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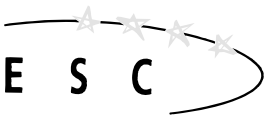

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The European Journal of Contraception and Reproductive Health Care is the official Journal of the European Society of Contraception, founded in 1988 in Paris, and is indexed in Index Medicus/MEDLINE, EMBASE/ Excerpta Medica, Chemical Abstracts, Current Contents and Family Index Database

The Scientific Programme

The numbers in the right-hand column are the numbers of the abstracts of the presentations

WEDNESDAY, JUNE 23, 2004

17:30–18:30	**Opening Ceremony**	*Pentland Suite*
17.30–17.35	Welcome Address *S. Skouby* and *J. Newton* (Presidents)	
17.35–17.40	Faculty President and Introduction of D. Baird *A. Bigrigg* (UK)	
17.40–17.50	Edinburgh's history: how the Scots invented the modern world! *D. Baird* (UK)	
17.50–17.55	Introduction of P. Hannaford *J. Newton* (UK)	
17.55–18.10	Performance	
18.10–18.30	What is the Conference about? What does holism mean and what is its relevance? *P. Hannaford* (UK)	

THURSDAY, JUNE 24, 2004

08:30–10:00	**State of the Art Session 1: Sexually transmitted infections**	*Pentland Suite*
08:30–08:50	STIs – trends and epidemiology *M. van de Laar* (The Netherlands)	IS-01
08:50–09:10	User issues/holistic model *J. Adams* (UK)	IS-02
09:10–09:30	Integrated sexual health services *P. Greenhouse* (UK)	IS-03
9.30–10.00	Q & A	
	Free Communications 1: Different contraceptive methods	*Tinto Room*
08:30–08:35	Introduction by chairmen	
08:35–08:45	Removal techniques for deep sub-dermal, sub-fascial & intramuscular Implanon contraceptive implants: experience of a Fertility Control Unit *B.A. Gbolade* (UK)	FC1-01
08:45–08:55	Study on the effects of a single implant containing nomegestrol acetate (Uniplant) on the hormonal profile, endometrial morphology and ultrasonographic evaluation of ovarian function *I. Barbosa* (Brazil)	FC1-02
08:55–09:05	A new highly effective subcutaneous contraceptive injection *A. Jakimiuk* (Poland)	FC1-03
09:05–09:15	A randomised controlled trial to determine the impact of fertility awareness education on the behaviour, knowledge and attitudes of condom users *C. Pyper* (UK)	FC1-04
09:15–09:25	A comparison of Pearl indices and cumulative incidences for use in meta-analysis of contraception trials *P. O'Brien* (UK)	FC1-05
09:25–09:35	Ease of insertion, contraceptive efficacy and safety of new T-shaped levonorgestrel-releasing intrauterine systems – first clinical report *D. Wildemeersch* (Belgium)	FC1-06

09:35–09:45	Living comfort at 1 year after placement of subcutaneous etonorgestrel *G. Donders* (Belgium)	FC1-07
9.45–10.00	Chairman's summing up	
08:30–10:00	**Workshop/Forum 1: Tailoring services for adolescents** Introduction *D. Apter* (Finland) Tailoring services *D. Apter* (Finland) Types of services *A. Hadley* (UK) Information and technology *S. Van der Doef* (The Netherlands)	*Moorfoot Room*
08:30–10:00	**Society/country slot 1: Nouveaux concepts en contraception** (*Society of French Speaking Countries of Contraception*) Nouveau regard sur les dispositifs intra-utérins *D. Serfaty* (France) Risque cardio-vasculaire de la pilule en 2004 – Actualité et perspectives *T. Farley* (OMS, Switzerland) Intérêt d'un nouveau progestatif, la nestorone, en contraception *R. Sitruk-Ware* (USA) Demain: des pilules sur mesure à base de stérodes tissus-spécifiques? *P. Bouchard* (France)	*Harris 1 + 2*
08:30–10:00	**Workshop/Forum 2: Edinburgh contribution to reproductive and sexual health** Introduction *A. Glasier* (UK) The uterus as a target for contraception and therapeutic invention *H. Jabbour* (UK) Falling sperm counts – should men blame their mothers? *R. Sharpe* (UK) No need to bleed – contraception and amenorrhoea *D. Baird* (UK) Emergency contraception probably won't change the world *A. Glasier* (UK)	*Kilsyth Room*
10:00–10:30	*Break*	
10:30–12:00	**Keynote Session 1: Contraception from a holistic perspective**	*Pentland Suite*
10:30–10:35	Introduction	
10:35–11:00	Benefit and harm *J. Drife* (UK)	IS-04
11:00–11:15	Contraception from a holistic perspective – a user view *T. Belfield* (UK)	IS-05
11:15–11:30	Holistic approach to contraception – the role of the provider *M. Short* (Ireland)	IS-06
11:30–11:45	Contraception – the holistic approach regarding services – sustainable contraceptive health care: how, who, where *O. Loeber* (The Netherlands)	IS-07
11:45–12:00	Discussion	
12:00–14:30	*Lunch and Poster viewing*	

12:00–14:15	**Symposium 1: New trends in European contraception** (*Schering*) Introduction *S. Skouby* (Denmark)	*Lomond Suite*
	Contraceptive use in European women: a research survey on contemporary behaviour *S. Skouby* (Denmark)	S1-1
	Long-term contraception in young women: special focus on nulliparous women and contraception following abortion *A. Gebbie* (UK)	S1-2
	Contraception as a therapeutic option in the treatment of menorrhagia *H. Critchley* (UK)	S1-3
	The non-contraceptive benefits and acceptability of Yasmin® *D. Mansour* (UK)	S1-4
	Yasmin® and the extended cycle regimen: current experience *M. Sillem* (Germany)	S1-5
	Conclusions *S. Skouby* (Denmark)	
13:00–14:00	**Meet the Experts A**	
13:00–14:00	ME 1: Psychosex (general) *R. van Lunsen* (The Netherlands), *G. Wakley* (UK)	*Carrick 3*
13:00–14:00	ME 2: Contraception and perimenopause *P. Crosignani* (Italy), *A. Gebbie* (UK)	*Harris 1*
13:00–14:00	ME 3: Sterilisation *M. Lech* (Poland), *J. Newton* (UK)	*Harris 2*
13:00–14:00	ME 4: Emergency contraception (practical issues) *A. Webb* (UK), *V. Prilepskaya* (Russia)	*Ochil 1*
13:00–14:00	ME 5: Teamworking in sexual health (skill mix) *C. French* (UK), *Y. Hazeveld* (The Netherlands)	*Ochil 2*
13:00–14:00	ME 6: Developing integrated services *A. Bigrigg* (UK), *S. Ozalp* (Turkey)	*Ochil 3*
14:30–16:00	**Free Communications 2: Special groups**	*Sidlaw*
14:30–14:35	Introduction by chairmen	
14:35–14:45	*To be confirmed*	FC2-01
14:45–14:55	Contraceptive choice for young people *D. Mansour* (UK)	FC2-02
14:55–15:05	VIP – Very important persons use contraception! Evaluation of a sexual education intervention among Swedish upper secondary school students *M. Larsson* (Sweden)	FC2-03
15:05–15:15	Use of alcohol among users of a Young People's Sexual Health Service *P.H. McGough* (UK)	FC2-04
15:15–15:25	Reported behavioural outcomes from RCT of a specially designed teacher-delivered sex education programme (SHARE) in Scotland: outcomes 2.5 years post-intervention *M. Henderson* (UK)	FC2-05

15:25–15:35	Teen4.info: a qualitative study to develop and evaluate a reproductive health website developed in partnership with teenagers and young parents from Oxford and Great Yarmouth *C. Pyper* (UK)	FC2-06
15:35–15:45	Effects of a gender-specific Health Promotion Program ('female doctor's lesson') in schools *C. Klapp* (Germany)	FC2-07
15:45–16:00	Chairman's summing up	
14:30–16:00	**Symposium 2: The Vagina Dialogue: NuvaRing and the benefits of vaginal administration** (*Organon*) Women and their vaginas *G. Liekens* (Belgium) The clinical profile of NuvaRing, update on new results *S. Killick* (UK) NuvaRing and the beauty of vaginal administration *R. Arias* (USA)	*Small Pentland Suite*
	State of the Art Session 2: Appropriate screening in sexual health	*Lomond Suite*
14:30–14:50	Should we screen? *P. Greenhouse* (UK)	IS-08
14:50–15:10	Opportunistic screening for *Chlamydia trachomatis*: establishing the national chlamydia screening programme in England *D.S. LaMontagne* (UK)	IS-09
15:10–15:30	Ethics/psychology *S.V. Carr* (UK)	IS-10
15:30–16:00	Q & A	
14:30–16:00	**Workshop/Forum 3: Intrauterine contraception** *To be confirmed* *R. Beerthuizen (The Netherlands)* When to change an intrauterine contraceptive device routinely? *I. Batar* (Hungary)	*Harris 1 + 2*
14:30–16:00	**Workshop/Forum 4: Clinical research issues** Strength and limitation of evidence based medicine *F. Helmerhorst* (The Netherlands) *To be confirmed* *P. Hannaford (UK)*	*Fintry*
16:00–16:30	*Break*	
16:30–18:00	**Free Communications 3: Improving access to services**	*Sidlaw*
16:30–16:35	Introduction	
16:35–16:45	Contraceptive behaviour. A psychoanalytic point of view *E.P. Spandau* (Austria)	FC3-01
16:45–16:55	Go ask Edith : achieving a holistic approach to sexual health through Knowledge Management *L. Macdonald* (Australia)	FC3-02
16:55–17:05	A termination of pregnancy care pathway. Worth the effort? *K. Guthrie* (UK)	FC3-03
17:05–17:15	The reproductive health needs of Somali women affected by female genital mutilation living in Manchester, United Kingdom *N. Mullin* (UK)	FC3-04

17:15–17:25	How good is the provision of sexual health services for young people across England? *J.M. Stephenson* (UK)	FC3-05
17:25–17:35	Improving access to abortion services: a local model *E.J. Oloto* (UK)	FC3-06
17:35–17:45	A collaborative clinic between contraception and sexual health services and the adult congenital heart disease clinic *P. Rogers* (UK)	FC3-07
17:45–18:00	Chairman's summing up	
	State of the Art Session 3: Non-contraceptive effects	*Small Pentland Suite*
16:30–16:45	Polycystic ovary syndrome *D. Cibula* (Czech Republic)	IS-11
16:45–17:00	Hormonal contraceptives for the medical treatment of endometriosis *G. Crosignani* (Italy)	IS-12
17:00–17:15	Health benefits – breast and bone *A. Glasier* (UK)	IS-13
17:15–17:30	Non-contraceptive effects – dysfunctional uterine bleeding *I. Milssom* (Sweden)	IS-14
17:30–18:00	Q&A	
	State of the Art Session 4: Abortion	*Lomond Suite*
16:30–16:45	Abortion methods: European issues *C. Fiala* (Austria)	IS–15
16:45–17:00	Home administration *Ph. Lefebvre* (France)	IS–16
17:00–17:15	Ethical and global aspects of abortion *H. Goldstein* (Denmark)	IS–17
17:15–17:30	Abortion; Influencing politics *M.M. Lech* (Poland)	IS–18
17:30–18:00	Q & A	
19:00–20:30	*Break*	
19:00–20:30	**Symposium 3: Title to be announced** (*Wyeth*)	'Castle Suite', *Caledonian Hilton Hotel* S3–1 S3–2

FRIDAY, JUNE 25, 2004

08:30–10:00	**State of the Art Session 5: Risks, the individual perspective**	*Pentland Suite*
08:30–08:50	Determinants of sexual and reproductive behaviour *R.H.W. van Lunsen* (The Netherlands)	IS-19
08:50–09:10	Individual risk perception in STI prevention *N. Bajos* (France)	IS-20
09:10–09:30	Risk and unwanted pregnancy *To be confirmed*	IS-21
09:30–10:00	Q & A	
	Free Communications 4: New developments in contraception, sexual and reproductive health	*Tinto Room*
08:30–08:35	Introduction	
08:35–08:45	Self-administration of Depot Provera (DMPA) – the way forward *F. Lakha* (UK)	FC4-01

08:45–08:55	Vaginohysteroscopic approach for ESSURE procedure: the experience of 317 cases *A. Ubeda* (Spain)	FC4-02
08:55–09:05	A live 3D ultrasound system with colour Doppler to study the effect of sildenafil on erectile performance in patients with chronic and serious diseases presenting with erectile dysfunction *R. Chatterjee* (UK)	FC4-03
09:05–09:15	Can we trust symptoms? *P.-A. Mårdh* (Sweden)	FC4-04
09:15–09:25	Maintenance of spermatogenic suppression by etonogestrel implants with depot testosterone *M. Walton* (UK)	FC4-05
09:25–09:35	Novial® effectively reduces seborrhea and acne after four cycles of treatment *H.T. Kränzlin* (Germany)	FC4-06
09:35–09:45	Maintenance of consistent ovulation inhibition with the 75 mcg desogestrel-only contraceptive pill Cerazette® after scheduled 12-hour delays in tablet intake *T. Korver* (The Netherlands)	FC4-07
09:45–10:00	Chairman's summing up	
08:30–10:00	**Workshop/Forum 5**: **Intercultural communication** *Title to be confirmed* *I. Mouthaan (The Netherlands)* *Title to be confirmed* *M. de Neef (The Netherlands)* *Title to be confirmed* *R. Coudane (France)*	*Moorfoot Room*
08:30–10:00	**Workshop/Forum 6: Microbicides & spermicides** (*WHO Workshop*) Microbicides: The science *J. van de Wijgert* (The Netherlands) Microbicides: The ethics *K. Shapiro* (Switzerland) Spermicides: The lesson *B. Raymond* (USA)	*Kilsyth*
08:30–10:00	**Society/country slot 2: Hormonal contraception without estrogens** (*ESHRE*) Overview of progestogen-only contraception *A. Glasier* (UK) Medical elegibility *S. Skouby* (Denmark) The contraceptive effects of anti-progestogens *D. Baird* (UK)	*Harris 1*
10:00–10:30	*Break*	
10:30–12:00	**Keynote Session 2: Sexual health in a multicultural society**	*Pentland Suite*
10:30–10:35	Introduction	
10:35–11:00	Diversity in sexual health: problems and dilemmas *J. Rademakers* (The Netherlands)	IS-22

11:00–11:15	Consumer/client perspective *A. Andro* (France)	IS-23
11:15–11:30	The English national strategy for sexual health and HIV – working towards implementation *J. Mezzone* (UK)	IS-24
11:30–1:45	Organisation of (specific) services *A. Imhoff-Köprülü* (Germany)	IS-25
11:45–12:00	Discussion	
12:00–14:30	*Lunch and Poster viewing*	
12:30–14:00	**Symposium 4: Programme to be announced (*Pfizer*)**	*Lomond Suite*
13:00–14:00	**Meet the Experts B**	
13:00–14:00	ME 7: IUDs *J. Newton* (UK), *D. Serfaty* (France)	*Carrick 3*
13:00–14:00	ME 8: Breast cancer & hormones, current advice *A. Szarewski* (UK), *C. La Vecchia* (Italy)	*Harris 1*
13:00–14:00	ME 9: Female sexual arousal disorder: does it exist? *R. van Lunsen* (The Netherlands)	*Harris 2*
13:00–14:00	ME 10: Doing a Cochrane review *F. Helmerhorst* (The Netherlands), *D. Grimes* (USA)	*Ochil 1*
13:00–14:00	ME 11: Polycystic ovarian syndrome *D. Cibula* (Czech Republic), *S. Skouby* (Denmark)	*Ochil 2*
13:00–14:00	ME 12: Working with the media *S. Brown* (UK), *T. Belfield* (UK)	*Ochil 3*
14:30–16:00	**Free Communications 5: Emergency contraception – sexual behaviour**	*Fintry*
14:30–14:35	Introduction	
14:35–14:45	Sexual behaviour and use of contraception among adolescents in Sweden *T. Tydén* (Sweden)	FC5-01
14:45–14:55	Impact of common contraceptive methods on sexuality – a study in Hong Kong Chinese women *R.H.W. Li* (Hong Kong SAR)	FC5-02
14:55–15:05	Community pharmacy supply of emergency contraception: changes in user profiles over time *K. Black* (UK)	FC5-03
15:05–15:15	Emergency contraception and the media: an analysis of English national and regional newspaper coverage from September 2000 to September 2003 *P. Kingori* (UK)	FC5-04
15:15–15:25	Introduction of a 24-hour toll free hotline for Youth Emergency Contraceptive services in a developing country *P.S. Steyn* (South Africa)	FC5-05
15:25–5:35	The remaining barriers to the use of emergency contraception: perception of pregnancy risk among women undergoing induced abortions *C. Moreau* (France)	FC5-06
15:35–15:45	Advance provision of emergency contraception through Family Planning Clinics: a feasibility study *A. Kasliwal* (UK)	FC5-07

15:45–16:00	Chairman's summing up	
	Symposium 5: Contraception: why change? (*Janssen-Cilag*)	*Small Pentland Suite*
14:30–14:50	Chairman's welcome and introduction *J. Guillebaud*	
14:50–5:15	Contraception, are we keeping up? *M. O'Flynn*	
15:15–15:40	The transdermal route, what is it delivering? *C. Keck*	
15:40–16:00	Where do we go from here? *J. Guillebaud*	
	State of the Art Session 6: Risk communication	*Lomond*
14:30–14:50	How do we measure risks in epidemiological terms? *T. Farley* (WHO, Switzerland)	IS-26
14:50–15:10	How do we communicate risk? *A. Herxheimer* (UK)	IS-27
15:10–15:30	Coping with scares *H.P.G. Schneider* (Germany)	IS-28
15:30–16:00	Q & A	
14:30–6:00	**Workshop/Forum 7: Special needs** Learning disability *C. Fanstone* (UK) Physical disability *D. Thompson* (UK)	*Sidlaw*
16:00–16:30	*Break*	
16:30–18:00	**ESC General Assembly**	*Small Pentland Suite*

SATURDAY, JUNE 26, 2004

08:30–10:00	**Workshop/Forum 8: Cardiovascular disease: is screening needed for clinical reasons?** New insights in the mechanisms of thrombosis *J. Jespersen (Denmark)* Clinical perspective *S. Skouby (Denmark)*	*Sidlaw*
	Free Communications 6: STIs – medical and ethical issues – risk communication	*Small Pentland Suite*
08:30–08:35	Introduction	
08:35–08:45	Postal testing kits for Chlamydia screening *K. Carrick-Anderson* (UK)	FC6-01
08:45–08:55	Risk factors for *Chlamydia trachomatis* genital infection in adolescent females *K. Sedlecki* (Serbia and Monte Negro)	FC6-02
08:55–09:05	Combined oral contraceptives and weight gain in young women *M. Lech* (Poland)	FC6-03
09:05–09:15	Clinician's attitudes and utilization of a chaperone for intimate examinations within a Contraceptive and Reproductive Health Care Service *L. Murray* (UK)	FC6-04

09:15–09:25	Sexual health care of street prostitutes – a holistic approach *S.V. Carr* (UK)	FC6-05
09:25–09:35	Women's attitudes towards, and experience of, long-acting contraception *K. Wellings* (UK)	FC6-06
09:35–09:45	Community mobilization for better health *S.H. Djalalinia* (Iran)	FC6-07
09:45–10:00	Chairman's summing up	
	Society/country slot 3 (*Spanish Society of Contraception*)	*Harris 1 + 2*
08:30–08:50	Anticonceptive use in Spain *C. Coll Capdevilla* (Spain)	
08:50–09:10	Consensus conference on IUDs in Spain *F. Martinez Sanadrés* (Spain)	
09:10–09:30	Consensus conference on hormonal contraception *I. Lete Lasa* (Spain)	
09:30–10:00	Discussion	
08:30–10:00	**Workshop: Internet** *(in preparation)*	*Lomond*
08:30–10:00	**Workshop Forum 9: Emergency contraception & adolescents** Delivery of emergency contraception without medical prescription: the French experience *E. Aubény* (France) The importance of emergency contraception in adolescents *I. Savelieva* (Russia)	*Fintry*
10:00–10:30	*Break*	
10:30–12:00	**State of the Art Session 7: Male and female steroidal contraception**	*Pentland Suite*
10:30–10:50	New developments *S. Skouby* (Denmark)	IS-29
10:50–11:10	New progestins *R. Sitruk-Ware* (France)	IS-30
11:10–11:30	Male steroidal contraception *R.A. Andersen* (UK)	IS-31
11:30–12:00	Q & A	
10:30–12:00	**Best Free Communication & Poster**	*Lomond*
12:00–12:30	**Closing Ceremony** Closing address and prizes *S. Skouby* (Denmark) Closing address from the Organising President *J. Newton* (UK) 9th ESC Congress 2006, Turkey *S. Özalp* (Turkey)	*Pentland Suite*

Abstracts of Invited Speakers

IS-01

STIs – trends and epidemiology

M.J.W. van de Laar (RIVM) and the European Surveillance of Sexually Transmitted Infections (ESSTI) Network

Bilthoven, The Netherlands

Sexually transmitted infections (STIs) are a major public health problem in Europe. Their substantial morbidity and disproportionate burden upon women, marginalized communities, and those with high-risk sexual lifestyles continue to drive their prioritisation in European public health. Behavioural changes in response to the HIV/AIDS pandemic resulted in initial reductions in the incidence of STIs. However, these have not been maintained and STI rates are on the rise again in many countries. Specific population sub-groups are disproportionately affected: Homosexual men and young people (aged less than 24 years) contribute highly to the rising trends of acute STIs in Europe and are at high risk for infection and re-infection. The prevalence of genital chlamydial infection is high in young females; and gonorrhoea remains fairly concentrated among those with high rates of partner change or the economically deprived in many EU states. In the past 5 years, many previously low incidence European countries have reported outbreaks of STIs, suggesting a changing epidemiology and deterioration in sexual health. Gains in STI control may be achieved though greater European collaboration in laboratory diagnosis, harmonising treatment protocols and strengthening disease surveillance. Recent trends in, and the epidemiology of, acute STIs will be discussed.

IS-02

Abstract not available at the time of printing

IS-03

Integrated sexual health services

P. Greenhouse

Milne Centre for Sexual Health, Bristol Royal Infirmary, Bristol, UK

Integrated sexual health services are designed to overcome the problems of the separation of medical specialisation – across most of Europe – between Gynaecology and (Dermato)-Venereology, which had disadvantages for women's health. An holistic approach takes the patient's needs as the central consideration, combining care for contraception, sexually transmitted infections (STI), unwanted pregnancy, sexual assault etc., thus putting women's sexual health under one roof.

This logical, commonsense approach has little formal evidence base as public health policy, apart from substantial work on acceptability to patients, particularly among adolescents, and is being investigated as an appropriate model of service delivery in Britain, the Russian Federation and elsewhere.

This paper reviews the existing evidence base, with particular emphasis on the case of need for joint contraception & STI services demonstrated by a precisely inverse relationship between gonorrhoea rates and live birth rates when preferred contraceptive method changes from hormonal methods to condoms.

The paper also identifies potential therapeutic advantages of the integrated clinical approach, with an increasing recognition of the need to consider hormonal influences on genital infection in the management of conditions such as recurrent bacterial vaginosis and genital herpes.

IS-04

Benefit and harm

J. Drife

University of Leeds, Leeds, UK

On 25 May 1965 in London, Professor Sir Dugald Baird of Aberdeen delivered a lecture entitled *The Fifth Freedom*. Published in the BMJ, it became a classic. To Roosevelt's four freedoms – freedom of speech and worship and freedom from want and fear – Baird added a fifth: ''freedom from the tyranny of excessive fertility''. Like the other four, this freedom is still denied to many people today.

Baird divided the benefits of contraception into those affecting populations and those affecting individuals. Population growth no longer hits the headlines but perhaps it should. Too many nations still rely on disease, war and famine to control their population. Contraception is a more beneficial option.

Specific methods of contraception have specific benefits. The combined oral contraceptive prevents ovarian and endometrial cancer. Long-acting progestogens prevent menstrual disorders, which cause not only inconvenience but also major ill-health. Condoms prevent the transmission of HIV.

And yet contraception is still regarded as harmful by some. Male-dominated institutions may see little benefit in liberating women from their traditional role. In some countries, reducing the demand for therapeutic abortion is financially harmful to gynaecologists. We should understand views with which we do not sympathise.

By breaking the link between coitus and pregnancy, contraception has altered people's attitudes to sex. The change is not entirely beneficial. Today in the UK, over 25% of girls have had intercourse by the age of 16. In 1965 the BMJ predicted that ''the use of the 'pill' must lead to a considerable spread of venereal disease.'' Nearly forty years on in Britain, there is indeed an epidemic of chlamydia.

The pill causes venous thromboembolism and the IUCD is associated with pelvic infection. These risks are low but they have received major publicity in the media, perhaps because people feel that a price must be paid for sexual freedom.

The risks of contraception must be set against the risks of conception, which vary from country to country. Worldwide, pregnancy causes one maternal death every mnute, mainly in developing countries, where pregnancy is seen as less harmful than the pill. This misperception is one reason why many women are still denied access to contraception, which otherwise could save thousands of lives every year.

IS-05

Contraception from a holistic perspective – a user view

T. Belfield

Family Planning Association, UK

Patients, consumers, users, clients are all terms for women and men who receive sexual health services. The reality is whatever we call people we see for information, advice, support and treatment – without them we would have no role. The last 30 years has seen a huge change in the availability and provision of contraceptive methods. Contraception has moved from the narrow confines of women's welfare to being an integral part of sexual health. This recognises that contraception involves men, is provided for in many different types of settings and importantly must be seen as more than just protecting against unplanned pregnancy, and needs to encompass the wider area of sexual health including sexual infection, abortion and sexual wellbeing. Research shows us that people are having more sexual partners, that they are knowledgeable about contraception and the use of condoms but do not use contraception consistently or always correctly, that sexually transmitted infections are increasing and that there is a wide variability in sexual lifestyles by age, gender, relationship and residence and all this is normal. Research also shows us that people do not always behave rationally, or in an organised or planned manner with their sex lives. As such sexual health services need to develop a holistic approach and become more 'person-centred' and must address more than 'just the waist down' but involve 'hearts and minds' too.

This short presentation will look at user's perspectives on contraception and contraceptive services to provide an understanding of what people think about contraceptive methods, and how this translates into use or non-use of contraception, and why contraceptive provision must be seen within the context of sexual health.

IS-06

Holistic approach to contraception – the role of provider

M. Short

Dublin, Ireland

Holistic medicine is a system of health care which fosters a co-operative relationship among all those involved from those that require the service to all staff involved, leading towards optimal attainment of health and well being. With internet access and a more and often better informed public, there is a changing expectation of the role of service provision and the doctor/patient relationship. Consumer driven reproductive health care is a feature of the late 20th century to the present day. Magazine articles encourage the latest trends in contraceptive usage whereas media scares influence prevalence of a particular contraceptive. In practice the interview process and treatment is tailored to individual needs and in some cases requests but consumer behaviour (patient behaviour) in affluent societies is not autonomous but is shaped by reference groups and life styles. In traditional societies the approach is more individualistic.

A quality service should ensure that members of staff have as much time as possible for each client and facilities within the practice to ensure privacy, confidentiality in comfortable surroundings in both the waiting and consulting areas. The way is open for a new approach to medicine but time honoured paternalistic behaviours remain substantially unchanged in the standard model of the doctor/patient relationship. Contraception and reproductive health care remain sensitive important social cultural and public health matters and delivery of service must continue apace with changing societal needs.

IS-07

Contraception – the holistic approach regarding services - sustainable contraceptive health care: how, who, where

O.E. Loeber

Mildredhuis-Rutgershuis, Centre for contraception, sexuality and abortion, Arnheim, The Netherlands

The health care system in a given country is organized on the basis of historical development of the society, governmental policy and professionals and their interests.
The political philosophy dictates whether the health care is totally dependent on the government as it was in Eastern Europe, where all decisions were made on a central level or whether, as in Germany and Austria, most power lies with the professionals, who defend their position fervently. In other countries certain groups demanded and organized specific forms of health care, like women's health care, which has underlying political ideas about women's position in society. National policy defines a government's strategy toward reproductive health.
In most countries the health care system is developing towards a client centred approach, in which there is an increasing focus on the rights and needs of clients, as well as involving clients in participatory approaches in implementation and evaluation of programmes. This system could partly be a holistic one.
If a whole new system of healthcare were initiated an ideal system could be one in which for general health issues general practitioners would be widely available. They are or should be the epitome of a holistic approach because of their broad field of interest.
For narrowly defined specialist problems high quality specialist care could be provided in central hospitals and between these two levels there could be another layer for holistic care. Not as widely available as the general health care but more accessible and cheaper then the specialist care. These services deal with problems centred around a specific topic, like reproductive and sexual healthcare and take into account all the other issues that contribute to the problem.
What are the characteristics of holistic contraceptive services?
They must have respect for male and female sexual rights, be youth friendly, gender sensitive, promote male-involvement and affordable. The care involves assessing the interrelationship between clients' needs as well as promoting among clients the awareness of their bodies and sexuality. The advices of the providers to clients needs and possibilities should be fine-tuned. The government should define policies that make this approach feasible. Logistics, supply and effective management should be in place and regular evaluation is needed to assess how well the services are functioning.
What topics could be covered apart from contraception?
For instance there could be STI tests and treatment, treatment of sexological problems, screening for cancer, pregnancy control and delivery, treatment of fertility problems, vasectomy and refertilisation, addressing of social issues, i.e. financial problems in single motherhood, provision of abortion. There should be prevention of these problems in the form of counselling and education for those who need it.
To be truly holistic services, it is not necessary that all of these issues are covered. The difference with other health services is rather the wider scope of interest and knowledge of the provider that may lead to a better adapted treatment and advice.
So if we see it as a laudable goal to establish these holistic services, what then are the challenges? Of course this depends on the structures given in a certain society. Changing these structures can be very difficult. When the political situation changes as for example in eastern Europe the government, the professionals and the clients have to learn new ways to organize society. If power structures exist, it is not so easy to convince beneficiaries to give up part of this power for the greater good. In countries where everything is heavily regulated pressure groups and voluntaries are often marginalized as being unprofessional.
Still it is more feasible to build upon and revitalize existing services depending on the situation of a specific country. The existing power balance (who is in charge, who is responsible, who earns the most money) will change in the process.
Whatever system develops, if left only to the demands of the client or the offerings by the provider without any regulation each system will in the end be outrageously expensive. Most countries in Europe wrestle with this problem at the moment.
Therefore some system of referral should be implemented or a financial contribution by the client or limit for the provider is necessary to make him or her aware and co-responsible for the cost of the healthcare.
Sustainable holistic contraceptive healthcare can be achieved through a variety of strategies, adapted to local circumstances and improved through evaluation and feedback.

IS-08

Abstract not available at the time of printing

IS-09

Opportunistic screening for *Chlamydia trachomatis*: establishing the national chlamydia screening programme in England

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Background: The evidence for the potential damage from untreated genital chlamydial infection in women is strong. Epidemiologic studies have found high levels of asymptomatic infection among women and men. Local communities, regional health authorities, and national governments have developed a range of screening initiatives targeting this important sexual health and public health issue. These screening programmes have been shown to be effective at reducing the sequelae from and prevalence of this infection. The Chief Medical Officer's Expert Advisory Group on *Chlamydia trachomatis* concluded that opportunistic screening of those at highest risk met the necessary criteria for public health intervention.
Objectives: This presentation will review the evidence for screening, describe approaches used in a variety of locations and settings, review the development of the Department of Health-funded national Chlamydia Screening Programme in England, outline the components of the national programme, and present key findings of the programme's impact in contraceptive services.

IS-10

Ethics/psychology

S.V. Carr

Sandyford Initiative, Glasgow, Scotland, UK

The ethical aspects of screening in sexual healthcare are often problematic for the clinician. Opposing ethical concepts can highlight conflict between the benefits to the individual and the good of society.
The impact on the individual patient of screening is very important and is often overlooked. A procedure which seems simple and straightforward to a clinician can often have far reaching impact on the individual's feelings and lifestyle.
The dilemma of the clinician is to be able to undertake ethical, evidence based screening programmes in sexual health whilst carrying out their duty of care to the individual patient in recognising the potential emotional impact of these programmes.

IS-11

Abstract not available at the time of printing

IS-12

Hormonal contraceptives for the medical treatment of endometriosis

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Drugs used in the treatment of endometriosis are not cytoreductive and quiescent implants have been demonstrated in nearly all women treated with danazol, GnRH agonists and progestogens.
Medical therapy is symptomatic and pain release at treatment suspension is the rule.
Hormonal contraceptive preparations are effective in controlling pain symptoms in approximately three out of four women with endometriosis. Their effect does not seem to be inferior to that obtained with other drugs habitually used in treating the disease. Medical treatment plays a role in the overall therapeutic strategy only if it can be administered over a prolonged period of time. Given their good tolerability, minor metabolic effects and low cost, hormonal contraceptives must therefore be considered the drugs of choice.
The effectiveness of hormonal contraceptives is probably partly due to the proven anti-inflammatory effect of progestogens. Most pelvic lesions associated with endometriosis are secondary to the strong inflammatory state caused by the metabolic activity of ectopic endometrium and to the resulting immune response. Furthermore, patients with endometriosis experience heavier menstruations than women without the disease. The reduction of menstrual flow observed with the use of OC or the levonorgestrel IUD can limit pelvic contamination caused by transtubal reflux.
Hormonal contraceptives are currently the only safe and inexpensive alternative to surgery. However, their contraceptive activity limits their use to women who do not wish to have children in the short term.

IS-13

Health benefits – breast and bone

A. Glasier

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The evidence for non-contraceptive benefits of hormonal contraception on breast and bone relates only to the combined oral contraceptive pill (COC). Most reviews on the topic state that the pill is associated with a reduced risk of benign breast disease (BBD) and that it is 'good for bone'.
The data on BBD are scanty, somewhat old and, of course, observational. It seems counter-intuitive that COC use should be associated with an increased risk of breast cancer while at the same time preventing benign disease. The beneficial effects, if any, may be limited.
There are more data on the effect of COC on bone and they are more recent. However studies on the effects of contraception on bone mineral density are not easy to do since there are many confounding variables.
The quality of the research is very variable, but the better studies tend towards demonstrating no significant effect on the pill on bone mineral density. The limited amount of observational data is even more difficult to interpret but it is hard to conclude that use of the pill is associated with a reduced risk of osteoporotic fracture.
The benefits of combined hormonal contraception on breast and bone may well have been overstated.

IS-14

Non-contraceptive effects – dysfunctional uterine bleeding

I. Milsom

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Menstrual disorders such as menorraghia and dysmenorrhea have been reported to seriously affect approximately 2.5 million women annually in the USA and cost US industry 8% of the total wage bill. Dysmenorrhea is probably the commonest form of menstrual disorder with a reported prevalence of 50–90% among young women. In Sweden 15% of young women have been reported to suffer from dysmenorrhea which causes absenteeism from school or work every month. Approximately 10% of fertile women suffer from menorraghia, defined as a menstrual blood loss of >80 ml. Excessive blood loss may lead to iron deficiency anaemia and ultimately necssitate hysterectomy.
The use of different contraceptive techniques has been shown to influence menstrual blood loss and the occurrence of dysmenorrhea. Some contraceptive methods have been reported to decrease the occurrence of menorraghia while other methods have been reported to increase the prevalence of dysmenorrhea and menorraghia
Combined oral contraceptives (COC) are generally accepted to provide effective pain relief for 70–80% of women with primary dysmenorrhea. This opinion has however been contested in a recent Cochrane review. COC's have also been reported to reduce menstrual blood loss by approximately 50%. On the other hand copper (Cu) intrauterine devices (IUD) have been reported to increase menstrual blood loss by approximately 50% and dysmenorrhea has been reported to be more common among users of a Cu-IUD.
Thus the choice of contraceptive method can influence the occurrence of these conditions and in some cases contraceptive methods can be used as an effective treatment for dysfunctional uterine bleeding. The scientific evidence behind the influence of contraceptive methods on dysfunctional uterine bleeding will be described.

IS-15

Abortion methods: European issues

C. Fiala

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Currently 3 methods are available for first trimester termination of pregnancy: surgical under general anaesthesia, surgical under local anaesthesia and medical. Interestingly, the frequency of these 3 methods varies tremendously by country and also by region within a given country.

The medical method for example is used in 0.8% of all first trimester abortions in the Netherlands, whereas the figure is around 50% in Scotland and Sweden. The other countries are in between these two extremes. And the very slow integration of medical abortion in most countries may reflect the reluctance of adopting new developments in female reproductive health. This reluctance is in sharp contrast to other examples in medicine, i.e. Viagra® was rapidly integrated in the medical system. Another example is general anaesthesia, which in most countries is the predominant method of analgesia for surgical abortion. Not so in the Netherlands, where 60% of surgical abortions are performed under local anaesthesia.

It is unlikely that these huge regional variations in the frequency of different methods are the result of patient preference. Furthermore, most women are given only a limited choice concerning the method. It is therefore safe to assume these differences reflect regional traditions, provider preference and administrative or legal incentives. They may also be seen as the remains of the prevailing double standard concerning women with an unwanted pregnancy.

The predominant use of general anaesthesia for surgical abortion has important implications in another aspect: it reinforces the woman's pre-existing fantasies and imaginations about an abortion. At the same time, it prevents her from correcting these mostly wrong and overdramatic fantasies. The majority of women have never experienced an abortion before. Their fantasies about this procedure are therefore entirely based on second-hand information. But most of the information available to the public is coming from religious sources. These institutions have no professional experience in performing abortions and dramatise this intervention by giving wrong information in an emotional language.

It is no surprise that women coming for an abortion frequently report this same misinformation. If the health professionals performing the intervention are offering general anaesthesia in this situation, they do in fact confirm these erroneous fantasies. Although they claim general anaesthesia would be in the best interest of the women, this might not necessarily be the case. Instead, the different methods should be explained in the pre-abortion counselling. Women should be offered the option to correct their fantasies after professional counselling and with empathic care during the intervention. Studies evaluating the psychological status of women after an abortion showed most women were satisfied with the method they had used provided they had a truly free choice.

IS-16

Abstract not available at the time of printing

IS-17

Ethical and global aspects of abortion

H. Goldstein

Copenhagen, Denmark

Abortion, legal as well as illegal, has been known from ancient times. Probably since then pros and cons have been debated, and political as well as religious systems have stated their points of view very often, also in recent decades.
For several decades a variety of Western societies have allowed abortion until a certain number of gestational weeks. The ethical questions have been debated very strongly, and no consensus is found by all political directions. The practice of legal abortion may vary from country to country, although the ethical problems are the same: Is the medical doctor a murderer? Has the fetus in utero the same legal status – and moral value – as a full born infant? Does the pregnant woman decide alone, if she wants the child, or does the father-in-future have some influence? Does legal and illegal abortion influence the global demographic situation? Or can abortion be used as a tool in order to change a demographic situation? May legal abortion be used as a tool if parents want a boy or a girl – after ultrasound examination?

IS-18

Abortion; influencing politics

M.M. Lech

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Abortion is a response to unwanted pregnancy, and is a consequence of poor sexual education and poor (or unavailable) family planning services. As it is well known, yearly number of abortion all over the world, approach the number of 50 million. 40% of them are illegal and unsafe. Everyday more than 200 women die due to unsafe/illegal abortions. Legalisations of abortions make these procedures safes, save women's lives and diminish indicators of maternal mortality. Restrictive abortion laws means; illegal abortions, creation of abortion-underground, high number of unsafe abortions, woman's mortality and morbidity, criminalization of the society, and even infanticide.
Abortion law is the most influent factor of availability and accessibility of abortions in Europe. Abortion laws in Europe vary from the complete prohibition, in Malta, and availability of abortion only in case of endangered (by pregnancy) life of the women, in Ireland and Poland, to ''abortion on request'' in most of the European countries.
In reality, restrictive abortion law in the certain country does not mean ''abortion-free-country''. For example, official data on number of abortions in Poland is less than 200 per year (means 0.022 per thousand women in the age of 15–49), but in reality, estimated numbers of abortion exceed 50 thousand abortions per year. Restrictive abortion law in Poland means also ''safe abortion services availability for well-off women only''. The fight for the contemporary and democratic abortion law (similar to abortion laws in most of the European countries) is one of the very hot points of politics in Poland. Some of groups of society, woman's right lobby, NGO's and some of the health professionals are trying to influence politics by; raising awareness, monitoring and initiating activities concerning reproductive health/rights and women's rights in the community, initiating media campaigns (through reports, press conferences, fact sheets, press releases, NGO's bulletins, open letters etc) on legalization of abortion and introducing sex education at schools, advocating for implementation of the commitments made by the Government during the international conferences (Cairo Conference on Population and Development, Beijing Fourth World Conference on Women), formation of various national and international networks and coalitions (including the Polish Committee of NGO's-Beijing '95), promoting international standards concerning human rights in the area of women's reproductive health and rights.

IS-19

Determinants of sexual and reproductive behaviour

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Sexuality and procreation in western societies have become more and more dissociated. Whereas in traditional Christian normative beliefs sexuality only existed in service of procreation it is estimated that approximately 95% of all human sexual encounters take place because of hedonistic motives while reproductive consequences would be an unwanted result of these sexual acts. The longer the period of sexual activity preceding family building is and the later attempts to conceive start, the lower are chances to conceive spontaneously in due course when a pregnancy is desired and the higher will be the need for assisted reproduction. Moreover sexually transmitted diseases that might be the result of hedonistic sexual activity endanger future fertility.
Determinants that on an individual level predict wether or not a women will be able to protect herself against unwanted pregnancy and STD and will preserve her fertilty as well as determinants that make her decide to discontinue contraception because of childwish are both of an intrinsic and extrinsic nature.
Choices with regard to contraception, STD prevention and reproduction however often are seen as unidimensional processes within the individual. In the most commonly used models such as the theory of planned behaviour (Ajzen) and the health belief model (Becker) subjective norms and values of the individual are used to predict whether or not a preventive method will be used.
These models however only give an indication of the intention of the individual to use a preventive method leaving out contextual factors like communication with the partner and situational factors - like for instance the use of alcohol - that are in between intended and actual sexual behaviour. It are mainly these factors that for instance explain discordances between knowledge about contraception and STD prevention of teenagers, their intended behaviour and the fact that unwantend pregnancies and STD transmission do occur more often than expected.
At least two extrinsic factors, other than the intrinsic subjective wishes,norms and values of the individual, are of great importance in predicting preventive and reproductive behaviour:
Interactional factors. When the partner is not effectively involved in the the decision making process this can lead to discontinuation or improper use of a chosen preventive method. A method that is more the choice of the prescriber than of the user will be used less successfully.
Situational influences. If a method is to expensive or not easily accessible, someone will have to resort to other means of prevention that may not be as suitable as the method he or she would have chosen if it were available.
Negative publicity resulting in distorted health beliefs may also cause someone to decide not to use a method that in the given situation would be the most suitable.
A lack of social possibilities to combine career and raising of a family might lead to postponement of reproduction to an age that diminishes reproductive chances.
The choice of oral contraceptives for instance is greatly influenced by the individuals subjective ideas on health related risks, whereas condom use has more interactional aspects.
The actual quality of preventive behaviour (compliance) depends on the number and severity of concerns about the chosen method. The more concerns, the more ambivalence and the more ambivalence, the more user failures and/or discontinuations.
Data from an ongoing research project will be used to illustrate the complexity of factors influencing sexual ad reproductive health. Recommendations for innovative counseling strategies will be presented.

IS-20

Individual risk perception in STI prevention

N. Bajos

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This communication reviews different approaches used to analyse the process of risk construction as concerns the sexual transmission of IST. Individualistic approaches focus on understanding how individual risk representation is constructed. Constructivist approaches consider that the process of risk construction occurs in relation with other people and is affected by social context. The specificities of these procedures are considered from theoretical and methodological point of view, and by using examples taken from quantitative and qualitative research. Zero exposure to IST risk does not exist in reality, and people tend to reduce their risk through condom use and other prevention strategies. Prevention campaigns should thus aim for risk reduction instead of risk elimination. Constructivist research elucidates why some people do not protect themselves, notably because of sexual issues, marginalization processes and social normalisation of gender roles. It also elucidates why preventive behaviour differs according to type of partner by showing how sexual and preventive behaviour depends on power role relationships

IS-21

Abstract not available at the time of printing

IS-22

Diversity in sexual health: problems and dilemmas

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The increase of migrant populations within western European societies leads to specific problems and dilemmas in the area of sexual and reproductive health and service provision. Specific groups differ with respect to their cultural background, religion, migration history and present living conditions, which in its turn impacts their sexual and reproductive status.
In general, the problems and dilemmas around sexual and reproductive health can be divided into four categories: (1) epidemiology of diseases and risk factors in specific populations; (2) psychosocial and cultural aspects; (3) communication; and (4) moral and ethical dilemma's.
Regarding epidemiology there is an increased prevalence in migrant groups of unwanted pregnancy and abortion, HIV/STD's, and sexual violence. Effective contraceptive use is hampered by knowledge deficits, uncertain living conditions, ambivalence regarding the use of contraceptives and problems accessing (information on) contraception.
Psychosocial and cultural aspects relate to the norms and attitudes individuals and groups have regarding the family, social relationships, sexuality and gender. These norms and attitudes have an impact on the sexual and reproductive choices people make and the possibilities and restrictions they feel in this respect. For example: virginity at marriage is crucial for Islamic girls, but growing up in a western, sexual liberal culture makes it more difficult to comply with this norm. This dilemma may eventually result in requests for hymen reconstruction or 'virginity certificates'. Another example: both the taboo on homosexuality and gender-inequality in heterosexual relationships may lead to more difficulty in negotiating safe sex practices. This results in higher HIV/STD rates.
Problems in communication do not only concern language, but also communication styles, the way patients present their problems and the expectations they have from the service provider. Communication problems inevitably lead to a lesser quality of care.
Moral and ethical dilemmas arise where cultures collide. Sex education in primary and secondary education runs counter to the wishes and believes of many Islamic parents. Can they exclude their children from it, should the boys and the girls be divided, or should school sex education be abandoned at all? Virginity problems are another topic where an individual gynecologist or a department should make the ethical decision: will we perform hymen reconstructions, thus contributing to deception and the myth of bleeding at first intercourse?

IS-23

Abstract not available at the time of printing

IS-24

The English national strategy for sexual health and HIV – working towards implementation

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Introduction: The first ever National Strategy for Sexual Health and HIV was published for consultation on 27th July 2001. A 27-point Implementation Action Plan was published in June 2002. Key aims of the Strategy are to
– reduce the transmission of HIV and Sexually Transmitted Infections
– reduce the prevalence of undiagnosed HIV and Sexually Transmitted Infections
– reduce unintended pregnancy rates
– improve health and social care for people living with HIV
– reduce the stigma associated with HIV and Sexually Transmitted Infections
Aims and Methods: The 27 point action plan aims to support implementation in the field accompanied by guidance to Primary Care Trusts and Local Authorities on commissioning and health promotion and recommended standards for HIV and Sexual Health.
Results: There has been substantial progress on national implementation of the Strategy. Key national programmes are underway including the Sex Lottery Campaign, roll out of chlamydia screening and targeted prevention work at vulnerable communities.
Conclusions: The National Strategy is ambitious and comprehensive. It requires a 10 year commitment to deliver what it proposes in partnership with key stakeholders in Primary Care Trusts, Local Authorities, with health and social care providers and Voluntary Community Organisations.

IS-25

Organisation of (specific) services

A. Imhoff-Köprülü

Profamilia chorweiler e.V., Cologne, Germany

The author reports about an advisory centre for pregnancy, conflict of pregnancy, family planning, contraception, and interruption, called Profamilia chorweiler e.V. (e.V. means: 'registered society'), placed in a district of Cologne, where more than half of the inhabitants are not German natives. She will give you an idea about the multiprofessional team working there, how they have been working, the variety of consultants coming, and why both the German society and the politicians think that it is important to have such advisory centres for women (and couples), when they are in a conflict of having a baby or not.
In her report, she will also look back on the 52 years since the Profamilia society was founded. She will tell you about the Profamilia ideology of contraception and family planning, about its organisation, its legitimisation and its financing.
In the appendix you will find (1) an extract of a law concerning Profamilia's work, and (2) a list of Profamilia's offered services.

IS-26

How we measure risk in epidemiological terms?

T. Farley

WHO, Geneva, Switzerland

The word risk is used in many different and frequently misunderstood ways.
The different types of risk used in epidemiology and public health will be defined and illustrated, together with several misconceptions as to what these mean in practice.

IS-27

How do we communicate risk?

A. Herxheimer

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We do it badly, for two quite different reasons: (1) the concept of probability of harm is difficult to convey and explain clearly, particularly in a brief consultation, and (2) we use the word 'risk' as a euphemism for 'harm', though strictly it denotes only 'probability'.

We must communicate that all interventions in health care can cause harms as well as benefits, and that an intervention is only worth using when the benefits clearly outweigh the harms. Both the benefits and the harms of an intervention have four distinct dimensions[1] – (a) the kind of benefit or harm; (b) their intensity and duration; (c) the probability that they will occur; (d) if they occur, their possible effects on the person's life.

We want people if possible to understand the important benefits and harms that we believe they should consider before choosing or accepting a treatment, and to help them compare these with the benefits and harms of other treatments, and of no treatment.

Clinicians cannot communicate these complex matters without thorough preparation and help; patients/clients need time to take them in and opportunities to discuss them and ask questions. This means that both written and spoken communication is needed, often on more than one occasion. A written summary enables all the professionals in a community to use the same information as the basis for their conversations with patients, who should then get consistent messages from whichever doctors, nurses, pharmacists, etc, they encounter. That can help them to understand the concepts, to minimise misconceptions and misunderstandings, and so to save time and regrets.

A complication that can rarely be considered, let alone explained, is that the benefits and harms of medicines vary greatly with dosage and duration of use, as well as with the users' individual characteristics; unfortunately rather little is known about these important variations.

1. Herxheimer A. Benefit, risk and harm. *Australian Prescriber* 2001; 24:8.

IS-28

Coping with scares

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Synthetic sex steroid hormones have extensively been employed for a great variety of indications, such as menstrual cycle disturbances, menopausal complaints, infertility, threatened or recurrent abortion, endometriosis, acne, adjuvant treatment of breast cancer and others. Substantial information was obtained about sex steroids interfering with metabolic processes in the body. Need for caution was pointed out to those patients with a history of cancer or of thromboembolism. Within the first years following the introduction of oral contraception (OC), the risk of venous thromboembolic disease was extended to acute myocardial infarction, stroke, and hypertension. These early studies were probably substantially biased by the tendency to overdiagnose thrombotic disease among pill users.

In addition to vascular phenomena, a variety of disorders such as neoplasms, diseases of the liver and biliary system, diseases of the reproductive, central nervous and immune system, skin conditions and others have extensively been studied in OC users with regard to pharmacodynamics, pharmacokinetics and their influence on biochemical parameters indicative of metabolic function. Almost all of the available data originate from studies performed in developed countries. It can be questioned whether the findings also apply to developing countries.

Today, many women still believe there are substantial risks involved using OCs. While some fears appear justified, many involve outright misconceptions. As a result of increasing knowledge, with time our views about the health applications of OC use have changed dramatically.

Current low-dose pills have been associated with a decreased risk of circulatory disorders, minimal influence on metabolic function and minimal, if any, and clinically insignificant impact in healthy women. In addition, OCs have been proven to provide several powerful health benefits which fully outweigh the risks involved. In particular, these concern diminished risks for ovarian and endometrial cancer. Other beneficial impacts include reduction of the risk of benign breast disease, functional ovarian cysts, pelvic inflammatory disease and various effects on or related to the menstrual cycle.

There were many lessons to be learned during the process of public acceptance of long-term OC use. The oral contraceptive scares of 1977 (thromboembolism), 1983 (breast or cervical cancer) and 1987 (breast cancer) and 1995 (differential risks for venous thromboembolism between desogestrel- and gestodene-based combined OCs) have documented the necessity of knowledgeable interpretation of epidemiologic data. Optimally, valid causal research in population studies should incorporate the complimentary roles of clinical medicine, biology, and statistics, with the latter serving as the servant rather than the master.

IS-29

Abstract not available at the time of printing

IS-30

New progestins

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The progestins have different pharmacologic properties depending upon the parent molecule, usually testosterone or progesterone, from which they are derived. Very small structural changes in the parent molecule may induce considerable differences in the activity of the derivative. The development of new generations of progestins with improved selectivity profiles has been a great challenge. Steroidal and nonsteroidal progesterone receptor agonists have been synthesized as well, although the later are still in a very early stage of development. Several new progestins, which have been synthesized in the last decade, may be considered fourth-generation progestins. These include dienogest, drospirenone, Nestorone®, nomegestrol acetate, and trimegestone. The fourth- generation progestins have been designed to have no androgenic or estrogenic actions and to be closer in activity to the physiological hormone progesterone. Drospirenone differs from classic progestins as it is derived from spirolactone. It is essentially an antimineralocorticoid steroid with no androgenic effect but a partial antiandrogenic effect. The antiovulatory potency of the different progestins varies. All progestins achieve the expected effect, but the less active compounds require higher doses to exert antigonadotropic effect. Trimegestone and Nestorone are the most potent progestins synthesized to date, followed by two of the gonanes: keto-desogestrel and levonorgestrel. The new molecules drospirenone and dienogest have less potent antigonadotropic activity and higher doses are required to suppress ovulation. Levonorgestrel, etonogestrel and Nestorone have been incorporated into long-acting delivery systems for use as long-term progestin-only contraceptives.

Nestorone, has high progestational activity yet is not active orally; it must be administered parenterally due to its rapid hepatic metabolism. The anti-ovulatory potency of Nestorone (s.c) is twice greater than levonorgestrel. Due to its high potency, very low doses of Nestorone may be delivered via long-term sustained-release delivery systems. Nestorone, 75 or 100 μg per day, released by vaginal ring for 6 to 12 months, has suppressed ovulation with inhibition of follicular maturation in a high percentage of women. A vaginal ring releasing both 150 μg of Nestorone and 15 μg of ethinyl estradiol per day has effectively suppressed ovulation for 13 consecutive cycles. Nestorone has also been used effectively in a single implant for contraception in breastfeeding women and shows promise for use in transdermal systems as a contraceptive or for hormone therapy.

Natural progesterone and some of its derivatives, such as the 19-norprogesterone molecules, and the new molecules drospirenone and dienogest are not androgenic and, therefore, have no negative effect on the lipid profile. The antimineralocorticoid effect of drospirenone leading to a better control of blood pressure is likely to offer potential cardiovascular benefits and further studies with this progestin are warranted. The effects of progestins on breast tissue remain controversial. However, depending on the progestin and the duration of application, cell differentiation and apoptosis may predominate over proliferation. It is still unclear if the currently available progestins are able to bind specifically to the progesterone receptors PR-A or PR-B and whether this is of clinical relevance to breast cell proliferation is unknown. Further research in this direction is warranted.

IS-31

Male steroidal contraception

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Contraceptive methods for men have not benefited from the advances in steroid chemistry in the last half century. This provides a stark contrast to female methods, which have been transformed and are available in a range of preparations enhancing compliance and efficacy. Potential approaches to male contraception include hormonal suppression of the pituitary gonadotrophins and thus spermatogenesis, direct testicular actions on spermatogenesis, and methods targeting post-testicular spermatogenic maturation in the epididymis. While all three offer potentially attractive methods, the hormonal is the only one in clinical studies. The ability of exogenous testosterone to suppress spermatogenesis was first reported in the 1940s. Large efficacy studies were undertaken by WHO in the early 1990s, confirming that a steroidal approach was feasible and offered good contraceptive efficacy. Subsequent studies have explored addition of a range of progestogens to testosterone administration, utilising the progestogen to provide most of the gonadotrophin suppression, with the testosterone mostly for 'add back' replacement to prevent hypogonadism. This allows a large reduction in the dose of testosterone required, and thus avoids the side effects noted in the purely testosterone-based WHO studies. A major issue has been incomplete suppression of spermatogenesis in a proportion of men, although Chinese and Asian men show more consistent induction of azoospermia. A Phase III trial using the longer acting injectable testosterone undecanoate is underway in China at present. Recent testosterone/progestogen combinations have show more consistent induction of azoospermia in caucasian men. In our studies using testosterone pellets with either oral desogestrel or etonogestrel implants, we have achieved azoospermia in all men, although groups sizes have been small (n=15 approx). The advent of synthetic androgens with differential metabolism such as the prostate-sparing 7-methyl-19-nortestosterone allow for the exploration of non-contraceptive health benefits. These results, together with the increasing involvement of the pharmaceutical industry, provide grounds for cautious optimism that a 'male pill' will become a reality.

Abstracts of Free Communications

SESSION 1: DIFFERENT CONTRACEPTION METHODS

FC1-01

Removal techniques for deep sub-dermal, sub-fascial & intramuscular Implanon contraceptive implants: Experience of a Fertility Control Unit

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Introduction: Implanon was launched in the United Kingdom in September 1999. Since then, thousands of women have used the implants, providing the women, their carers, and the manufacturers a wealth of post-marketing experience of the use of the contraceptive. It is difficult to know the exact number of women who have used and are continuing to use Implanon, which has led to a call for a monitoring scheme. Ease of use appears to be the most common reason for choosing Implanon and one of the best-liked features while bleeding irregularities appear to be the most commonly reported side-effect, followed by weight gain, moods and headaches. The UK is the only country where theoretical training is followed by live training, a significant factor in reducing complication rates. However, cases of poor insertions still occur, leading to very difficult removals of deeply inserted implants. Guidelines have been published for locating such implants but guidelines about removal procedures and techniques are very difficult to come by and are dependent on operator experience and available facilities.
Aims and Methods: To report on our experience of and describe our techniques of accurately locating and removing deeply removing deeply placed Implanon contraceptive implants over a period of 4 years. To also identify factors that may identify deeply placed implants that are likely to be successfully removed under local anaesthesia and those more likely to require removal under general anaesthesia.
Results: To-date, we have attempted removal of 15 deeply placed Implanon contraceptive implants, all referred from outside our unit. Some were placed deep into the fat layer; some just below the muscle fascia while others were placed in the biceps muscle. The location of the implants ranged fro 3 to 6mm below the skin surface. Previous attempts at removal ranged from 0 to 3. One patient had attempted self-removal using a screwdriver and a pair of scissors. Implants that were located above the muscle fascia were more likely to be removed successfully under ultrasound guidance that those located below the muscle fascia. Thos located intramuscularly were more likely to require general anaesthesia and intraoperative ultrasound guidance. We illustrate our techniques of removing these Implants.
Conclusions: Despite concerted efforts to ensure accurate insertion of Implanon contraceptive implants, cases of deeply placed implants still occur. On occasions, removals of these implants require general anaesthetic. We have identified factors that may predict such cases and descried techniques for removal of such implants. Patients with deep implants should be referred to centres with experience of dealing successfully with such cases.

FC1-02

Study on the effects of a single implant containing nomegestrol acetate (UNIPLANT) on the hormonal profile, endometrial morphology and ultrasonographic evaluation of ovarian function

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Objectives: The objective of this study was to evaluate the effects of a single silastic implant containing 55 mg $\pm$ 10% of nomegestrol acetate on the hormonal profile, endometrial morphology, cervical mucus, maturation index and evaluation of ovarian function by vaginal sonography, during one year.
Material & Methods: Twenty healthy women of reproductive age (18–30 years old) participated in this study. Prior to implant insertion, a clinical examination was carried out, which included: a general medical and gynecological examination, as well as the collection of cervical/vaginal material for cytology and maturation index. Hysteroscopy with endometrial biopsy was carried out during the control cycle in all patients. All patients were submitted to a second hysteroscopy during the study, five during the second month of use, five during the sixth month and ten during the twelfth month of UNIPLANT use. In the same cycle in which hysteroscopy was performed, hormone measurement, vaginal sonography and cervical mucus collection was carried out thrice weekly.
Results: Based on levels of plasma progesterone, 80% of cycles studied in users of UNIPLANT were anovulatory. In 56% of cycles, the presence of persistent, non-luteinized follicles was observed. Cervical mucus was evaluated according to criteria established by the World Health Organization and showed a marked reduction during treatment cycles in all parameters studied. Endometrial thickness was <8 mm in all treated cycles in the study. Alterations in the endometrial architecture were observed in the majority of treated cycles and consisted of the presence of a thin endometrium with a marked increase in vascularization.
Conclusion: This study demonstrates that UNIPLANT is a long-acting contraceptive method that probably functions at hypothalamic-hypophyseal level, on the ovary, the endometrium and in cervical mucus production.

FC1-03

A new highly effective subcutaneous contraceptive injection

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Objectives: To assess the efficacy, safety, and acceptability of a new formulation of depot medroxyprogesterone acetate subcutaneous injection (DMPA-SC) administered every 3 months (12 to 13 weeks).
Design & Methods: This phase 3, open-label, noncomparator, multinational, multicenter 1-year study included sexually active, regularly menstruating women, aged 18 to 49 years. Subjects who received at least 1 dose of study medication constituted the ITT population. Treatment consisted of DMPA-SC (104 mg) injection at 0, 13, 26, and 39 weeks; subjects at selected sites that successfully self-injected in the office were given the option to self-inject at home for injections 3 and 4. The primary endpoint was the treatment failure cumulative pregnancy rate at 1 year. Safety endpoints included the incidence of amenorrhea, irregular bleeding, and adverse events. Satisfaction with treatment was evaluated through a Patient Satisfaction Questionnaire (PSQ) and End of Treatment Questionnaire (EOTQ).
Results: Of the 1065 subjects in the ITT population (mean age, 32.2 years; BMI range, 15.4–40.6 kg/m^2), 80.4% completed the study. No pregnancies were reported in this study, which included 10,407 woman-cycles of exposure to DMPA-SC. Efficacy was independent of BMI (overweight, BMI >25 to 30 kg/m^2, 20.6%; obese, BMI >30 kg/m^2, 6.3%). At least one home self-injection was performed by 19.2% of subjects. A very high level of satisfaction with DMPA-SC was indicated in 3 PSQ and EOTQ measures: preferring it to other contraceptive methods, willingness to continue treatment and willingness to recommend it to a friend. The largest percentage (44.0%) of respondents indicated they would prefer home self-injection to injection by clinician (35.5%) or self-injection at the doctor's office (20.5%). Overall, DMPA-SC was well tolerated. Of the 856 patients assessed at month 12, most subjects (67.1%) either lost weight or fluctuated within a narrow range (-2.29 kg to +2.39 kg). The mean weight gain was 1.4 kg. Most irregular bleeding decreased with time, whereas incidence of amenorrhea increased to 51.6% at month 12. Treatment-emergent side effects leading to discontinuation were low (5.3% of subjects).
Conclusion: The results of this study indicate that new DMPA-SC (104 mg every 12 to 13 weeks) is a highly effective and well-tolerated contraceptive, with efficacy uncompromised by BMI. Subjects reported a high level of satisfaction with DMPA-SC and those given the opportunity for home self-injection preferred this option to injection at the clinician's office.

FC1-04

A randomised controlled trial to determine the impact of fertility awareness education on the behaviour, knowledge and attitudes of condom users

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This study was a collaborative effort between the University of Oxford and Georgetown University, Washington DC.
Aim: To assess the impact of fertility education on the behaviour, knowledge and attitudes of condom users.
Design: A randomised controlled trial.
Setting: Primary health care centres.
Subjects: Eighty-four couples aged 18 to 45 who used condoms as their method of contraception.
Methods: The women were followed up for a total of four menstrual cycles. All women were asked to record menstrual cycle information including, intercourse frequency, and condom usage. At the end of four menstrual cycles, the women's fertility knowledge assessed using a questionnaire. The couples were then randomised into two groups. Allocation of couple to group was at random using a sequence of computer generated random numbers sealed into numbered envelopes and opened by the nurse just prior to the visit after four cycles. The intervention group received a single educational session about fertility knowledge, whereas the control group did not. The couples were then followed for four further menstrual cycles recording the same information as previously. The women randomised to receive fertility education were also asked to record observed signs of their changing fertility throughout the menstrual cycle, and days they thought they were fertile. After a total of eight menstrual cycles all the women in the study were asked repeat the fertility knowledge questionnaire. In addition an in-depth interview was conducted to determine their knowledge, attitudes and behaviour relating to using condoms.
Main outcome measure: The difference in pattern of protected and unprotected intercourse during the fertile and infertile phases of the four menstrual cycles after randomisation.
Results: The fertility education intervention significantly increased the frequency of unprotected intercourses in the post fertile phase of the cycle. There were no pregnancies resulting from the unprotected intercourses in the intervention group. The fertility knowledge of the couples increased significantly in the intervention group.
Conclusions: The fertility education intervention significantly increased the frequency of unprotected intercourses in the post fertile phase of the menstrual cycle. These findings suggest that if fertility education is targeted at monogamous couples it is likely to encourage them to target their risk taking behaviour at time that are unlikely to result in a pregnancy. However it is argued that a small amount of knowledge can be a dangerous thing and if fertility education is offered indiscriminately it could result in increased frequency of risk taking and increased exposure to STIs to those couples at risk.

FC1-05

A comparison of Pearl indices and cumulative incidences for use in meta-analysis of contraception trials

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Objectives: One of the issues encountered when performing meta-analysis of contraceptive trials is the variable way in which the outcomes are reported, as cumulative rates (Kaplan Meier curves), single or multiple decrement life-tables rates, or Pearl indices (events per 100 women-years). The latter decrease with time, while the others increase. However, it is usually the ratio of the rates that we use in meta-analysis. In this analysis we compare the ratio of the Pearl rates to the ratio of the cumulative incidence and their confidence intervals.
Design and methods: We used data from a large WHO randomised trial of a frameless IUD and TCu380A, to compared the ratio of Pearl indices to the ratio of cumulative incidences. We used the method described by Kleinbaum to calculate the standard error of the ratio of cumulative incidences and the method of Hasselblad for the standard error of the ratio of Pearl indices, to calculate their confidence intervals.
Results: For accidental pregnancies the difference in the ratio of Pearl ratios to ratio of incidence ratios was greatest at year 6 at 13% (Pearl rate ratio 0.95, 95%CI 0.64 to 1.47; incidence rate ratios 0.85, 0.56 to 1.29). In 4 of the 6 years of follow-up, the difference in ratios was less than 5%. The difference was smaller for removals for bleeding and pain, never exceeding 3% (Pearl ratio 1.10, 0.90 to 1.33; incidence ratio 1.13, 0.94 to 1.36 at 6 years). For total use-related discontinuations, the difference never exceeded 4% (Pearl ratio 1.26, 1.10 to 1.45; incidence ratio 1.22, 1.08 to 1.38 at 6 years).
Conclusions: The difference in rate ratios, whether we use the Pearl indices or cumulative incidence rates, is usually small. The difference in rate ratios from single and multiple decrement life-tables is likely to be smaller. The ability to incorporate trials using different reporting methods in meta-analyses enhances our capacity to systematically review the literature. Further research is required to understand the determinants of the magnitude and direction of the differences.

FC1-06

Ease of insertion, contraceptive efficacy and safety of new T-shaped levonorgestrel-releasing intrauterine systems – First clinical report

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Objective: The objective of the study is to evaluate ease of insertion, contraceptive performance and safety, in parous and nulliparous women, of two new T-shaped levonorgestrel (LNG)-releasing intrauterine systems (T-LNG-IUS), Femilis™ LNG-IUS and Femilis™ Slim LNG-IUS, releasing 20 μg of LNG/day. An ancillary objective is to evaluate expulsion and user-continuation.
Design and methods: An open, prospective non-comparative study (interim analysis). Two hundred and fifty-eight insertions were performed in fertile women for contraception. From these, 143 (55.5%) parous women were fitted with Femilis-LNG IUS and 115 (44.5%) nulliparous women were fitted with Femilis Slim LNG-IUS. The LNG-IUS is inserted using a simplified push-in technique (without folding the cross-arms in the insertion tube).
Results: This paper is the first (interim) report with the Femilis LNG-IUS. The push-in technique of insertion was considered simple and safe. Insertion was reported 'easy' in virtually all women (98%). Pain at insertion was absent in 23.6% and 'mild' in 64.7% of women. At the time of study analysis the total number of women-months was 1,867. Seventy-eight women had the T-LNG-IUS in place for periods in excess of one year. The study was well followed-up with lost-to-follow-up of 3 woman only. No pregnancies were observed. The following events occurred: there were 3 expulsions in the nulliparous and 1 in the parous group. Fifteen removals were performed for medical reasons (mainly bleeding and pain). One pelvic infection occurred in a nulliparous women caused by Chlamydia trachomatis which was cured without removing the IUS. There were no serious adverse events (e.g. perforation) reported. Both the standard and slim version of T-LNG-IUS were well tolerated which resulted in a high continued use (91.4%).
Conclusion: The Femilis LNG-IUS insertion procedure is simple and safe. The results of this one-year study are in agreement with those observed with the Mirena® and frameless FibroPlant™ LNG-IUS. However, the simple and safe insertion procedure could be an advantage for use by non-specialist providers (e.g. nurses, midwives, general practitioners), and for those not using the LNG-IUS regularly, and contribute to an increased prevalence of use of the method. Femilis Slim could be an attractive long-term contraceptive option in young, including adolescent women. The study analysis will be updated for the presentation.

FC1-07

Living comfort at 1 year after placement of subcutaneous etonorgestrel

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The etonogestrel implant contraceptive device (Implanon) was placed in the upper arm of 188 women in 2001 at the outpatient gynecology clinic of the general hospital of Tienen, Belgium. Patients were asked to fill out a questionnaire at placement and again at one year after placement. Discontinuation of the method was seen in 18%. The main reason of discontinuation was excessive or irregular vaginal bleeding. Questions about living comfort in the 145 users returning their questionnaire after one year showed an increased risk of androgenic side effects and fatigue. On the other hand, migraine was 16 times less frequent in users (OR 0.06 (0.018–0.21) $p < 0.0001$), but not other types of headache (Table 1). We conclude that Implanon has disadvantages of irregular bleeding and androgenic side effects, but has a significant improvement on migraines.

Table 1. Univariate analysis of variables linked to the use of etonogestrel implants

	Improved	Identical	Worsened	Chi^2 or Fisher t statistics
Acne	11	78	24	2.5 (1.2−5.4) p=0.026
Libido	17	86	19	
Mood swings	16	91	21	
Quality of sleep	3	112	13	4.7 (1.3−16.9) p=0.018
Frequency of urinating	3	119	3	
Mictalgia	1	95	2	
Ease of defecation	4	113	3	
Pleasure to go out	12	103	4	3.2 (1.0−10.3) p=0.07
Migraine	33	63	3	0.06 (0.02−0.2) p<0.0001
Headache (except migraine)	22	71	16	
Weakness, fatigue	9	63	36	5.5 (2.5−12.1) p<0.0001
Dysmenorrhoea	43	45	24	0.4 (0.2−0.8) p=0.008
Pleasure in sports	8	96	10	
Pleasure in work	8	100	11	
Dyspareunia	7	72	14	
Medication for vaginal yeast infection	16	47	8	
Medication for vaginal bacterial infection	13	44	4	3.9 (1.2−12.6) p=0.03
Appetite	19	95	7	3.0 (1.2−7.5) p=0.02
Urge to eat chocolates, sweets	21	87	19	
Greasy hair	5	77	28	7.2 (2.6−19.4) p<0001
Dry skin	3	92	12	0.2 (0.06−0.8) p=0.03
Breast tenderness	10	73	27	3.2 (1.5−7.1) p=0.0035
Concentration difficulties	2	102	11	0.2 (0.4−0.8) p=0.019
Endurance*	11	85	21	

SESSION 2: SPECIAL GROUPS

FC2-02

Contraceptive choice for young people

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Introduction: Clinicians suggest that use of long-acting contraceptive methods such as Evra the contraceptive patch, NuvaRing the contraceptive vaginal ring and Implanon the contraceptive implant may help reduce teenage pregnancy rates. However, little is known about young people's attitudes towards these methods or about how their personal experience may affect them.
Objectives: The aim of this study was to compare contraceptive use, experience of contraceptive failures and knowledge of and attitude towards long-acting contraceptives between a group of young people attending young people's contraception and sexual health clinics and young people at school who were not necessarily sexually active in order to contribute towards the improved understanding of the choices which young people make about contraception.
Design and Methods: A cross sectional survey was carried out using a self-completion questionnaire developed for this study. Participants were a self-selecting sample of young people attending three young people's contraception and sexual health clinics; a school health drop-in or a Year 10 (age 14–15) Personal and Social Education class. Statistical analysis was carried out using appropriate univariate tests.
Results: There were 129 participants in the clinic group and 24 in the school group. The clinic group was older than the School Group. Condoms were the most commonly used method of contraception in both groups. Of pill users approximately 50% had missed at least one pill in the last month. Over half the clinic group had experienced a pregnancy scare and 8.6% had experienced an unplanned pregnancy; 16.7% of the school group had experienced a pregnancy scare but none had experienced an unplanned pregnancy. The majority of participants in both groups had no prior knowledge of Evra, NuvaRing or Implanon. Approximately one third of participants in both groups indicated that they would wish to use Evra; five percent of the clinic group and none of the school group that they would wish to use NuvaRing and approximately one quarter of the clinic group and one eighth of the school group that they would use Implanon. Participants in the clinic group were more likely to wish to use NuvaRing and Implanon than the school group but the proportion of participants who stated they would wish to use Evra was approximately the same for both groups.
Conclusions: Young people's use of and attitude towards contraception is variable. Awareness of this variability and recognition that attitudes may change with experience will be important for health professionals in assisting young people in making informed decisions about contraception.

FC2-03

VIP – Very Important Persons use contraception! Evaluation of a sexual education intervention among upper secondary school students in Sweden

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Introduction: Swedish upper secondary schools offer theoretical programs preparing the students for university studies and vocational programs preparing for various hand-craft professions. Investigations have shown that students on vocational programs have sexual intercourse at earlier ages and are less prone to use contraceptives than students on theoretical programs. Abortion rates and the prevalence of Chlamydia are increasing among Swedish adolescents. The condom is one of the most frequently used contraceptive methods among adolescents in Sweden. In case of condom failure, the emergency contraceptive pill (ECP) can be used as a back-up method. The ECP has been on the Swedish market since 1994 and in April 2001 a levonorgestrel-only preparation became available as an over-the-counter product to a cost of 13 Euros.
Aims and methods: To evaluate an intervention aimed at improving knowledge, attitudes and practices of condoms and emergency contraception (ECP) among a group of students in upper secondary school, we undertook an intervention study with quasi-experimental design. A strategic sample of 25 classes from two vocational high school programs was divided into one intervention group and one comparison group. All students completed questionnaires before and after the intervention which included sexual education lessons, free condoms on request and access to telephone counselling.
Results: Of the 461 eligible students, mean age 17 years, 390 (85%) completed the pre-test and 326 (71%) the post-test. Three out of four (77%) had experienced sexual intercourse. The majority (76%) had used contraception, mostly condoms at first intercourse. The students already had good knowledge about condoms with no change after the intervention, but attitudes improved and condom use increased. Knowledge and attitudes towards ECP improved but the use remained stable (29%). The most important source of information about ECP changed from 'friends' to 'school' after the intervention. More than one out of four (28%) had opted for free condoms but only 3% had requested telephone counselling.
Conclusions: The sexual education intervention reached one important goal, namely improving knowledge about ECP without increasing ECP use or jeopardizing condom use. Increased availability of condoms and practice of condom skills may be ways of reducing barriers for teenage condom use. Senior students within different health care professions can be a useful resource in school-based sexual health education programs.

FC2-04

Use of alcohol among users of a Young People's Sexual Health Service

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The use of alcohol by young people, and its links to antisocial and risk-taking behaviour, has been the subject of much government and media attention. Links to sexual risk-taking have been shown in some studies and not in others. In an effort to discover whether this link was important to our practice, three hundred young people attending various clinical services across a large Scottish city were asked about their alcohol intake, and the relationship to various health and social behaviours. 83% of the subjects were female, reflecting the use of services locally. The age range was from 12–25 years, with most being 16–18 years old. 39.7% of respondents were still at school.

The results: 74% drank at weekends or more frequently, with only 8% stating they never drank alcohol. 50% said they stop when they've 'had enough', but 22.7% drink 'until it runs out' or 'until very drunk'. 40% drank spirits mainly, with another 15% choosing 'alcopops'.

While 47% of the sample had never taken drugs, 42% of respondents had mixed alcohol and other drugs, with cannabis being the most frequently mentioned drug.

Adverse events were common: 19% stated they had experienced concern or hurt through their own drinking, and 41.7% said they had experienced concern or hurt through someone else's drinking. 25.7% had been injured or hurt, 11.7% had been in hospital, and 24.7% admitted that they had been in trouble with the police as a result of alcohol use. 35% said that their alcohol use was linked to unprotected sex, and 25.7% that alcohol had been linked to sex they later regretted.

These figures show that a large proportion of young people in this group were drinking alcohol regularly, and regretted, unprotected sex and its sequelae are only one of the adverse unintended consequences of this. This has several implications for education of young people, provision of services for them, and training of staff working with them.

FC2-05

Reported behavioural outcomes from RCT of a specially designed teacher-delivered sex education programme (SHARE) in Scotland: outcomes 2.5 years post-intervention

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Objectives: Despite widespread support for school sex education, evidence of effectiveness from rigorous evaluations is still very limited. The purpose of this is to add to the current evidence by presenting the results of a RCT that rigorously evaluated the effectiveness of a theoretically-based teacher-delivered sex education programme for 13–15 year olds (SHARE) in Scotland. The SHARE programme (20-session pack and five-day teacher training course) was developed and carefully piloted over two years. A RCT of the SHARE was conducted from 1996 – 2004. This paper will describe the behavioural outcomes of the RCT 2.5 years post-intervention, these include, sexual experience, use of sexual health services, levels (and type) of contraceptive use, experience of pregnancy, regret of sexual experience and quality of relationships.

Design & Methods: Twenty-five schools were assigned by a balanced randomisation either to deliver SHARE or to continue with their existing sex education. All third year pupils in two successive years were invited to participate in the study. Participants were first followed-up, 6 months post intervention (results already in public domain) and then again at second follow-up, 2.5 years post-intervention. The pre-intervention and first follow-up questionnaires were conducted in school classrooms under examination conditions. As the pupils had all left school by second follow-up, postal questionnaires were sent to the study participants.

Results: At baseline predictors of sexual experience (parenting and socio-economic) were very well balanced between the arms of the trial. Outcomes at first follow-up were within the range predicted for sample size calculations and allow us to report the effect of the SHARE programme with the accuracy we had expected at the planning stage. At the second follow-up, 2,863 respondents completed the survey. Weighting will be used to adjust for attrition. The median age at second follow-up was 18 years, 2 months. Analysis of the behavioural outcomes at second follow-up is ongoing. For information, at first follow- up 29% of males and 39% of females reported experience of sexual intercourse, these rates will be higher at second follow-up and therefore the analysis of behaviours such as condom use will be conducted on a higher proportion of the sample.

Conclusions: Analysis by arms of the trial will allow us to report at the Conference the effect of the SHARE Programme on the sample at 2 years 6 months post-intervention. These findings will be discussed in terms of their implications for the efficacy of the programme, the extent and quality of its delivery, and possible limitations in evaluation design.

FC2-06

Teen4.info: a qualitative study to develop and evaluate of a reproductive health website developed in partnership with teenagers and young parents from Oxford and Great Yarmouth

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Introduction: The UK has the highest incidence of teenage pregnancy in Europe, which contributes to a high proportion of socially disadvantaged single parents. In addition to unhealthy lifestyles many are also infrequent attendees of antenatal health care systems and have poor pregnancy and perinatal outcomes, which may have long-term health, social and economic consequences.
Aim: To use website technology and a participatory approach to improve health promotion about Reproductive Health including: reproductive & sexual health; access to local groups and services and accesses to educational and vocational training opportunities.
Design and setting: A qualitative study in primary health care centres.
Subjects: Teenagers and young parents living in Oxford and Great Yarmouth.
Methods: The research involves the development and evaluation of information about reproductive health relevant to the target groups. The facilitators and support workers from the project team and young parents from each of the communities involved are working together to develop the pilot website A variety of methods is being used to support the participants in the development and co-ordination of the website, including facilitated group discussion, personal stories (narratives) and frequently asked questions. The information is frequently displayed as a series of images to assist those with low literacy skills. The participatory techniques used ensure that the content and design of the information is locally relevant and easily understood by the target group. An example of the information currently under development can be viewed at the website: www.Teen4.info. The website includes a locally relevant section for each community and a 'core' section (or hub) which is focussing on general issues developed in collaboration between the communities.
Evaluation: An initial evaluation of the teenage website project has been completed. A questionnaire survey and focus groups with teenagers and young parents who to date have not been involved in the development of the content of the web-site is being conducted in order to gain further understanding about the social, health and educational needs of teenagers who are vulnerable to becoming parents.
Results: The evaluation will describe the key lessons learnt under five headings: historical development of the website; the facilitators' experience of involvement; the participants' experience of involvement; the participatory methodology of the facilitation process; the development of ideas and concepts tried and revised. We will also present preliminary findings from the questionnaire survey
Conclusion: A reproductive health website needs to be dynamic and responsive to the needs of local groups. Many young people prefer images and photos to large amounts of written text. There is a need for peer group support workers to facilitate young parenting groups. There is a need for designers involved with the website development to become IT support workers and work directly with the groups. The process of developing the website in a participatory way is method for delivering a health promotion to disadvantaged young parents.

FC2-07

Effects of a gender-specific sexual health promotion program ('female doctor's lesson') in schools

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Introduction: Numbers of pregnancies and abortions in young girls - particularly in very young girls from 10 to 14 years of age - have increased rapidly since 1996.
Girls in that age group seem to overestimate their knowledge concerning sexuality, pregnancy and contraception as well as STDs. We deal with a media-experienced generation, who has heard a lot but understood very few and feel highly under pressure to have their own sexual experiences very early.
Aims and methods: 1.911 students grade 6 and grade 9/10 (aged 10 to 18) were randomized into intervention and control groups. The intervention group attended a special 'doctor's lesson' Pre (T1) and post (T3) intervention questionnaires (T1-T3=2 weeks) combined 57 items covering actual knowledge, 62 items for actual feelings and attitudes and 14 epidemiologic items. After the interventional lesson (T2) the students had to rate the comprehensibility and usefulness of this lesson.
Results: At T 1, before intervention, we found large knowledge deficiencies in both groups. Only 39% of the answers were correct. In 90% comprehensibility and usefulness of the intervention was estimated as good and very good.
In grade 6 more than 50% of the girls didn't know about the first menstruation being connected to the possibility of getting pregnant. So did 25% of the girls in grade 9/ 10. Two weeks after our interventional lesson 88% of the younger and 91% of the older girls were able to answer the questions properly. The same lack in general knowledge could be observed with respect to topics like 'morning after pill's, 'menstruation' and 'sexually transmitted diseases'.
After a 90 minutes intervention, the overall increase of knowledge was extremely high with 32% in grade 9/ 10 and 84% in grade 6.
Discussion: Age related medical information by female doctors for female students - empathic, but competent – could improve the knowledge of students effectively and could therefore play an important role in the promotion of sexual health and primary prevention of pregnancy in young girls.

SESSION 3: IMPROVING ACCESS TO SERVICES

FC3-01

Contraceptive behaviour: a psychoanalytic point of view

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Since modern contraception (MC) developed, acceptability became a tool to seek an answer to what goes on in the 'black box' of contraceptive decisions: why a particular method is chosen; to use, not use or to misuse a contraceptive; why failures in compliance happen, etc.. Social scientists and the medical world complain that there has been little progress in the last decade to understand contraceptive behaviour. Here we introduce the psychoanalytic point of view to enhance the comprehension of this behaviour.
Some case studies show how well informed women often choose unsafe contraceptive methods or have failures with highly effective ones. There are also fantasies and fears about contraception that are alike in very different settings and cultures. We'll try to understand these 3 f's (failures, fantasies and fears) searching for unconscious (ucc) meanings and conflicts activated by contraception.
Modern contraception successfully separates sex from reproduction. Sexual pleasure only for its own sake, without consequences, not allowed by unconscious and ancient social repression, may release ucc feelings of guilt and (self)-punishment that often lead to unhealthy contraceptive behaviour.
Pregnancy can be a drive (Trieb, pulsion) or the final stage of gender identification with the own mother or have many other meanings. But to give up this ucc desire to conceive, there has to be a resignation, a often incomplete, never ending mourning, that may appear as contraceptive failure.
The modern psychoanalytic and gender position, sees a conflict in the psychosocial construction of motherhood as a central value of a woman's self and the free exercise of sexuality.
The woman's body has the capability to achieve the basic feminine self - ideals: attract the male and get pregnant. The unconscious mental picture of the own body is different in every person.
The unconscious ideas of how the body interacts with gadgets or devices in the genital tract or incorporating drugs, are absolutely personal and very far from our biomedical way of seeing the body. It may unleash fantasies and fears of harm related to the conflictive repressed sexual behaviour.
To include contraception usefully in life depends on how the self developed, the relationship with the own body and the meaning of sex-life. That is why reproductive health, in fact, is embedded in human development, in social and educational change. In counseling in MC one should always bear in mind the ambiguity, the contradiction between what is consciously asked for and the unconscious trends and drives. Contraception may seem simple, but it awakens often complex behavior and psychic conflict.

FC3-02

'GO ASK EDITH': achieving a holistic approach to sexual health through Knowledge Management

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Introduction: Knowledge Management is a multi disciplined approach to achieving organisational objectives by making the best use of knowledge. FPA Health has developed a knowledge management strategy to improve reproductive and sexual health outcomes for it's target population. Through designing a web based interactive facility for clients and health professionals, FPA Health contributes to and disseminates reproductive and sexual health knowledge, information and learning.
Design & Methods: The 'Go Ask Edith' www.fpahealth.org.au/sex-matters/go-ask-edith/ website page offers an interactive facility, where web visitors can email questions, which are answered by clinical nurse specialists in reproductive and sexual health. These real life questions, form the basis of FPA Health's Frequently Asked Questions website page. An analysis of the information ensures a focus on consumer needs. This information is then applied across FPA Health's range of services research, clinician training, health promotion, prevention and treatment.
Results: The FPA Health website continues to attract an increasing number of visits. Average monthly visits for 2003 is 20 000, compared with 15 000 for the previous year. The average number of questions posted per month doubled in 2003. Over 50% of questions concern oral contraceptive and brands such as Diane, Brevinor, and Yasmin. Implanon attracted 7% of questions in 2003. Other dominant questions cover sexuality, STI's, itching, breasts, falling pregnant, erectile difficulties and period pain.
Conclusion: 'Go Ask Edith', is an effective Knowledge Management strategy, giving FPA Health an alternative model to deliver holistic sexual health care and meet the challenges of static budgets and service accessibility.

FC3-03

A termination of pregnancy Care Pathway: worth the effort?

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Introduction: Termination of Pregnancy services in Hull were centralised under one consultant in 1994/5. This included a central booking line and a clinic doctors' performa. However, co-ordination of elements of the service was difficult, duplication of work was evident and some aspects of the service were fragmented.
Aims and Methods: To co-ordinate care between clinical areas, sites and professions and to ensure adherence to quality standards (RCOG Guidelines), a full Care Pathway was developed with supporting guidelines and patient information leaflets. This covered the patient's journey from considering/requesting a termination until closure of the patient episode. Variances from the pathway were recorded as a quality tool.
Results: The pathway and supporting elements will be described including the first 18 months variance analysis.
Conclusion: The pathway has been very well received by patients and staff, has achieved its objectives and has fully justified the effort required in its production.

FC3-04

The reproductive health needs of Somali women affected by female genital mutilation living in Manchester, United Kingdom

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Background: Female genital mutilation (FGM), usually type 3 (the most severe form), affects over 90% of Somali women. FGM is illegal in the UK. There is a rapidly increasing Somali population in Manchester. In other parts of the UK, special African Well Woman Clinics have been set up to provide culturally sensitive reproductive health care to women affected by FGM.
Objectives: A health needs assessment was carried out to discover the reproductive health needs of Somali women affected by FGM; and to ascertain if a community family planning service could provide an acceptable service to these women.
Design and methods: A systematic literature search on FGM was performed. Somali women, men and Somali health professionals were interviewed individually for a video commissioned by the World Health Organisation. Focus groups comprising of representatives from the local Somali population were brought together to discuss topics of concern. A health questionnaire was developed from the discussions of the focus groups and was completed by other members of the Somali community.
Results: Qualitative and quantitative analysis was used. FGM was reported to have influences across the life course. The main themes were consistent with the world literature. FGM in childhood is normal in Somali and is often associated with acute health problems including pain, bleeding, infection and urinary retention. Menstrual problems may occur in puberty, sometime necessitating de-infibulation (re-opening). In later life there may be sexual problems, effects on fertility and childbirth. We discovered socioeconomic and sociocultural reasons facilitating continuation and factors against FGM. Women complained of a lack of knowledge and understanding by UK doctors and midwives. This Somali population expressed a desire to have easy and timely access to the FGM reversal operation (before marriage and pregnancy) rather than having to wait to see the local female hospital gynaecologist.
Conclusions: The adult Somali female population in Manchester suffers many complications of FGM. There is a need for an improved FGM reversal service in Manchester. This could be provided by the local family planning service when an acceptable location for the clinic is established and medical staff with gynaecological experience have been trained in the simple reversal procedure. Further work on FGM issues is being carried out within the Somali community.

FC3-05

How good is the provision of sexual health services for young people across England?

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Background: One of the aims of the national Teenage Pregnancy Strategy in England is to halve under –18 conception rates by 2010. Improving provision of contraceptive services for young people is a major component of the strategy.
Objective: to present a national picture of contraceptive services for young people in England and to assess the quality of provision against Best Practice Guidance from the Teenage Pregnancy Unit.
Design and Methods: Two national surveys, distributed via local Teenage Pregnancy Co-ordinators, were conducted of contraceptive services and general practice in 2002.
Results: Data were returned by 1295 contraceptive services (64% of all services in Sexwise database). Nearly a quarter of services had been developed since the start of the Teenage Pregnancy Strategy in 1999. 49% were mainstream services e.g. family planning or GU clinics, 39% were designated young people's services and 12% were mainstream services with specific sessions for young people. The proportion of services meeting at least 5 of the Best Practice criteria was 14%, 27% and 39% respectively. About half of the young people's services provided a wide range of contraceptive methods and screening for STI. Data were returned from 4020 /8910 (45%) general practices. 13% ran sexual health sessions for young people. Over 90% provided oral contraceptives and emergency contraception and only 50% provided condoms. 91% offered referral for NHS abortion, but 27% had at least one GP with conscientious objections to abortion. Notices explaining under 16s rights to confidentiality were displayed in 19% of practices, and in 14% of practices, at least one GP would not see under 16 year olds without a parent present. Contraceptive methods that are less reliant on the user e.g. injectables were less likely to be offered to those aged under 16.
Conclusions: Mainstream contraceptive services do relatively well in terms of range of services offered and Best Practice criteria met. If designated young people's services are to provide a level one standard of care, as outlined by the National Strategy for Sexual Health and HIV, further support will be needed, including effective referral pathways. In general practice, concerns remain about confidentiality and provision of services, particularly for under 16 year olds. These findings have stimulated further opportunities for training and interaction between the Teenage Pregnancy Unit, Royal College of General Practitioners, local commissioners and services providers in primary care.

FC3-06

Improving access to abortion services: a local model

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Local difficulties: Access to local services was poorly co-ordinated with considerable frustration and inconvenience to GPs, users and staff providing the service. There was very limited support for ultrasound scan services. There was also a limited choice of methods as only 23% of pregnancy terminations were carried out medically. About 26% of cases in one hospital were repeat outpatient visits. This was primarily said to be due to the difficulty in assessing the duration of pregnancy in the absence of an ultrasound scan machine. There were different, and sometimes complicated, paperwork for termination of pregnancy (TOP) services in the local hospitals. Staffing was problematic due to conscientious objection particularly by junior doctors. The net result was that the 'first contact to procedure' interval was in excess of the required target of 3 weeks (National sexual health strategy) and that 60% of cases referred to and 44% of those treated by the private sector were 12 weeks and under (local service level agreement is for cases above 12 weeks).
Aim: To put a comprehensive system in place to facilitate early access to and choice for abortion services in the local population.
Improvements required: These would include establishment of a community based centralised referral system for the efficient co-ordination of the appointments at the various clinics, theatres and wards; harmonisation of the paperwork and protocols for TOP services in the region; purchase of at least one portable ultrasound scan machine to facilitate early dating of pregnancy; expansion of existing service to reduce the number referred out of the region with significant reduction in cost to Primary Care Trusts (PCTs) and inconvenience to the clients; effective contraceptive backup in clinics, wards and theatres; staff training in basic ultrasound scanning; additional training in general and specialised contraception; recruitment of clerical, nursing and medical staff; and establishment of a robust database for TOP services for the purposes of audit and monitoring of local and national targets.
Outcome measures: Overall improvement in access and choice for clients; efficient use of time by GPs and other health professionals; and in staff morale and job satisfaction. A GP or other health professionals would either ring, fax or email details to designated numbers rather than ringing round various services for an appointment. An ultrasound scan machine, used in-house, would eliminate the need for repeat outpatient visits and increase the option of a medical TOP. Provision of regular information to PCTs and other stakeholders about TOP services and how targets are being addressed. Contraceptive backup and further training for staff would hopefully reduce the number of unplanned and unwanted pregnancy.
Results: The new system was set up in July 2003 and the first year experience would be presented. Also to be presented is the result of the questionnaires being sent to GPs and other health professionals to evaluate the impact of the changes.

FC3-07

A collaborative clinic between contraception and sexual health services and the adult congenital heart disease clinic

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Background: The success of cardiac surgery has created a new medical community – the 'grown-up' congenital heart patients. Women with congenital heart disease may need specialist advice about contraception and pregnancy.
Objective: To investigate whether women with congenital heart disease were receiving appropriate advice on contraception.
Methods: A contraceptive history was taken, via a predetermined form on 46 consecutive female patients, consenting to see a family planning doctor, at the adult congenital heart disease clinic, Freeman Hospital, Newcastle upon Tyne.
Results: Sixteen women (35%) had never discussed contraception with a health professional. One third of women who had previously discussed contraception with either their GP or family planning clinic had received inappropriate advice. There had been eight unplanned pregnancies in seven women. Thirteen out of eighteen women using condoms as their main method of contraception changed to a more reliable hormonal method. Four out of seven women not using any contraception started on a hormonal method. Two women changed their hormonal contraception to a more reliable method. There was a poor knowledge among the women about hormonal methods particularly Depo-provera and Implanon.
Conclusions: There is poor provision of contraceptive advice for women with congenital heart disease. A lot of women are unaware of the methods available to them. Many women had not received any advice or had been given inappropriate advice. Simply denying hormonal methods due to uncertainty is not adequate advice. Contraception and pregnancy should be raised with all female patients with congenital heart disease. Informed advice is vital to avoid the potential risks of an unplanned pregnancy. A combined clinic between the cardiologist and family planning doctor offers the optimal informed advice as neither alone has expertise in the other's field.

SESSION 4: NEW DEVELOPMENTS IN CONTRACEPTION, SEXUAL AND REPRODUCTIVE HEALTH

FC4-01

Self-administration of Depot Provera (DMPA) – the way forward?

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Introduction: Depo Provera (DMPA) is a popular method of contraception in the UK, but the need to attend for injection every 12 weeks involves costs to the health service and inconvenience to the user. A micronised preparation of DMPA for subcutaneous use has been developed and will allow self-administration. In anticipation of subcutaneous DMPA becoming available, we undertook a survey to determine what percentage of women would want to self-administer the injection and what would be the most suitable method for reminding women to do it.
Methods: The survey was undertaken in a large family planning clinic in Edinburgh, Scotland. During one calendar month, a self-administered questionnaire was offered to every woman attending for repeat DMPA injection. A questionnaire was attached to every packet of DMPA thus ensuring 100% targeting of DMPA users. All data will be entered onto a Microsoft access database and analysed using SPSS.
Results: 176 women completed the questionnaire, there were no refusals. 118 women (67%) were keen to self-administer DMPA. 89% of these women felt that they would need a reminder for when to inject. The most popular request was for a verbal reminder (33%) of the next 3 dates for injection at the time of their annual review; 30% of women preferred to receive a letter, and 25% a text message, just prior to the date of the next injection. Of the 58 women who did not wish to self-administer DMPA, the commonest reason was a dislike or fear of needles (62%); 43% were concerned that they would administer the contraceptive incorrectly; whilst 33% felt it was important to see a doctor every 3 months. Forgetting to self-administer was a concern to only 12% of women.
Conclusions: Most women are interested in self-administration of DMPA and would like to be informed of future administration dates at their annual review.

FC4-02

Vaginohysteroscopic approach for Essure® procedure: the experience of 317 cases

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Objective: To analyze the results of 317 cases of Essure® procedure in two Spanish hospitals in terms of efficacy, safety and patients' satisfaction.
Design and methods: Retrospective observational study undergone between November 2002 and January 2004. Three-hundred and seventeen women seeking for permanent sterilization were included after normal gynecologic routine examination, cervical Pap smear and ultrasound. Average age was 35 years (range 20 – 47). The performance was carried out in an outpatient setting or the office. A 5-mm diameter continuous-flow hysteroscope with a 5-Fr working channel was used to deliver the devices. Paracervical block was applied in the first 81 cases in order to be familiar with the technique, and then abandoned thanks to the feasibility of the vaginohysteroscopic approach without anesthesia or any ancillary instrumentation in the last 70% of women. Rates of placement of the devices, complications, patients' satisfaction and follow-up were recorded.
Results: Overall successful placement was reached in 302/317 women (95.3%), both bilateral (295/312) and unilaterally (5/5). Successful delivery in a second try was achieved in 15 out of 21 women (71.4%). Moreover, the last 158 (49.8%) were all delivered without incidences. Average time of the whole procedure was 10 minutes (range 1 – 35). To assess the correct intraoperative placement of the devices, the number of intracavitary loops was recorded, and at the end of the procedure a mean of 4.1 (range 2 – 16) and 4.3 (range 2 – 11) loops were seen in the right and the left tubal ostia respectively. Light vagal reactions took place in 17 out of 299 patients (3.3%), but were medically solved. Two uterine perforations were averted without bringing further complications. Patients were discharged in a maximum of 30 minutes time. Abdominal X-ray and/or hysterosalpingogram follow-up of 236 cases displayed an overall 99.2% rate of correct placement of the devices. Satisfaction was referred as 'good' or 'excellent' by more than 94% of the women at third-month visit. At present, no pregnancies have been recorded.
Conclusions: The hysteroscopist's experience rather than the use of anesthesia seems to be the most influential factor in successful placement rate. The vaginohysteroscopic approach decreases significantly patients' discomfort, avoids the need for either general or local anesthesia and allows the procedure to be safely and routinely carried out in the office.

FC4-03

A live 3D ultrasound system with colour Doppler to study the effect of sildenafil on erectile performance in patients with chronic and serious diseases presenting with erectile dysfunction

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Introduction: Patients with chronic and serious diseases (CSD), have a higher incidence of erectile dysfunction (ED) affecting 60–80% of survivors. As the pathophysiology is poorly understood, CSD men with ED often remain undiagnosed and untreated with significant affection of their quality of life.
Objective: The aim of this study was to determine functional anatomy of penis and cavernosal vascular haemadynamics in CSD suffering from erectile dysfunction (ED) before and after sildenafil therapy.
Patients and methods: Erectile performance of 5 CSD patients aged 26–55 (median 51) years was assessed before and after 50–100 mg of sildenafil. Two healthy age matched volunteers acted as controls. A Live 3D system by Philips Ultrasound was used for 4D anatomical data acquisition at a rate of 20 –24 volumes per second. ECG gating was used for 4D colour-Doppler blood flow data collection. To enable the 4D scans to be carried out in a physiological condition, a water-filled vagina was devised to allow patients to insert the penis in and to perform artificial intercourse in it. Off-line analysis was performed on TomTecs 4D CardioView.
Results: At base line, the size of the penis was small and the cavernosal blood flow was virtually undetectable in controls as well as the patients. Within 45 mins of oral Sildenafil, all patients had successful erection of grade II (partial) to grade III (with full rigidity) which was comparable to the erectile performance of the controls without sildenafil. Erection was associated with an increase in penile size, volume and length in both patients and controls. In addition, there was a marked increase in cavernosal blood flow with high velocity during erection. However, despite having successful erection, the patients had cavernosal arteriogenic insufficiency compared to the controls. Following detumescence, there was evidence of urethral dilation followed by return of structural and haemodynamic changes to base line values.
Conclusions: Our data suggest that 4D images of the erection and subsequent changes in vasculature can be observed in real time by using live 3D ultrasonography and Colour Doppler. This method also offers a potential means of volumetric quantitation of the geometric change and increment of the whole penis, individual corpora cavernosa penis and urethra and penile haemodynamics. We propose that this novel technique can be used as a diagnostic tool to understand the pathophysiology of ED.

FC4-04

Can we trust symptoms?

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Introduction: It is a common experience among gynaecologists that there is often a discrepancy between symptoms and signs with regard to diseases affecting the lower genital tract (LGTI), for example.
Objectives: To correlate symptoms reported by women who had attended for contraceptive advice and in whom laboratory findings either documented or could not document presence of a lower genital tract infection with the outcome of an experimental psychological personality profile survey of these women.
Aims and Methods: One thousand women were studied with an extensive battery of microbiological tests for bacterial, fungal, viral and parasitic genital infections and for vaginal flora changes such in vulvovaginal candidiasis and bacterial vaginosis. The participants were asked to react on a series of pictures with a given number of alternatives to box graded from do not agree with statement to agree very much. The Sivik's test, which we used, had been validated in a large population-based survey.
Results: The women who were infected were, as compared to those who were microbiologically negative, showed, e.g. a higher proneness to trust other persons ($p=0.04$), had a lower ability to feel guilt and shame ($p=0.01$) and were less aggressive ($p=0.01$). The infected women with no symptoms compared to those infected who could report symptoms showed less proneness to experience anxiety ($p=0.04$), had a higher tendency to expect and/or demand anything from other people ($p=0.05$).
Conclusions: Symptoms, regarded as indicative of a LGTI, reported by a woman at history taking are strongly influenced by her personality profile. This profile may also influence her risking taking in general, including her risk of contracting exogenous genital infectious agents.

FC4-05

Maintenance of spermatogenic suppression by etonogestrel implants with depot testosterone

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Objective: Testosterone/progestogen combinations are currently the most promising approach to hormonal male contraception. We here investigated the effectiveness of the etonogestrel implant Implanon® in combination with androgen replacement using testosterone pellets in maintaining spermatogenic suppression. We have recently demonstrated that this combination results in profound but incomplete suppression of spermatogenesis with only 1/14 men maintaining a sperm concentration $>0.1\times10^6$/ml after 24 weeks treatment with 2 etonogestrel implants. We here investigated the effects of a higher dose of etonogestrel, i.e. 3 implants at maintaining spermatogenic suppression for a longer time period of up to 48 weeks.
Methods: Fifteen healthy men received 3 subcutaneous etonogestrel implants (each releasing approximately 50 μg/day) with 400mg testosterone pellets s. c. 12- weekly for 24 or 48 weeks. Semen analysis was performed at 4 weekly intervals.
Results: 13 of 15 men completed 24 weeks treatment. Sperm concentrations were reduced to $<1\times10^6$/ml in all 14 subjects at week 16. Azoospermia was achieved in 10/14 subjects at week 16 and 10/13 subjects at week 24. 9 men chose to continue treatment to a total of 48 weeks. 8 men remained consistently azoospermic from week 28, but one showed partial recovery of spermatogenesis from week 40, sperm concentration increasing from azoospermia to 7×10^6/ml. This was associated with partial escape from suppression of FSH. LH remained suppressed to the limit of detection in all men. Mean testosterone concentrations remained in the normal range throughout the study.
Conclusion: In comparison to 2 etonogestrel implants with testosterone pellets, the addition of a third provides more consistent profound suppression of gonadotrophins and spermatogenesis. This regimen therefore illustrates the potential for long-acting hormonal male contraception, although the duration of action remains to be more completely defined.
This study was supported by DFID/MRC (grant no G9523250).

FC4-06

Novial® effectively reduces seborrhea and acne after four cycles of treatment

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Objective: Seborrhea is a pre-condition to acne, characterized by oily skin and greasy hair. The objective of the study was to investigate the effect of an oral contraceptive (Novial®) on facial seborrhea and acne compared with no hormonal treatment.
Design and methods: In this open-label, non-randomized, group-comparative multi-center trial,young women aged 18–30 with moderate to severe seborrhea were enrolled after a 2-month washout phase. Women either used Novial®, a phasic oral contraceptive containing ethinylestradiol (35/30/30 μg) and desogestrel (50/100/150 μg) (n=177) or no hormonal treatment (control group; n=77) for four cycles. Condoms were provided to the control group for contraception. SebuTape®, an adhesive tape that absorbs facial oil when attached to the skin, was used to measure seborrhea on the forehead and cheeks. Computerized image analyses of the tapes were used to assess the number of active follicles and the amount of excreted sebum. Qualitative tape assessments were also performed. Acne was assessed by lesion counts, and questionnaires were used to assess the subjects' and physicians' perception of skin condition. Pregnancies and adverse events (AE) were recorded. Assessments were performed at baseline, after two and four cycles/months, or at early discontinuation.
Results: Overall, 161 subjects in the Novial® group and 73 subjects in the control group completed the study. After 4 cycles, the total score for sebum excretion decreased by 0.71 nl/cm^2 (95% CI 0.36–1.05) in the Novial® group and increased by 0.05 nl/cm^2 (−0.55–0.46) in the control group. The difference between groups (0.78 nl/cm^2 0.19–1.36) was statistically significant (p=0.010). The number of active follicles/cm^2 decreased by 0.86 (0.44–1.28) and 0.08 (−0.53–0.69), respectively (mean (SD) at baseline were 11.45 (2.23) and 11.19 (2.24) respectively). The difference between the groups was statistically significant (p=0.029). The difference in qualitative scores between the Novial® group and the control group (0.93 0.08–1.78) was statistically significant (p=0.032). The average number of acne lesions decreased in both groups, with a greater decrease seen in the Novial® group. The subjects' perception of their skin condition (0–100 rating) significantly increased by 22.3 in the Novial® group (p=0.005), compared with 5.24 in the control group (ns). The physicians' perception of the subjects' skin also statistically significantly improved in the Novial® group (p=0.009). Overall 19.3% of the subjects reported an AE (18.1% in the Novial® group, 22.1% in the control group). In the Novial® group, four subjects (2.3%) discontinued due to an AE. There were no pregnancies.
Conclusion: Novial® effectively reduces seborrhea after only 4 cycles of treatment and may be a suitable oral contraceptive for women wishing to improve their facial skin condition.

FC4-07

Maintenance of consistent ovulation inhibition with the 75 mcg desogestrel-only contraceptive pill Cerazette® after scheduled 12-hour delays in tablet-intake

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Introduction: Cerazette® is an estrogen-free, desogestrel-only contraceptive pill which differs from existing progestagen-only pills (POPs) in providing consistent ovulation inhibition. Traditional POPs primarily rely on the induction of a viscous cervical mucus, which hampers the penetration of sperm into the female genital tract. This contraceptive action is considered to last for maximally 27 hours after intake and therefore delays in tablet intake of only 3 hours may jeopardize contraceptive efficacy. This study was performed to demonstrate that Cerazette® is more failure-proof than traditional POPs due to its ovulation-inhibitory properties. To this end, the incidence of ovulation during 2 treatment cycles during which three tablets were to be taken 36 hours after the previous one (i.e. 12 hours late) was determined, as well as the time required for ovulation to return after intake of the last tablet.
Design and methods: A total of 103 women aged between 19 and 40 years with confirmed ovulation were admitted to this open-label pharmacodynamic study. They were treated with Cerazette® for 56 days with three tablets to be taken 12 hours late, randomised to a regimen with scheduled late tablets on Days 39, 42, 49 (Group A) or on Days 11, 14 and 21 (Group B). Ovulation was assessed by measuring progesterone P serum levels every other day. P levels >16 nmol/L, sustained for at least 5 days were taken to indicate ovulation. P sampling was continued until return of ovulation was observed after stopping treatment.
Results: One of the 103 treated subjects ovulated twice during treatment. The ovulation incidence thus amounts to 1.0% (two-sided 95% confidence interval 0.02–5.29%). There was no apparent relationship between these ovulations and scheduled late tablets. The minimum time to first post-treatment ovulation was 7 days, while it took 17.2 days on average from last tablet-intake until ovulation.
Conclusion: The estrogen-free pill Cerazette® provides consistent ovulation inhibition, even when tablets are incidentally taken 12 hours late. In fact, return of ovulation takes at least 7 days. With these properties, Cerazette® appears to be as effective as combined OCs in preventing ovulation.

SESSION 5: EMERGENCY CONTRACEPTION – SEXUAL BEHAVIOUR

FC5-01

Sexual behaviour and use of contraception among adolescents in Sweden

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Aim: To investigate sexual behaviour among high school students in Sweden and to study if pornography has any influences on their sexual behaviour.
Method: A cross sectional survey. 718 students, from 47 high school classes in a medium-sized Swedish city, participated.
Results: The mean age was 18 years. Three-quarters of the sample had had sexual intercourse, the median age at first sexual intercourse was 16.0 years and 71% reported contraceptive use at first intercourse. More males (98%) than females (72%), had ever consumed pornography and Internet and TV were the most commonly reported sources. More 'high consumers' than 'low consumers' got sexually aroused by, fantasised about, or tried to perform acts seen in a pornographic film ($p < 0.001$). Anal intercourse was reported by 16%, with infrequent condom use (39%). Among those who had had anal intercourse, a difference between genders was found regarding the personal experience of this practice, 53% (n=27) of the females reporting it to be mostly negative compared to 5.8% (n=3) of the males. When asked if they would consider doing it again, 83% (n=43) of the males but 42% (n=21) of the females answered yes ($p=0.015$).
Conclusion: Three out of four adolescents used contraception at their very first intercourse. Pornography seems to influence the sexual behaviour among adolescents. High consumption of pornography was found among males and negative experience of sexual practices inspired by pornography among females. This warrants further research with a gender perspective. Condoms were infrequently used at anal sex, a fact that has implications for the spread of STIs.

FC5-02

Impact of common contraceptive methods on sexuality – a study in Hong Kong Chinese women

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Background: The combined oral contraceptive (COC) pills, injectables, intrauterine contraceptive device (IUCD) and female sterilization are the most common contraceptive methods used by women. Women's choice, compliance and satisfaction with the specific contraceptive methods are influenced by their personal experience or anticipation about the impact of the method on their sexual life. Anxiety regarding possible adverse effects of the contraceptive methods on their sexual life is one of the common concerns. Currently there is limited data in the literature addressing this issue.
Objectives: The study aims at determining the impact of the above-mentioned contraceptive methods on sexual function.
Design and Methods: This was a prospective observational questionnaire study on a group of Hong Kong Chinese women, carried out in the family planning clinics and general gynaecology clinics of the participating institutions. During the period between January 2003 and March 2004, we recruited 442 women who were first time users of the following contraceptive methods: (1) COC pills (n=117), (2) injectables (n=80), (3) IUCD (n=115), and (4) female sterilization (n=130). Clients who had a recent pregnancy or abortion within the recent 6 weeks were excluded. Sexual function of the subjects was assessed before and 3–4 months after use of the contraceptive method by a standardized questionnaire. The questions were adopted from the body image, sexual satisfaction and sexual drive subscales of the Derogatis Sexual Functioning Inventory (DSFI)(Chinese version).
Results: We found a significantly improved DSFI score for sexual satisfaction ($p=0.004$) and sexual drive ($p=0.003$) in the female sterilization group 3–4 months after sterilization. However, the scores for body image were not significantly different ($p > 0.05$). No significant difference in the sexual satisfaction, body image and sexual drive scores was demonstrated after use of COC pills, injectables and IUCD ($p > 0.05$).
Conclusions: The COC pills, injectables, IUCD and female sterilization all do not have significant adverse impact on sexual function. After female sterilization, there is a significant improvement in sexual satisfaction as perceived by the women.

FC5-03

Community pharmacy supply of emergency contraception: changes in user profiles over time

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Introduction: The success of pharmacy availability of Hormonal Emergency Contraception (EHC) has been demonstrated in the south London boroughs of Lambeth, Southwark and Lewisham through an innovative Health Action Zone (HAZ) pilot project. The project aimed to increase awareness of and access to EHC, as part of the strategy to reduce the unplanned, particularly teenage, pregnancy rate. Together these boroughs make up a third of the most deprived health areas in the country and have one of the highest rates of teenage pregnancy in England. The HAZ project allows community pharmacists working to a Patient Group Direction to supply EHC free of charge.
Aims and Methods: The aim of the study was investigate changes over time in the profile of women accessing EHC through the community pharmacy service. The service collected data on its users continuously from April 2000 to March 2001 and subsequently in 2 weekly audit cycles during March 2002, January 2003 and September 2003. From the 4 cycles of data collection, 5155 cases were available for analysis.
Results: Although there was an increase over time in the number of women presenting in less than 24 hours from unprotected sex for EHC from 71.6% in 2000 to 75.6% in 2003, this did not reach statistical significance ($p=0.186$). Over time more women accessed the service on weekends and after hours ($p<0.001$ and $p=0.056$ respectively). There was a significant shift over time toward younger women (16–19 years) accessing theservice ($p<0.001$) and a decrease in the number of women who reported using regular.
Conclusions: Community pharmacy access to EHC has been a popular service and an increasing proportion of women is taking advantage of the weekend and after hours opening times. Younger women, whom the service set out to target, are accessing EHC through pharmacies in increasing numbers. Of some concern in the utilisation of the service is a reported fall in the number of women using regular contraception.

FC5-04

Emergency contraception and the media: an analysis of English national and regional newspaper coverage from September 2000 to September 2003

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Background: In 1999, the Teenage Pregnancy Strategy was launched with the aims of halving under–18 conception rates and reducing social exclusion among teenage parents in England by 2010. The prevention of teenage pregnancy forms one of four major components of the Strategy. Improving contraceptive provision and services are key elements in this component, of which increasing and enhancing early access to Emergency Contraception (EC) forms an important part. The Teenage Pregnancy Strategy Evaluation (TPSE) has been commissioned to inform the Strategy. The role of national and regional newspapers in influencing the social environment in which the Strategy is implemented forms an important part of the TPSE.
Objectives: To present a systematic examination of English newspaper articles related to EC and teenage pregnancy, from September 2000 to September 2003.
Design & Methods: A commercial press cuttings agency was used to monitor all national and regional newspapers for the keywords 'teenage pregnancy' and 'Teenage Pregnancy Unit' (TPU). The TPSE team coded the articles by: newspaper; month; story; story headline; reporter; tone of the article; spokesperson quoted/ referred to in the article, and region. Five researchers were blinded to the newspaper's name and the identity of spokespersons, and asked to describe the tone of articles as 'positive', 'neutral' or 'negative'.
Results: 1249 articles were collected (464 from national newspapers; 785 from regional newspapers). Regional newspapers tended to have a larger proportion of positive articles than the national newspapers (56% vs. 32%). 186 stories (15%) were related to EC, 64% (n=129) were about the availability of EC 'over-the-counter' and 8% (n=15) were about the provision of EC in schools. The majority of these were negative or neutral in tone, 37% (n=69) in each case, while 26% (n=48) were positive in tone. Over the three years the proportions of negative stories were: Year 1=49%; Year 2=26% and Year 3=40%. The inter-rater reliability check of the coding of the tone of the articles produced an average weighted Kappa of 0.62 (range from 0.4–0.8). The most frequent spokespersons, or person quoted/referred to in the articles, were those categorised as 'Family Values' campaigners (n=56, 30%) e.g. SPUC. 'Commercial organisations' (n=37,19.9%) e.g. Schering, and 'Sexual Health Groups' (n=34,18.3%) e.g. Brook, were also major contributors to discussion of EC in the articles. Over the three years 'Family Values' campaigners and the Daily Mail newspaper were significantly associated with negative articles ($p= <0.0001$ and 0.007, respectively).
Conclusions: Newspaper reports of EC and teenage pregnancy have been predominantly negative over the three years. Our analysis highlights important distinctions between newspaper type, spokesperson and regional/national newspapers. These findings can inform media advocacy strategies related to EC.

FC5-05

Introduction of a 24-hour toll-free hotline for Youth Emergency Contraceptive services in a developing country

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Introduction: Early evidence suggests that abortion rates among adolescents drop following access to information and use of emergency contraception (EC). In a survey among women requesting termination of pregnancy (TOP) at Tygerberg Hospital (TBH), 40% had no knowledge of EC and 36% heard about EC, but had never used it. Of these women almost 50% had had sexual intercourse by the age of 19, highlighting the need for increased awareness of EC in this group.
Objective: To increase the availability of and accessibility to EC information, counselling and services for adolescents, youth and their communities.
Methods: A 24-hour toll free hotline was implemented to provide information on the appropriateness and usage of EC and details on the location nearest to the caller where EC is available. Training on EC was done to providers working in public and private health care centres throughout the Western Cape Province. Research is designed to examine: The knowledge, attitudes and use of contraception (including EC) in young people; knowledge and attitudes toward safer sex and sexually transmitted infection; factors that contribute to a decision to seek a TOP; factors that contribute to a young person to continue with a pregnancy; and satisfaction of the adolescents with reproductive health care information and services.
Results: Six hotline staff (five lay councillors and one registered nurse) was specially trained for the information and referral service. Two gynaecologists with a special interest in family planning, back up the staff for any inquiries. Up to date 261 health care professionals (42 medical doctors, 12 specialists, 31 pharmacists and 176 nursing staff) have been trained in 11 workshops and one satellite training transmission. A linear increase in calls to the hotline was logged from its commencement on 24 October 2003. Of the 521 calls during the first 20 weeks, 210 were during the evening and 311 during daytime. The complimentary website had 622 visits during the same time. The project also received 10532 units of progesterone-only-emergency contraception free of charge from the public sector.
Conclusions: This free information and referral service on EC may result in a more supportive community environment for addressing adolescent reproductive health service issues and increase the usage of EC with a resulting decrease in TOP-rate.

FC5-06

The remaining barriers to the use of emergency contraception: perception of pregnancy risk among women undergoing induced abortions

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Objective: The purpose of this study is to assess the remaining barriers of emergency contraception (EC) use in a context of expanded access (available over the counter) and high awareness about EC, in a population of women presenting for pregnancy termination. Particular attention will be drawn on the impact of unperceived pregnancy risk, rarely explored in such a context.
Population & methods: The study was conducted between June and November 2002 in four abortion centres in France. Altogether, 1365 women requesting an abortion (response rate 90.2%) completed a 10 minute self administrated questionnaire at the abortion clinic. The questionnaire collected information on women's social demographic characteristics, the circumstances that led to the current pregnancy, awareness of pregnancy risk, knowledge and use of EC.
Results: Whereas most women had heard of EC before (89%), access to information remained limited in socially disadvantaged populations. Also, a majority of women (68%) lacked information about the conditions of use of the method. Nevertheless, our results suggest that the unperceived risk of pregnancy may be the most important limiting factor for EC use. Only 38.5% of women in our study were aware of pregnancy risk at the time of the intercourse that made them pregnant. Perception of pregnancy risk was mostly dependent on the type of contraception used around the time of conception. Women using the pill or periodical abstinence were less aware of pregnancy risk than others. Conversely, women living alone, those without children or with a high educational level were more likely to be aware of pregnancy risk than others. Risk perception is a complex phenomenon, likely to be re-evaluated by women over time. Thus, among women who thought they were at risk of pregnancy at the time of the intercourse that made them pregnant, 41% re evaluated the risk, which resulted in the decision not to use EC.
In our study, 33% of women met the three conditions for EC use (unintended pregnancy, knowledge of EC, recognised risk of pregnancy). Among these women, 25% used EC to try to prevent the current pregnancy. Assuming a 74% effectiveness rate of EC, approximately 18% of abortions in our study could have been avoided by using EC.
Conclusion: Beyond easy access to emergency contraception, more information about the conditions of use of the method seems necessary to improve its utilisation. However, unperceived pregnancy risk may be the most important barrier to EC use. As the perception of risk is commonly re evaluated by women, which probably impacts on its use, it could be important to promote advance supply of EC, as a medication women could use immediately after a recognised unprotected intercourse.

FC5-07

Advance provision of emergency contraception through Family Planning Clinics: a feasibility study

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Background: Oral Emergency Contraception (EC) is safe and effective. The earlier treatment is started after the episode of risk, the more effective it is likely to be. However, current organisation of family planning services limits access to EC out of hours, on weekends and holidays. Access has improved with pharmacy provision without prescription, but it is unlikely to meet the total contraceptive and sexual health needs of clients. Community based specialist family planning services are well placed to offer advance provision of EC along with the package of future contraceptive and sexual health advice.
Aims: This study explored client perspectives, staff attitudes, purchaser and manager opinion about introducing advance prescribing of EC (AEC) into a community family planning service.
Methodology: Clients' views were obtained by anonymous, self-administered waiting room questionnaires. Staff attitudes were determined by confidential, postal questionnaires. Key management personnel were interviewed.
Results: Vast majority of clients (88%) would be willing to take AEC if offered. A quarter of the responding clients (23%) had concerns regarding 'misuse' and safety of AEC. Of the 64.4% responders to the staff questionnaires, 92% were willing to provide AEC. The rest were unsure, but would give AEC under clear guidelines. The senior clinical managerial staff was supportive but funding emerged as the main problem.
Conclusions: The introduction of provision of AEC through the community family planning clinics was well supported by clients and staff. Counselling of clients regarding regular and effective contraceptive methods is essential. Funding is the main barrier to introduction of AEC.

SESSION 6: STIs – MEDICAL AND ETHICAL ISSUES – RISK COMMUNICATION

FC6-01

Postal testing kits for Chlamydia screening

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Objectives: Chlamydia is the most common treatable sexually transmitted infection (STI) in Scotland, yet most cases of infection remain undiagnosed and therefore untreated. As part of the Healthy Respect demonstration project funded by the Scottish Executive, we set out to increase availability of Chlamydia testing, with the aims of raising awareness, exploring the true extent of Chlamydia in the community, and especially trying to persuade men to share responsibility for sexual health.
Methods: Although we carried out a number of testing initiatives, the crucial development was a postal testing kit for Chlamydia, which we made available in a variety of settings throughout Lothian. Young people picked up a free kit and sent away a urine sample in the pre-paid envelope having completed a lab form. They had a choice of four options on how to receive their results; they phone us, we phone them, we send an e-mail or we send a letter. All asymptomatic clients were treated by Healthy Respect nurses using a Patient Group Direction (PGD) and anybody who fell out-with the PGD were referred to a GUM doctor.
Results: 10,000 kits were distributed over a two year period and over 2,300 (23%) were returned. 24.5% were from males and 75.5% were from females. The overall prevalence was 8.5 % (males–9.8%; females–8.1%). Within our target population of 13–25 year old the prevalence was significantly higher at 13.2% (males–12%; females–13.6%). 97% of positive patients were successfully treated, of whom only 7 fell out-with the PGD and had to be referred to medical staff.
Discussion: This project has been successfully run by nurses with very little medical supervision. The hypothesis that '1 in 10 young people has Chlamydia' would seem to be confirmed. Postal testing kits offer an additional effective route to Chlamydia testing, especially for men.

FC6-02

Risk factors for *Chlamydia trachomatis* genital infection in adolescent females

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Introduction: Chlamydia trachomatis genital infections (CTIs) are the commonest bacterial sexually transmitted diseases (STDs) having the highest age-specific rates in adolescent females. Unfortunately, CTIs are, particularly in women, mostly difficult to diagnose due to producing few or no symptoms. In the settings without resources directed toward the whole sexually active adolescent females population screening, it could be beneficial to single out those adolescents which are in the high-risk of CTI acquisition.
Objective: The purpose of this study was to estimate the significance of sexual behaviour indicators and clinical features in predicting CTI in adolescent females.
Design & Methods: The study group was consisted of 300 sexually active 19 years old girls who had attended the Youth Reproductive Health Service in The Mother and Child Health Care Institute of Serbia in the period from 1995 to 1997. The participants of this study were interviewed about their health and sexual behaviours. Gynaecological assessment included microbiological and colposcopic findings. The cervical CTI was identified by the direct immunofluorescence staining of smears by application of monoclonal antibodies. Colposcopic findings were divided in two groups: cervical ectopy and other findings. Data were statistically analysed by step-wise linear regression, by SAS application.
Results: The prevalence of CTI in the study group was 30.3%. Predictors of CTI in adolescent women, according to the step-wise linear regression analysis, were the following: the presence of cervical ectopy (R^2 0.2032), negative attitudes of adolescent girl and her partner toward the condom use (R^2 0.0104 and 0.0256), associated genital infections (R^2 0.0122), high coital frequency (R^2 0.0066), the sexual experience in casual relations (R^2 0.0064), and the first sexual partner two or more years older (R^2 0.0058). However, the predictive value of these variables in identifying the adolescent women in higher risk for CTI is limited (R^2 0.2701). The other variables that slightly and insignificantly increase the likelihood of CTIs were the following: first sexual intercourse before 17 years of age, three or more sexual partners in sexual history, sexual experience in casual relations, low level of safe sexual practice, poor contraceptive behaviour, poor health behaviour, STD symptoms as the reason for the first gynaecologic examination, and one or more unwanted pregnancies in reproductive history.
Conclusion: This investigation indicates that no risk factors are reliable predictors of CTI in the majority of infected adolescent girls. Therefore, screening for the presence of CTI should be conducted in the whole population of sexually active adolescent females.

FC6-03

Combined oral contraceptives and weight gain in young women

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Introduction: There is a complex of reasons for overweight and obesity in women; this phenomenon is related to genetic, endocrinological, social and other factors. The common reason for obesity is high food supply and low physical activity. Some of the pharmaceutical products may also affect energy balance of the women and lead to overweight and obesity. List of such pharmaceuticals is not fully defined but steroids (and most common, hormonal contraceptives) are often included there.
Objective: The aim of the study was to present reasons and date on the relation between the use of combined oral contraceptives (COC) and body weight in young women.
Design and Methods: Observational study on the study group of young women on COC and the control group of young women who never used COC. Cases for study and control groups were recruited in selected gynecological clinics in Poland during the period of 1st – 31st January 2002 (with the use of randomization method). Statistical analysis was done using the Program Statistica for Windows. In the multifactorial analysis the model of logistic regression was used, regression indicators values were established using SPSS Packet for Windows Release 6.0. Observation and comparison of anthropometrics parameters, past reproductive history and nutrition status in the group of 145 young women on COC (study group) and 218 young women (control) who never used COC.
Results: Both groups (study and control) were almost identical regarding age, anthropometrics characteristics, number of pregnancies and deliveries, body mass and BMI. On the basis of this investigation, there is no relation between use of COC and weight gain. Observed (in both groups) weight gain in young women was most probably related rather to time passing (patients were getting older). The higher risk for overweight and obesity was found in the group of young women who have got already problems with overweight in their childhood and in the group of women with high weight gain during first pregnancy.
Conclusion: Combined oral contraceptive use is not associated with weight gain in young women living in Poland.

FC6-04

Clinicians' attitudes and utilization of a chaperone for intimate examinations within a Contraceptive and Reproductive Health Care Service

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Introduction: Abacus Liverpool has adopted a policy of always offering a chaperone when conducting intimate examination regardless of the examiners gender. This was in response to the Royal College of Obstetricians and Gynaecologists (RCOG) and the General Medical Council guidelines.
Aims and Method: The aim was, via conducting an audit, to examine the adherence to the chaperone policy one year after implementation and possible reasons behind non-compliance. The audit was a questionnaire with a mix of open and closed questions and was sent to all 65 members of the clinical staff working within the clinics in Abacus Liverpool. The results are based upon 44 questionnaires returned, a response rate of 69%. Of the questionnaires returned 19 were Doctors and 25 were Nurses divided by gender as 2 males and 42 females.
Results: Only 8 staff always offered a chaperone when performing an intimate examination. The majority of staff only sometimes offered a chaperone for intimate examinations, and only 2 staff had never offered a chaperone. It is note worthy when offered it was well documented. The reasons given for not offering a chaperone were varied but the most common was time pressures and staff shortages, 10 staff reported forgetting to offer a chaperone and 2 thought it was an interruption to the client/practitioner relationship. In direct contrast to this when asked if at all times a designated chaperone was made available, 75 percent of staff thought that this would make no difference in the offering of a chaperone. On the occasions where a chaperone has been required most staff had no problem obtaining one with only 4 members of staff having occasions where they could not obtain a chaperone at the time requested. Staff estimated that only 6 percent of clients requested a chaperone when offered and the clients' own anxiety determined this. Two members of staff thought that gender difference between client and clinician was an issue.
Conclusion: Complex and varied reasons were given by clinicians for non-adherence to the chaperone policy. Clinicians within contraceptive and reproductive health care work autonomously, and this may have an impact for policy adherence. This audit did not clearly define this and the offering of a chaperone for intimate examinations has shown to be a more subjective decision. The time impact on a fully staffed and balanced clinic is questionable. Consistent remainders of the policy may improve adherence. The unique nature of contraception and reproductive health care is such that the sensitivity of the consultation changes the influence of the chaperone and more investigation is needed on this issue.

FC6-05

Sexual healthcare of street prostitutes – a holistic approach

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Objective: To evaluate the application of a simple sexual health screening questionnaire in eliciting the hidden healthcare needs of a population of female sex workers in Scotland, the majority of whom are drug users.
Setting: Base 75, a dedicated health and social care service for female street prostitutes in Glasgow. This service is open six nights a week from 7.30–11.30pm. Base 75 is part of the Sandyford Initiative for sexual health in Glasgow.
Method: In order to apply a social model of care to all parts of the Sandyford service, a sexual health questionnaire was developed in order to uncover hidden health needs in the clinic population. The questionnaire asks about general health concerns, women's health, and contains a small section on concern about addictions and violence. The questionnaire is designed to be administered by the doctor or nurse conducting a clinical consultation with the client. Over a six month period the opportunity to participate was offered to a client sample at Base 75. The results were collated and analysed using Microsoft Access:
Results: 56 women from Base 75, 527 women from genitourinary medicine and 2113 female family planning attenders completed the questionnaire.

	BASE 75	GUM	FAMILY PLANNING
Heterosexual	53 (94%)	537 (97%)	1970 (99%)
Been physically assaulted	27 (48%)	37 (6%)	126 (6%)
Concerned about menstruation	20 (36%)	57 (4%)	302 (14%)
Concerned about urinary incontinence	11 (20%)	20 (3%)	62 (3%)
Wish to discuss pregnancy loss	11 (20%)	11 (2%)	109 (5%)

Conclusion: As expected, this population showed a high prevalence of experience of violence, however a considerable leave of concern about gynaecological problems, such as menstruation, abortion and miscarriage was also revealed to be higher than the general clinic population. A structured questionnaire is therefore an appropriate way of eliciting hidden health needs in a high risk group. This should be included when designing services for the group.

FC6-06

Women's attitudes towards, and experience of, long-acting contraception

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Background: In the past, long acting methods of contraception have had little support from consumers or professionals. Despite acceptance that the risks are similar to those associated with other hormonal methods, negative associations have persisted, as has the charge that poorer people are inappropriately targeted. The impetus to this study has been provided, firstly, by evidence that use of long acting methods of contraception (injection, implant or hormonal IUD) may have potential in reducing teenage pregnancy rates, and secondly, from increasing awareness that attitudes towards long acting contraception are changing. More reliable data is needed to understand the extent of acceptance and understanding of these methods. This study addresses this deficit, by exploring the views of both consumers and providers on their acceptability, safety and efficacy.
Objectives: The aim of the study has been to provide data which will facilitate an informed appraisal of the potential for long acting methods of contraception to enhance the aims of the Teenage Pregnancy Strategy and the Sexual Health Strategy. Qualitative and quantitative techniques of investigation are used to examine, in relation to long acting methods of contraception, attitudes and experience towards their adoption among young users and non-users, and prescribing preferences and practices among health care practitioners.
Design and Methods: The study comprises four components of research. The first consists of analysis of the second National Survey of Sexual Attitudes and Lifestyles (Natsal 2000), with a view to providing a demographic and behavioural profile of users of long acting contraception. The second involves in depth interviews with 35 women recruited from the survey sample who have either used long acting methods of contraception, or been at risk of unplanned pregnancy. The third is a survey of 500 health care professionals, and the fourth a qualitative study of their attitudes towards prescribing long acting contraception. Data are presented from components 1 and 2.
Results: 24% (1440/6006) women had ever used long acting methods of contraception, and 10% (602/6006) had used them in the last year. In terms of demographic and classificatory variables, there were no significant differences in prevalence of recent use (last year) by area-related deprivation, social class, or school leaving age, but the prevalence was significantly lower among women with A level or higher education ($p=<0.0001$), and significantly higher among women of African or Afro-Caribbean origin ($p=0.014$). Greater variation was seen in prevalence of use of long acting contraception by risk-related variables. Early age at first intercourse; motherhood before age 18; experience of abortion; ever diagnosis with STI; ever use of emergency contraception; and two or more sexual partners in the past year; were all significantly associated with recent use of long acting methods of contraception. Women interviewed in-depth could be categorised into two groups: a larger group consisting of women who had experienced dissatisfaction with, or failure of, a method, or who had had an early unplanned pregnancy and birth, and a smaller group of women with high career aspirations and demanding occupations. In both groups, levels of acceptance and satisfaction were generally high and the decision to adopt the method had been an autonomous one. Amongst non-users, knowledge and awareness of long acting methods was poor.
Conclusions: These data suggest that sexual risk factors are more important determinants of use of long acting methods of contraception than are demographic factors. Acceptance and tolerance of these methods is high and there is no evidence of undue persuasion by health care practitioners for patients to adopt them. Our data suggest that long acting contraception may have an as yet under-exploited role to play in the prevention of teenage pregnancy. The UK Sexual Health Strategy makes particular reference to the need to improve the accessibility and range of contraception methods available. We hope these data will contribute towards delivering more effective and better-tailored and targeted contraceptive provision to young people.

FC6-07

Community mobilization for better health

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In order to improve reproductive health status of youth a health campaign consider to improve youth health through involving them for finding their needs and their suggestion for solving them, so for this purpose the an operational study was considered with three phase 1-Assesing the knowledge, attitude and behavior of the youth regarding reproductive health. 2-Implementing a multidisciplinary approach based on their needs assessment. 3-Evaluating the effectiveness of this program. This project concentrated on: Advocacy and community mobilization, Financing and resource allocation, Capacity building, Network formation and partnerships, Multicultural Engagement, Youth empowerment. So with enrolment of different sectors and NGOs, we awarded youth in reproductive health matters and making service delivery friendlier.

Abstracts of Posters

SESSION 1: ABORTION

P001

Relationship between occupational exposure to anaesthetic gases and spontaneous abortion

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Introduction: There are different opinions about the relationship between the exposure of pregnant staff members to anaesthetic gases and the occurance of spontaneous abortion.
Objective: The purpose of this study was to determine the relationship between the exposure to anaesthetic gases and the occurance of spontaneous abortion.
Design and Methods: This is a case control study performed at all educational hospitals of tehran. All staff personnel were interviewed and then were devided to case and control group according to the ward they were working during their pregnancy. Case group spent their pregnancy in operating rooms. The control group were working in other wards of hospital except operating room, angiography, radiotherapy, radiology, chemicotherapy and x-ray units. 687 hospital staff members were matched in charectristics such as age of pregnancy occurred, number of deliveries, and the number of cigarettes smoked per day.
Results: Out of 524 pregnanc cases, 262 were exposed to anaesthetic gases during pregnancy. The rate of spontaneous abortion was 9.06% (case group), and 5.97% in the control group.The difference was not statistically significant ($p > 0.05$). That means there is no relationship between the occupational exposure to anaesthetic gases and spontaneous abortion.
Conclusion: Occupational hazerds always exist and avoidance of unreasonable exposure is rational.therfore medicall staph shoud receive warrents in this regard.

P002

Abortion problem in Serbia

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Objective: Induced abortion has for a long time been a predominant method of birth control in Serbia. With spreading of contraception, its significance became to a decrease. Besides this positive trend, estimated number of abortions observed both absolutely (about 200.000 abortions per a year) and relatively (82.1 abortions per 1.000 women in the 15–49 age) shows that a significant number of women mostly, and a certain number of women exclusively, relies on this method of birth control. It should also be stressed that more or less all women, independently of the age, education, profession, marital status and other social, psychological and cultural characteristics, turn to induced abortion. This fact poses a number of questions, among which the most important one is why are women in Serbia not relying on modern contraception?
Method: Identification of determinate factors of abortion problem in Serbia trough research findings synthesis having in mind that several abortion-related surveys were conducted in last decade in Central Serbia and Vojvodina.
Results: Research findings discovered a complex array of factors of abortion problem, including insufficient knowledge of contraception and abortion, a belief that modern contraceptive methods are harmful to health, and a number of psychological barriers, also those arising from relationships with partners. Additionally, the liberalization of the abortion law occurred at a time of decrease birth rate and very modest presence of modern contraceptive methods. Also, there are few organized efforts to promote sex education, as well as limitations in the family planning programme. Thus, conclusion of one research is that gynecologists attitudes about modern contraceptive and behavior do not differ significantly from the rest of the people.
Conclusion: Actual problem in reproductive health sphere is complex, serious and ask for solution. It supposes the promotion of knowledge, the network of family planning services, the access to modern contraception means, responsibility of male in family planning, the law regulation of sterilization, etc. Duration of prevalence of induced abortions indicates that underlying causes of frequency are numerous and stable over time. Considering this, and the slowness of any spontaneous change, it may be expected that the problem of abortions will be present in the years to come.

P003

Improving contraceptive use after abortion: a cluster randomised controlled trial of personalised, expert contraceptive advice and provision at the time of termination of pregnancy

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Introduction: Abortion is common. In 2002 over 11,500 terminations of pregnancy (TOP) were reported in Scotland. Reducing the rate of unintended pregnancy has been the aim of successive UK governments. In the UK between 20 and 25% of women undergoing pregnancy termination will have another abortion at some time during their reproductive lives. This group of women offers a target for interventions aimed at improving correct and consistent use of contraception. We have undertaken a study to determine whether personalised, expert contraceptive advice and provision of adequate supplies of the chosen contraceptive method at the time of TOP influence contraceptive choice and continuation after abortion.
Methods: Using a cluster randomised controlled study design, 613 women undergoing TOP in Edinburgh were randomised to receive personalised contraceptive advice and immediate provision of their chosen method (316 women) or standard care with limited method provision (297 women). 16 weeks after the procedure all participating women were contacted to determine their pattern of contraceptive use. Statistical analysis took account of clustered randomisation by using two-sample t-tests at a weekly level based on summary statistics for each intervention and control week. Associations were tested using chi-squared tests, Mann-Whitney tests or Spearman rank correlation and McNemar's test was used to examine changes in contraceptive use at different times.
Results: At 16-week follow-up, there were no differences between the proportion of women using any contraceptive method or in continuation rates for individual contraceptive methods. However women who received tailored advice were significantly more likely to be using a long-acting, user independent method of contraception such (IUD/IUS, injectable or implant).
Conclusion: Personalised contraceptive advice and immediate provision of contraceptive method at the time of TOP are associated with a higher uptake of long-acting, reversible methods of contraception than standard provision of a more limited choice of contraceptive methods. Whether this would reduce the rate of repeat abortion would require very long term follow-up.

P004

Can we identify women at risk of more than one termination of pregnancy?

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Introduction: One in five women will have more than one abortion in their lifetime. The recurrent pregnancy termination rate (i.e., women who undergo a second abortion) varies around the country but is between 20 and 30%.
Aims and Methods: This study was designed to identify risk factors in women requesting termination of pregnancy (TOP) after previous TOP(s) so that women at risk of recurrence, attending for the first time could be identified. A retrospective case note review of 358 women undergoing TOP during October and November 2000 was performed.
Results: Twenty-six percent of women had had a previous TOP. Women undergoing a second or subsequent therapeutic abortion were more likely to be older and have experienced more pregnancies to full term but these two factors were confounded. When women were both parous and deprived the risk of them having had more than one TOP was over 50%.
Conclusion: The reasons for increasing rates of repeat abortion are probably complex and numerous. This study suggests that women who undergo more than one abortion may be socially and emotionally disadvantaged. Whether the rate of repeat abortion can be influenced by identifying women and targeting them for specific interventions remains to be seen.

P005

Procurable safety contraception leads to reduction of abortion risk

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Objective: To verify on demography changes influence of contraceptive's possibilities on the abortion rate.
Design: Demography study
Results: The 1990s represent a radical transition from the socialist era in the Czech Republic, when induced abortion was a common method of unwanted pregnancy additional prevention. Abortion was legalised according the § 68/1957 law many years before hormonal contraception was widespread. Government tried to reduce number of induced abortions by so-called abortion boards from 1962 to 1987 and by abortion fees until 1993. But restriction was not successful. During the last 10 years the magnificent lowering of the abortion rate by 60% was connected with the increase of hormone contraception users by 613%. Whereas in 1990 only 17% used medically prescribed contraception, today it is 39% of childbearing. The rapid decrease of terminated pregnancies total intensity per woman from 3.67 in 1990 to 1.74 in 2001 is largely due to induced abortion intensity decrease (57%). Fertility decrease (39%), spontaneous abortion total number decrease (3%) and ectopic pregnancy and stillbirths decrease (less than 1%) bore a minor role. The sharpest decrease (78%) took place within the female 20–24 age group. Average age at abortion grew by 2.5 years. There are still some problems. First order abortion percentage grew merely from 50 to 54%. In 2000, 94% of women who underwent abortion did not use any contraception. Stable percentage of 7% concerns fourth or further order abortions. The most important group undergoing induced abortion remains mothers of two children (38%).
Conclusions: The women's right to decide about their pregnancy could be broken by legal restrictions of abortion. The reduction of the abortion rate is closely connected with the modern contraception widespread. It is also more successful than any pro-natality political climate. Data from the Czech Republic are the best confirmation of it.

P006

Seasonality of abortion in the United Kingdom

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Seasonal variation in induced abortions has been previously described but most available data are produced by month or by quarter. In England & Wales a peak in the first quarter of the year is observed each year. We have extracted weekly data for both abortions and phone calls received at the national call centre for the abortion charity bpas, which provides almost 50,000 abortions each year in the independent sector in the UK. There was a sustained rise in abortions in February; in most years examined this peaked between the 5th and the 7th week of the year. For example, in 1999 the highest number of abortions was in the week ending 13 February at 1,013; the mean weekly abortions that year was 861. This number of abortions in the 7th week of 1999 was 16% higher than the number of abortions in the 2nd week of the year. The number of phone calls peaks slightly earlier than the number of abortions. In 2003 there was a sustained rise in phone calls from mid-January to mid-February, peaking in the 5th week of the year at 6,513 calls; the mean weekly calls that year was 4,993. The two peaks reflect first the diagnosis of the unwanted pregnancy and then the abortion procedure being carried out. Both these seasonal changes reflect an increase in sexual activity at Christmas time. Service providers need to be aware of this when planning available appointments for consultation and treatment and also when considering the timing of preventive campaigns.

P007

Implementation of holistic care for women requesting referral for termination of pregnancy: following a local review

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Introduction: 50% of women in Glasgow seeking termination of pregnancy are referred via the Sandyford Initiative and associated community family planning clinics (approximately 1200 women per year). 'Living with a Secret' – an action research report on women and service providers views of termination of pregnancy services in Glasgow – highlighted that a 'responsive, efficient, intimate service. that allows adequate time, information and support to come to the right decision' was a priority for women. Women also felt that the social and psychological aspects of termination of pregnancy were under-estimated before and after the procedure. The 'Mrs Brown' referral service at the Sandyford Initiative allows women to be seen by a specially trained nurse to explore options and feelings around unplanned pregnancy and to be referred to local hospital services for termination, if this is the chosen outcome.
Aim: To provide approximately 100 appointments per month for termination counselling and referral. Women can self-refer and are allocated a 30 minute appointment with a nurse to look at their pregnancy and situation, explore all possible options and make an informed choice when they feel ready to do so in as non-threatening an environment as possible.
Results: From July – December 2003, 559 'Mrs Brown' appointments were available: 499 women booked, 399 attended and 334 were referred for termination. Prior to July 2003, 50% of women were being seen at busy drop-in clinics – now early all are seen at the specialist service. A separate post termination counselling service has been established. Women can self-refer and counselling is provided by a trained counsellor from the Centre for Women's Health (Sandyford Initiative), based on a single session model, but with longer term counselling available if required.
Conclusion: An easily accessible, specialist service has been developed to help meet the needs of women seeking support and referral for termination of pregnancy.

P008

Efficacy and tolerance of immediate post-abortion IUD contraception

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Objective: To assess the efficacy and tolerance of IUD insertion for the initiation of contraception immediately after induced abortion before the 10^{th} week of gestation, according to different types of anesthesia.
Methods: One hundred and ninety-eight parous women who referred to the Department of Family Planning of our clinic due to an unwanted pregnancy below 10^{th} week in the years 1998–2002 were included in the study. After a counseling session concerning initiation of contraception, all women gave their consent to be subjected to IUD insertion immediately after abortion. General intravenous anesthesia was performed on 107 of them while in the rest 91 IUDs were placed under paracervical blockade. The type of anesthesia was selected according to the medical history of the women, to the personal preference of each one of them as well as to their willing to minimize the time for the scheduled abortion. A clinical and ultrasound follow up was performed on all women immediately after operation, 2 weeks, 6 weeks and 1 year after operation. Immediate or late complications were evaluated such as unsuccessful operation, IUD expulsion, postoperative pain, genital infections, abnormal bleeding, improper placement of the IUD, as well as the contraceptive efficacy of the method.
Results: In the group of women who were subjected to paracervical blockade a statistically significant difference was observed concerning the inability to have the operation completed ($p < 0.05$), as well as the lack of immediate postoperative pain ($p < 0.01$). No significant differences were noticed between the two groups concerning the rest of the parameters evaluated.
Conclusions: IUD insertion immediately after induced early abortion by use of paracervical blockade is a safe and well - tolerated method, which both facilitates family planning services by simplifying the medical part of the procedure and releases the women from the need of a late start of contraception.

P009

The comparison of two different routes of misoprostol administration in cases of first trimester fetal deaths

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Introduction: To compare the vaginal and oral plus vaginal misoprostol administration for abortion of first trimester pregnancies complicated with fetal death.
Aims and Methods: A total of 43 women who were diagnosed as fetal death by transvaginal ultrasound examination with gestations between 7 to 12 weeks were recruited in the study. Women were randomly allocated to one of the following groups: vaginal administration of 800 μg misoprostol or 400 μg intravaginal plus 400 μg oral misoprostol up to a maximum of two main doses every 12 hours for abortion. In case of no abortion occuring within the first 12 hours, a second dose of misoprostol repeated with the same dose at the end of first 12 hours. Success was defined as the non-surgical evacuation of the products of conception, including complete abortion. Failure was defined as the recourse to surgical abortion in cases of misoprostol resistance including incomplete abortion. Outcomes assessed included demographic characteristics, side-effects, mean abortion time, complete or incomplete abortion of conception, changes in hemoglobin levels, complications related with the procedure and the data of the two groups were compared statistically.
Results: The demographic characteristics of the two groups were similar. Five patients in Group A (21.7%), six patients in Group B (55%) required a second dose. Within the first 12 hours, 3 patients in Group A (13%), one patient from Group B (5%) had complete abortion and the rate of incomplete abortion was 65.2% in group A and 40% in Group B. At the end of 24 hours one patient from Group A (4.3%), five patients from Group B (25%) had ongoing fetal death pregnancies. Overall complete abortion rate was 13% for Group A, 10% for Group B and the rates for incomplete abortion were 82.6% and 65% respectively. There was no statistically significant difference between two groups for the time of abortion (Group A; mean 8.5 ± 4.6 hr, median 7.3 hr, range 2–20 hr and Group B; mean 10.8 ± 5.7 hr, median 8 hr, range 4–22 hr; $t=1.368$, $p=0.18$). There was a statistically significant difference in hemoglobin levels of patients before and after administration in Group A ($t=7.120$, $p < 0.001$) while in Group B no statistically significant difference was seen ($t=0.786$, $p=0.445$). The frequencies of side effects such as nausea, vomitting, diarrhea and chills reported by women in two groups were similar. No complications related with the procedure were observed.
Conclusion: Although both routes of misoprostol have similar side effects and mean abortion time, due to lower failure rate of 800 μg intravaginal misoprostol, it can be used safely and effectively for abortion of fetal death, up to 12 weeks gestation.

P010

Randomised controlled trial of sublingual and vaginal administration of misoprostol for medical abortion up to 13 weeks gestation

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Objectives: To assess women's acceptability, side effects and effectiveness of sublingual versus vaginal administration of misoprostol for medical abortion up to 13 weeks gestation.
Design & Methods: The primary outcome of the study was patients' acceptability. Women requesting medical abortion up to 13 weeks gestation at a Scottish Teaching Hospital were asked to participate. Mifepristone (200mg) was given orally followed by misoprostol (sublingual: 600μg, vaginal: 800μg) 36–48 hours later. A further dose of 400μg was given three hours later (sublingually or vaginally). Women between 9 and 13 weeks gestation received a further dose of 400μg (sublingually or vaginally), three hours later if abortion had not occurred.
Results: A total of 339 women were recruited. Of these, 171 were in the sublingual group and 168 in the vaginal group. The mean (SD) age and gestation of women was 24.2 (6.5) years and 24.2 (5.7) years; and 67 (13.3) days and 66 (13.5) days in the sublingual and vaginal groups, respectively ($p=0.99$ and 0.58, respectively). Complete abortion without the need for surgical evacuation occurred in 156 (98.1%) women and 153 (97.5%) in the sublingual and vaginal groups, respectively ($p=0.69$). The number of misoprostol doses used was 1.9 (1.0) and 1.8 (0.8) and the mean (SD) induction to abortion interval was 4.49 (3.1) hours and 4.54 (5.1), respectively ($p=0.35$ and 0.84, respectively). There was no significant difference in nausea ($p=0.61$), vomiting ($p=0.13$), tiredness ($p=0.92$), headache ($p=0.92$), hot flushes ($p=0.72$) or dizziness ($p=0.61$) between the two groups; nor was there a difference in analgesia requirements between the two groups ($p=0.26$). Women receiving sublingual misoprostol were more likely to experience diarrhoea ($P=0.002$), shivering ($p=0.0001$) and unpleasant mouth taste ($P=0.0001$). A total 70% of women in the sublingual group expressed satisfaction; 18% answered 'Don't know'; while 12% were dissatisfied, compared to 68%; 28%; and 4%, respectively in the vaginal group ($p=0.01$).
Conclusions: This study shows that the sublingual route of misoprostol administration for medical abortion up to 13 weeks gestation is effective and acceptable to women, although the prevalence of side effects was higher. Sublingual administration will increase the choice available with regards to route of drug administration to women undergoing medical abortion.

P011

Study of anxiety during consultation and assessment for termination of pregnancy

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Introduction: Studies have been conducted on the anxiety levels of women pre and post abortion showing that stress levels during these periods vary remarkably. However, we found no published studies stress levels during consultation for termination of pregnancy in the English Literature. Anxiety during consultation and assessment for termination of pregnancy may adversely affect patients' assimilation and understanding of information with a consequent adverse effect on their ability to choose a particular method of termination.
Aims and Methods: To ascertain the state anxiety levels of women, during consultation for termination of pregnancy. Over a four-week period, women requesting termination of pregnancy who were willing to participate in the study filled a six-item short-form of the State-Trait Anxiety inventory (STAI-6) scale. Demographic data was also obtained for each participant.
Results: Forty-one women took part in the pilot study. Majority of the participants were single and aged less than 25 years. The state anxiety scores for the cohort of women ranged from 23 to 80 with a mean of 46.5. Eighty-five percent of the participants had high anxiety levels during consultations.
Conclusions: Although this is only a pilot study, it shows that a highly significant proportion of women requesting termination of pregnancy endure a high level of stress during the consultation process. As this can affect their ability to assimilate information during the consultation, it is important that providers are aware of this phenomenon and take adequate steps to minimise it.

P012

Termination of second trimester pregnancy; a comparative study of using misoprostol alone and oxytocin

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Objective: The aim of this study is to compare the efficacy and complications associated with using Misoprostol alone and Oxytocin for termination of second trimester pregnancy.
Material and methods: One hundred and fourteen patients undergoing termination of second trimester pregnancy between January 1997 and November 2000 were studied. The patients were allocated in two groups: termination by using Misoprostol and termination by using Oxytocin. Sixty patients received 200 mkg Misoprostol every four hours peroral and fifty four
40 units/L Oxytocin i.v. There were no significant differences between age, parity and cervical status in two groups. Mean induction to abortion time, blood lose were estimated.
Results: The mean induction to abortion time was 12,6/4–24/hours in Misoprostol group and 18,4/ 4–32/ hours in Oxytocin group /$p < 0.05$/. In the group with Misoprostol there was no need for surgical intervention except curettage, in the group with Oxytocin there were 11 surgical interventions /1CS, 10fetus extraction's/ /$p < 0.02$/. Hemorrhage is the same in the both groups.
Conclusion: Termination of second trimester pregnancies by using Misoprostol is safer and faster comparing to termination by using Oxytocin. Regarding the high effectiveness and low cost misoprostol becomes one of the most important medications in obstetrical practice.

P013

Manual vacuum aspiration: complication rates and post-operative experience of women undergoing this method of termination of first trimester pregnancy

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Introduction: Manual Vacuum Aspiration (MVA) is the method of first trimester surgical abortion used in Marie Stopes International (MSI) centres in the United Kingdom. Complications associated with this form of surgical abortion are known to be low within MSI centres, yet there has been no previous survey of clients to assess complication rates particularly for those who may report post abortion problems to health professionals. This survey accurately monitors complications and health and well- being of clients at the time of the procedure, and in the six-week period post procedure.
Objectives: The primary objective of this study is to determine the complication rates associated with MVA terminations of pregnancy <12 wks of gestation at MSI centres. Secondary objectives are to; elucidate the experience of women post MVA in terms of bleeding pattern, pain, and onset of menstruation; understand how often MSI is contacted with post operative problems; identify methods of contraception chosen, and analyse their possible implications on the bleeding pattern, post termination.
Design and Methods: The study surveyed clients who had a MVA for termination of pregnancy up to 12 weeks under conscious sedation or local anaesthetic. Clients were recruited to participate in the survey at the time of initial consultation, clinical information was recorded at the time of the procedure; clients were contacted by telephone at two weeks and six weeks post termination and asked to describe their bleeding, pain, other related symptoms and treatment post termination. Local anaesthetic consisted of 2% lignocaine gel applied to the external cervical os. No routine para-cervical block, cervical priming or prophylactic antibiotics were used. All clients were screened for Chlamydia at time of the consultation – and received appropriate follow up. All gestations were confirmed with a pre-procedure trans-abdominal ultrasound scan.
Results: The survey recruited 480 clients, and our preliminary analysis is based on the results of 456 MVA procedures, after excluding those who had the IUD/IUS fitted for contraception. At the time of the procedure there were two (0.44%) reported heavy bleeds, both approximately 500 ml blood loss in total. No serious haemorrhage, uterine perforation or haematometra were reported at the time procedure. Of these clients, 303 (66%) were followed up two weeks post MVA, and 232 (51%) were followed up at six weeks post MVA. One woman had a continuing pregnancy (0.33%), four (1.32%) women had re-evacuation procedures for suspected RPOC; three of these done outside MSI; Nine women (2.97%) were prescribed antibiotics (seven by GP, and two by MSI).
Conclusions: MVA for surgical termination of pregnancy in the first trimester is safe and effective with minimal complications.

P014

Sublingual misoprostol versus oral and vaginal misoprostol in inducing mid-trimester medical abortion

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Introduction: The new route of sublingual administration of misoprostol was used by 34 -women requesting mid-trimester termination of pregnancy because of various medical reasons. The efficiency and acceptability of this regimen were studied versus those obtained by the use of oral and vaginal misoprostol.
Aims and Methods: The women were given 200 microg. misoprostol sublingually followed by 100 microg. every 1h until delivery. The abortion rate and the median induction-to-abortion interval were compared with those obtained by using oral misoprostol (200 microg. every 1h until delivery), vaginal misoprostol (200 microg.), endocervico-vaginally administrated misoprostol (200 microg.vaginally and 200 microg.endocervically).
Results: The overall abortion rate was 100% within 24h and the median induction-to-abortion interval was 10,5h (range 7–16,5). The side effects were represented by pelvic pain and in a few cases by fever and chills. Comparing these results with those obtained by oral, vaginal and endocervico-vaginally administrated misoprostol we can observe a greater rate of abortion within 24h and a smaller median induction-to abortion interval in the sublingually regimen. The acceptability of the sublingually administrated misoprostol was good, 96,5%of the women would choose this method again because it is convenient to take, it avoids the painful vaginal administration and gives more privacy during the abortion process.
Conclusions: This regimen of sublingual misoprostol is an effective and acceptable method of medical mid-trimester abortion.

P015

Factors associated with provision of elective abortions among US obstetrician-gynecologists

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Introduction: The number of abortion providers has continued to decrease in the US. We sought to investigate what factors correlate with elective abortion provision.
Aims and Methods: An anonymous, validated, two-page survey mailed to all 5,000 ob-gyns who became board-certified between 1998 and 2001 inquired about demographics, career, abortion attitudes, residency training, intention to provide abortions prior to residency, and current abortion provision. We performed logistic regression models including all variables significantly associated ($p < .1$) with abortion provision in univariate analyses, including a previously validated abortion attitude score.
Results: Two thousand one hundred thirty-eight (43%) surveys were returned. Seventy-two percent (1540) stated that some abortion training had been available in residency, of whom 901 (62%) participated in training. Elective abortions were currently provided by 502 (23%). Thirty-four percent worked in hospitals that prohibit abortion provision, and 16% worked in practices that prohibit abortion provision. Prior to residency 33% had planned to provide abortions, 50% had planned to not provide abortions, and 17% had been undecided. In multivariate analyses, residency training availability increased the odds of elective abortion provision (OR 2.60, $p < .001$.). Factors that negatively correlated with provision included religiosity (OR 0.70, $p = .005$), membership in a practice that prohibits abortion provision (OR 0.45, $p < .001$), association with a hospital that prohibits provision (OR 0.42, $p < .001$), and practice in a rural setting (OR 0.51, $p = .001$). Residency training availability was independently correlated with provision regardless of intention to provide abortion prior to residency.
Conclusions: Residency abortion training availability increased the likelihood of abortion provision when controlling for abortion beliefs, religiosity, practice location, subspecialty status, and hospital/practice policy, regardless of intention to provide abortions before residency.

P016

Incorporating abortion and family planning into Ob-Gyn resident education in the United States

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Introduction: Abortion in the United States was legalized in 1973. Since that time, elective abortion has become one of the most common surgical procedures in the United States, with an estimated 1.3 million elective abortions performed in 2000. Despite the high volume of pregnancy terminations, abortion is not a routine component of graduate medical education in many departments of Obstetrics and Gynecology (Ob-Gyn). According to a survey conducted in 1992, only 12% of Ob-Gyn residency programs require first trimester abortion training for residents, and 7% offer training in second trimester abortions. In 1996, the Accreditation Council for Graduate Medical Education (ACGME) created a mandate for Ob-Gyn residency programs to increase abortion training.
Aims and Methods: The Kenneth J. Ryan Residency Training Program in Abortion and Family Planning (Ryan Program) was founded in 1999 in response to the ACGME mandate. The Ryan Program provides technical expertise and funding to assist Ob-Gyn residency programs in efforts to ensure that abortion and contraception become a routine aspect of resident education.
Results: Since 1999, the Ryan Program has established twenty training rotations throughout the United States. Program sites have integrated abortion into the Ob-Gyn residency curriculum using a variety of approaches and settings. Training occurs in high volume, outpatient, hospital-based services or in collaboration with free-standing reproductive health clinics. Rotations range in length from 4 to 10 weeks, take place most commonly in the first, second and/or third year of residency, with a minimum of 1 dedicated abortion training day per week. In addition to the clinical training component, Ryan Program sites employ a variety of strategies to integrate didactic teaching in abortion and contraception into the core residency curriculum. Initial evaluation has shown that all Ob-Gyn departments to implement a Ryan Training Program have experienced an increase in the number of residents who report knowledge of and clinical competency in methods of pregnancy termination when compared to baseline.
Conclusions: The Ryan Program has been successful in assisting selected departments of obstetrics and gynecology in fulfilling their professional mandate of incorporating abortion education in the residency curriculum.

P017

Exploring women's options: regimens of misoprostol with mifepristone for early medical abortion

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Background: Efficacy, side effects, and acceptability to both the patient and provider have important impacts on how a medical abortion regimen is used. Current clinical practice varies greatly with respect to dose and route of administration of misoprostol following mifepristone for early pregnancy termination, especially before 56 days LMP. There is no consensus on an 'optimal' dose of misoprostol in this case, although research suggests that women's acceptability of the regimen may vary depending on the dose. Similarly, systematic investigation into the merits of different routes of administration of misoprostol in medical abortion is lacking. Emerging data on the efficacy and safety of various medical abortion regimens, together with insight into women's own preferences, will have important implications for service delivery.
Methods: We reviewed current evidence and research regarding the efficacy, safety, and acceptability of different medical abortion regimens.
Results: Findings from an array of recent and ongoing trials suggest similar efficacy for selected medical abortion protocols at least below 56 days LMP A recent three-arm randomized trial with 971 women found comparable success rates and side effects for regimens of 200 mg mifepristone followed by either 1) 200 μg oral misoprostol, 2) 400 μg oral misoprostol, or 3) 800 μg vaginal misoprostol. Preliminary findings from a current study comparing vaginal and buccal administration of misoprostol following a 200 mg dose of mifepristone also indicate similar success rates, with a trend towards greater efficacy in the buccal group. These findings suggest that it may be feasible to offer greater options for women who dislike vaginal administration of misoprostol. The known pharmacokinetics and clinical correlates of vaginal, oral, rectal, buccal, and sublingual administration of misoprostol for medical abortion point to significant variability; however, studies suggest little variation with respect to clinical efficacy for these different routes, at least in the first part of the first trimester.
Conclusions: There appear to be a range of safe and effective mifepristone-misoprostol medical abortion options. Where there are small differences in the acceptability of different routes of administration, the choice of route should ultimately be left to the woman. Such an approach offers increased flexibility and patient autonomy in medical abortion provision by taking into account the different personal and social factors that influence women's preference for a particular regimen; this in turn may improve overall quality of abortion care. Future studies should continue to gather data on patient experience and preference in medical abortion regimens.

P018

Manual vacuum aspiration versus routine abortion procedure in hospital settings – does it improve the service?

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Introduction: Manual vacuum aspiration (MVA) is a method of evacuation of products of conception from the uterine cavity which has been used in a number of countries since more than thirty years ago. Since year 2000 it has been officially included in the WHO recommendations. It has been introduced at our hospital since November 2002 as a part of a joint project with the National Abortion Federation (NAF) of the USA and the Open Society Institute (OSI) in Macedonia.
Objective: To find out if the use of MVA is an improvement versus the routine abortion method used at our hospital.
Material and Methods: The study included 108 patients who underwent MVA as an analysed group (AG) and 104 patients where the routine procedure was used, as a control group (CG). MVA was done with local paracervical block, using the standard MVA technique and instruments. The routine abortion technique consisted of dilation, electrical vacuum aspiration and sharp curettage, performed in short intravenous anesthesia. Both groups (AG and CG) were divided into two subgroups, out of which we had 40 patients where MVA was performed because of a diagnosis of a missed abortion, with a CG of 36 patients, and another subgroup of 68 artificial abortions performed with MVA, with a CG of 68 standard interventions. The choice of the type of intervention was done by the patient herself. We compared the effectiveness of the method (duration, bleeding, discomfort, post intervention complications) and the costs of the procedure for the hospital and the patient (hospital stay, anesthesia, laboratory tests, staff).
Results: There is no significant difference in the effectiveness and safety of both methods. On the contrary, MVA significantly reduces the costs for the institution and the patient, in all of the analysed parameters.
Conclusions: According to the need of offering an effective service to the patient which would also consider the cost/benefit principle, introducing MVA in hospitals might be a reasonable step. Lowering of the intervention costs gives the opportunity of redistribution of funds and improving hospital abortion services. Of course, we need further evaluation, including qualitative studies about the patients' satisfaction by the method.

P019

Evaluating quality of verbal information provision about abortion methods during assessment consultations

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Introduction: Prior evidence suggests that women requesting induced abortion, often do not receive adequate written information to enable them to make informed decisions about undergoing medical or surgical abortion. Very few studies have assessed the content of consultations about choice of abortion method. It remains unclear whether the information provided during assessment consultations is sufficient to enable these women to make informed decisions about the abortion procedure to have.
Aims & Methods: To evaluate the quality of verbal information about methods of induced abortion provided by clinicians during assessment consultations. A sample of 23 consecutive assessment consultations for induced abortion under nine weeks gestation in a UK teaching hospital's fertility control clinic were audio tape-recorded. The consultation transcripts were analysed using a coding frame developed from the data and literature on informed decision to assess adequacy of information provided about the benefits, risks and aftercare of both abortion methods.
Results: Clinicians provided sufficient information about the medical procedure but less comprehensive information about the surgical procedure. None of the consultations provided complete information about the risks of both methods. When risks were communicated, verbal expressions (e.g. quite rare) were used rather than presentation of the actual risk figure (e.g. 1%). Inadequate information about aftercare was often provided. All clinicians undertaking the consultations made it clear to the women that the decision regarding which method of abortion to undergo was entirely within the women's domain. In general, women choosing to have medical abortion received more information about the medical method, while those choosing the surgical method received more information on the surgical method.
Conclusions: Women appeared to have received reasonable verbal information about both methods of induced abortion but communication of risk and aftercare information was inadequate. It is unclear whether the final choice was dependent on which method was given more emphasis by the clinicians or whether the women made their choice prior to the consultation and more discussion was offered on the chosen method. Either way, this study suggests that the content of consultations do not compensate for the limitations of incomplete written information suggested by previous studies. Further research is required to improve information provision in order to facilitate women's informed decision making about abortion methods.

P020

Routine histopathological analysis of the products of conception following the first trimester abnormal intrauterine pregnancy

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Objective: To evaluate the histopathological findings of tissue samples collected at termination of pregnancy and surgical uterine evacuation in the first trimester.
Materials and method: This is a retrospective study of patients admitted in the Early Pregnancy Clinic in a 12-month period with the diagnosis of incomplete abortion (n=970), fetal death or missed abortion (n=636) in the first trimester. The abnormal pregnancies were terminated and the tissue samples were sent for histopathological diagnosis. Association of pre-operative clinical diagnosis and the postoperative histological results was analysed.
Results: Uterine evacuation was performed in cases of incomplete abortion (n=970, %60.4). Surgical pregnancy termination was performed in cases of intrauterine fetal death or missed abortion (n=636, %39.6). Histopathological examination revealed the products of conception in 1119 patients (%69.7) while hydropic changes were diagnosed in 33 patients (%2.5). Complete hydatidiform mole was detected in only seven cases (%0.43). Exaggerated placental site and placental site trophoblastic nodule was detected in two cases (%0.12). Decidual tissue without chorionic villi was reported in 272 patients (%16.9) that raised the suspicion of presence of other pathology. The patients were called back for clinical examination, ultrasound assessment and -hCG level measurements. An intact ectopic pregnancy was found in two of them.
Conclusion: By routine histopathological assessment of products of abnormal intrauterine pregnancies, important pathologies such as molar pregnancy and placental trophoblastic disease can be diagnosed. Histopathological assessment can be alarming for an ectopic pregnancy or infection if it is evaluated with clinical and laboratory findings.

P021

High dose misoprostol used in outpatient management of first trimester spontaneous abortion

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Introduction: misoprostol is effective in medical management of 1st trimester spontaneous abortions. Various regimens have been tested to determine the most efficacious dose. The aim of this study was to evaluate the efficacy and tolerability of a high dose of intravavaginal misoprostol regimen, in an outpatient management of 1st trimester spontaneous abortions.
Design and Methods: 4 doses of 400μg misoprostol were administered intravaginally every 4 hours at 4 daily doses for a maximum period of 3 days. 108 women at 6–11 gestational weeks with sonographic evidence of missed abortion (embryo >4.0mm in length, without cardiac activity) and closed cervical os, in the absence of significant cramping or vaginal bleeding were included in the study. Misoprostol was self-administered in the patients' own home after detailed instructions. Both the time of misoprostol administration and the expulsion of gestational products, were recorded by the patient. Transvaginal sonogram (TVS) was performed 24h after the 1st dose of misoprostol, repeated when gestational tissues indicative of complete abortion were discharged, or 7 days after the completion of treatment. Serum β-hCG was determined weekly until the levels decreased below 50IU/L. 200 mg doxycycline was given orally for chemoprophylaxis. Successful treatment was considered when endometrial cavity thickness was <15mm, and serum β-hCG levels <50IU/L.
Results: 98 women (90.7%) were managed successfully: 68.5% within the first 24 hours, and 22.2% within the following 2 days. Mean dose of misoprostol administered: 1257.1μg (400–4800μg); mean time required: 22hrs (7–65hrs); vaginal bleeding 1.4 ± 1.3 days; spotting 4.9 ± 3.9 days; total bleeding 6.5 ± 2.8 days; pre- and post-treatment hemoglobin levels were 11.8 ± 0.8g/dl and 11.6 ± 1.4 g/dl respectively ($p>0.05$). Only 10/108 (9.3%) women required surgical intervention as the result of retained conception products or increased anxiety. Serum β-hCG declined to non-pregnant levels over a mean period of 2.5 weeks. Minimal side effect occurred in 44.4% of women, included nausea (24.1%), vomiting (14.8%), headache (7.4%), and diarrhea (3.7%). No further intervention was required in any of the women who were successful managed. Post-treatment infection was not observed. TVS was performed 30 days after treatment, showed normal uterine cavity and endometrium.
Conclusions: 400μg misoprostol self-administered intravaginally every 4 hours, to a maximum daily dose of 1600μg is effective for the outpatient conservative management of 1st trimester missed abortions.

P022

Post-abortion rehabilitation with low-dose combined oral contraceptives: method of optimization of reproductive health

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For the last 5 years in Russia a decrease of an absolute number of induced abortions has been noted < and the ratio 'abortion – labor' has made up 1.3: 1.0 (in 1998 it was 2 : 1). At the same time the same decrease has not been registered among the adolescent group, and first pregnancies of teenagers still result in induced abortions in 80% ('abortion-labor' ratio is 5.0: 1.0). Our findings have demonstrated that induced interruption of first pregnancies leads to hormonal disorders in endocrine system, and the uterus as a target organ as well as endometrium endures the same changes because the local haemostasis is mostly regulated by endocrine system. As a result there occurs a disturbance of cyclic processes in endometrium, chronic endometritis that in its turn leads to reproductive function disorders. Out studies have demonstrated that in case the first pregnancy outcomes with induced abortion the probability of complications during the following pregnancy increases two-fold: threatened abortions, gestosis, intrauterine fetal growth retardation, disorders of early postnatal adaptation of newborns. The objectives of the study were to assess the possibilities of rehabilitation of reproductive system after induced abortions in adolescents with combined oral contraceptives (COC).
Materials and Methods: A prospective study has been carried out which included 183 girls after induced interruption of the first pregnancy. Low dose COC Regulon and Novynette (Gedeon Richter, Hungary) have been used for post-abortion rehabilitation. Observations have been carried out for two years. An assessment of efficacy, tolerance, and effect on menstrual cycle after induced abortions and the duration of the use of theses medicaments have been made.
Results: It has been detected that only 35% of adolescents used the contraceptives. The efficacy has made up 100%, the rate of the following pregnancies has been 11.5% for two years in the control group. Side effects in the form of marked headaches has been observed in 5.1%, no negative effect on the mammary glands have been noted as well as on the body mass. Menstrual cycle restoration after induced abortions with the use of COC occurred during 2–3 weeks; none of inflammations in reproductive system have been registered. Sixty-five per cent (119) refused hormonal contraception due to psychological factors.
Discussion: Application of hormonal contraception has lead to an early restoration of menstrual cycle and reduces of post-abortion inflammations. A high rate of COC withdrawal may be connected with traditional in Russia birth regulation by way of abortions and lack of knowledge of the adolescents about modern methods of contraception.

P023

Rehabilitation and contraception of women after induced abortion

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Objectives: To elaborate a system of rehabilitation measures after various types of induced abortions.
Materials and Methods: One-hundred fifty women coming for induced abortions were studied with clinical, bacteriological, radioimmune and morphological methods.
Results: Pregnancy was terminated with medicaments (Mifepriston) in 50 patients (group 1), by way of vacuum aspirator in 50 (group 2), and with surgery in 50 (group 3). Patients of all three groups were equal by age and extragenital pathology. An assessment of restorative processes in endometrium and menstrual function was made after the abortions. A differentiated approach towards rehabilitation of women depending on the applied method of pregnancy interruption was elaborated. Patients of group 1 were recommended Novynette (ethinylestradiol 20 mcg, desogestrel 150 mcg) during not less than three months; Regulon (ethinylestradiol 30 mcg, desogestrel 150 mcg) for three months was indicated for the patients of group 2, Regulon for not less than six months was recommended for the patients of group 3. Post-abortion contraception was performed with the same medicaments prior to the planning of the next pregnancy.
Conclusion: A differentiated use of hormonal contraceptives depending on the method of pregnancy interruption contributes to a rapid restoration of menstrual and reproductive functions of women.

P024

Survey: TOP's in foreign immigrant population in Ginetec

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We have noted, in our clinic Institute Ginetec, an increase in the number of foreign patients who call in for a termination of pregnancy. We initiated a prospective survey from May 2003 to the end of February 2004 in order to become acquainted with those women's social profile. A total of 960 TOP were performed to foreign women and the focus was on:- country of origin, reason why they came to Spain, length of their stay,academic level, occupational situation abroad (country of origin), occupational situation in Spain, legal situation, whether they have or are, residence permit, work permit, Social Security tax-payers, number of children, date of their last delivery, are their children living here?, number of TOPs, date of their last TOP, usual contraception method, current contraception method, following contraception method.
Conclusions: type of women: South American, Ecuatorian, went to Catalonia looking for a job, illegally the majority, less than 5 years ago. They speak Spanish and their group-age is 21–25.

P025

Determinants of induced abortion: results of a qualitative study

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Introduction: In Turkey since from two decades ago, it is possible to have an induced abortion in case of contraceptive failure, unwanted pregnancies or medical contraindications. According to the act on Pregnancy Termination, all women aged 18 years or older are allowed for pregnancy termination legally. This intervention can be performed both in a public hospital before the end of 10^{th} gestational week. Married couples should decided together and a signed form is asked from the husband if a women want to have induced abortion. Although modern methods are available to a great extent considerable high proportion of unwanted pregnancies is assumed to be due to lack of modern method use.
Aims and methods: This study was carried out to define the characteristics of 42 women who had induced abortion in private or public clinics and to explore the reasons of induced abortion by in-depth interviews in Istanbul.
Results: The age of the women varied between 20–48 and there were women from all educational status from illiterates to university graduates. Amongst all women %82 had official and 11% had religious weddings while 7% were single. Of the participants 31% were not using any contraceptive methods while 38% were using withdrawal. The number of women who used modern methods were 13 (seven condoms, one intra- uterine device, three oral contraceptives and one inject able progesterone). The leading reasons for not using any method were as follows: Lack of knowledge or awareness about medical methods of women and/or partners, medical contraindications against all methods. The causes of induced abortion mainly phrased as economical difficulties of bringing up children. Two women believed that they would not get pregnant: one because she was in menopause and another because she was told by her doctor that she would not get pregnant after abortion. One woman got pregnant at her first sexual intercourse, one because she got sexual intercourse with her husband again after separation. Another woman had abortion because she had desired to have a child while her husband did not. In most of the cases couples decided to have pregnancy termination together but in two cases women had taken decision individually. Women usually expressed their appreciation of having an opportunity to get rid of unwanted pregnancy while couple of them thinks that induced abortion was sin.
Conclusion: Although contraceptive methods are widely available there are still need for public education and medical staff to prevent unwanted pregnancies.

P026

Does abortion procedure influence contraceptive choices and behaviour?

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Objectives: To prevent repeated unwanted pregnancies and abortion, it is crucial to discuss sub-sequent contraception with the patient and to start it as soon as possible after the abortion. Medical and surgical abortion explicitly differ in the course of the procedure. With regard to optimise our pre-abortion contraceptive counselling we wanted to investigate whether the choice of the contraceptive method and its initiation depend on the chosen abortion procedure.
Design and methods: We retrospectively collected data of all patients who underwent either medical or surgical abortion at our clinic between 1.3. 2002 and 28. 3. 2003. Medical abortion was offered until a gestational age of 49 days using Mifepriston and Misoprostol, surgical abortion was performed by suction curettage up to 12 weeks of gestation. The data were analysed by descriptive statistics.
Results: Of a total of 422 abortions, 184 (43,6%) were performed surgically, 238 (56,4%) medically. The patients mean age was 32.7 years with a minimum of 16 to a maximum of 50 year. 4,8% of the patients were younger than 20 years of age, 41,4% between 20 and 30 years, 41,1% between 30 and 40 years and 12,6% over 40 years. The contraceptive method to be used after abortion was known in 248 (58,8%) cases, in the remaining 174 (41,2%) cases subsequent contraception was not documented. We know of twice as many patients with surgical abortion, which method of contraception they used (82%) compared to the group who underwent medical abortion (40%). This might be due to lost follow up for patients who went back to their practising gynaecologists and/or the less clear end point of the medical procedure. In case of suction curettage, IUD (half copper and half levonorgestrel-containing) was used twice as much (40,4%) as after medical abortion (20%). The most frequently chosen contraceptive method after medical abortion was a combined oral contraceptive (56,7%). A progestogen only preparation (progestogen-only pill, implant or depot-injection) was chosen by 21,6% after medical and 11,9% after surgical abortion.
Conclusions: According to our retrospective evaluation the initiation of post-abortion contraception is better established after surgical than after medical abortion and IUDs seem to be more frequently chosen by the 'surgical group'. This may have an impact on the risk of repeated unwanted pregnancy and does demand special counselling efforts in the medical abortion group.

P027

Evaluation of outcome of cohort of attenders in a termination of pregnancy clinic

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Introduction: Reducing repeat termination rates by more effective contraception selection and use is a continuing goal in termination of pregnancy clinics. Previous data regarding rates of repeat termination date from the 1970's and 1980's. In view of changes in number and availability of contraceptive options, recent data may be helpful to assess effectiveness of current contraception services.
Aims and Methods: A cohort of attenders at outpatient termination of pregnancy assessment clinic was identified from Jan-Mar 1999. Patient records were located and anonymised demographic data, gestation, procedure, method of contraception and repeat attendance at the same hospital for termination was collated. Data collation occurred from September 2003 allowing a follow-up period of at least 4 years.
Results: 305 patient records were identified, 237 (77.7%) had procedure and did not reattend. 36 (11.8%) had procedure and returned for at least one repeat termination. 10 patients attended for assessment and failed to attend for procedure. 5 of these were rereferred in a subsequent pregnancy for termination in the follow-up period. 22 notes not included for a variety of reasons. Contraception choices before termination included 74(27.1%) having unprotected intercourse, 135 (49.5%) using condoms, 44(16.1%) using COC. Post termination choices included 133(48.7%) using COC, 74 (27.1%) using Depo-Provera, 29(10.6%) with IUD/IUS, 12 (4.4%) using POP.
Conclusion: 11.8% of patients returned for at least one further termination of pregnancy at the same hospital in the follow up period. 50% of those who fail to attend at time of procedure re-present in a subsequent pregnancy requesting termination. The majority of patients 248 (91%) left the hospital with a choice of POP/COC/IUD/IUS or Depo-Provera for ongoing contraception.

P028

Early medical abortion with a single vaginal dose of misoprostol is an effective method?

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Introduction: In Greece the number of abortions, seems to be increased in comparison with other European countries. The method mainly in use, is surgical vacuum aspiration. The use of misoprostol offers an alternative, non-invasive method for termination of pregnancy.
Objective: To evaluate the efficacy of a single vaginal dose of 800μg misoprostol for termination of early, unwanted pregnancy, in outpatient management.
Methods: 92 young women diagnosed for early pregnancy (49–63 days), meeting the criteria for enrollment and wishing to terminate their pregnancies, were informed about the method, evaluated and planed for a single vaginal administration of 800 mg misoprostol.
Results: In group A (n=79 /85.86%), complete abortion was recorded. In group B (n=4 /4.3%), the pregnancy continued and surgical vacuum aspiration was required. In group C (n=7 /7.6%), incomplete abortion was revealed and in those cases the dose was repeated with successful results. In two cases (2.2%), missed abortion was recorded. Repeating vaginal application of misoprostol, resulted in complete termination of pregnancy. Vaginal bleeding appeared on a mean time of 6–8 hours and had a duration of a mean 9 days. Evaluation of β-hCG on days 3^{rd}, 7^{th} and 14^{th} revealed a fast drop of 98,4% in group A, 87,3% in group C and 21,8% in the cases with missed abortion. All cases were followed-up with transvaginal U/S on days 3,7 and 14.Recording the side effects of the method, mild pelvic pain was reported in 69% of the cases, nausea in 18,4%, fever >38 C in one case and headache in 14,1%. No diarrhea episodes were reported.
Conclusions: One single vaginal dose of misoprostol, seems to be an effective method for early medical abortion.

P029

Day care surgery for termination of pregnancy under general anaesthesia: experience of managing patients with body mass index (BMI) of 35 and above

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Introduction: Obesity in Western Europe is high and rising, and presents a considerable anaesthetic and surgical challenges. It is not unusual in most hospitals to use or reserve in-patient beds for patients with BMI of 35 and above prior to day care surgery with obvious cost implications.
Objectives: To evaluate the safety of day care surgery for termination of pregnancy under general anaesthesia for women with BMI of 35 and above.
Setting: Private abortion service provider located about 20 kilometres away from the nearest access to in-patient beds.
Design & Methods: A designated theatre, supported by a consultant gynaecologist, a consultant anaesthetist and a team of experienced nurses, is used for the management of these patients. All patients were seen and assessed by the team immediately before surgery. Assessments included ultrasound scan to date pregnancy, cervical preparation with prostaglandin for gestations of 12 weeks and above and pre-medication with antacids.
Results: Experience of managing this group of patients is continuing and we expect to have managed over 200 cases before the congress. Analysis of the first 127 cases revealed that 65 (51%) had BMI of between 35 and 39 while 62 (49%) were morbidly obese with BMI of between 40 and 45. The age range was 17–45 years; parity range was 0–7; and the range of gestation was 6–17 weeks. One hundred and eleven patients (87.4%) had suction termination, 15 patients (11.8%) and one failed dilatation of the cervix (0.8%) for which the procedure was abandoned. There were no complications in 120 patients (94%), 3 patients complained of post-op pain, one felt faint, one passed blood clot and the failed dilatation had medical TOP.
Conclusion: Obesity in the population is high and rising. It poses considerable anaesthetic and surgical challenge. However, day care surgery is safe in experienced hands within appropriate setting and may represent efficient use of resources for the National Health Service.

P030

Randomised trial comparing expectant with medical management for first trimester miscarriages

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Objective: To compare the efficacy of prostaglandin E analogue (misoprostol) for rapid evacuation of pathologic miscarriages.
Design & Methods: The study group was selected from women attending the OB/GYN clinic at Shariati University Hospital. Inclusion criteria was healthy women with pathological pregnancy (1. an intact but empty gestational sac on two occasion and at least one week interval; 2. gestational sac with a non-viable fetus) and an estimated gestational age of less than 13 weeks and closed cervix on clinical examination. Women randomised to misoprostol treatment were admitted at hospital and received 800 mg misoprostol vaginally (n=30) or expectant management (n=30). They had surgical evacuation if they had severe bleeding or pain or retained products of conception with a diameter above 15 mm one week after inclusion. Comparisons between groups were performed by Fisher's test, two tailed test and $p < 0.05$ was considered significant.
Results: There were no significant differences in women's characteristics between the two groups. Eighty percent of the women randomized to misoprostol and 20% of those randomized to expectant management had an empty uterine cavity after one week that reached significant difference. Fifty percent of both groups needed surgical evacuation based on transvaginal ultrasound. Women who had a complete miscarriage without intervention were satisfied with either method and women who did not have empty uterus after a week requested pharmacological treatment.
Conclusion: Medical intervention with misoprostol was associated with rapid resolution, more satisfaction, so less patient's anxiety.

P031

Septic abortion as a consequence of unwanted pregnancy

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Objective: To assess the frequency of septic abortion as a consequence of unwanted pregnancy.
Design & Methods: We perform a retrospective study during 1996–2001 on 494 patients with miscarriage.
Results: The rate of illegal abortion was 10% and 2.5% of them became complicated by sepsis.
Conclusion: There is a high prevalence of illegal abortion in our country, as a consequence of unwanted pregnancies. Family planning, education and contraceptive facilities should be available.

P032

Termination of the first trimester pregnancy in women gravida, pre-treated with misoprostol

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The aim of this study is to compare efficacy and complications associated with early pregnancy termination in women pre-treated with misoprostol.
Material and method: Patients G1 pregnant in first trimester were allocated in two groups: 43 women pre-treated with 200mkg misoprostol waginaly two times–12h and 2h before procedure and 43 women without medications. Pregnancy termination was performed by dilatation and aspirations. We evaluated cervical status/need for dilatation /, blood lose, operative time and late complications-blood and ova part retention. All 86 patients were gravida1 and there were no significant differences in age and physical status.
Results: In the group with medication 38 patients had 9mm dilatation and do not need additional dilatation, 4 had 6mm dilatation and need to 9mm dilatation and1 needed complete dilatation. In the group without medication all patients except 4 needed complete dilatation. Operative time in the first group was 5 min (range 3,5–7), in the group without medication –8 min (range 5,5–10) ($p < 0,05$).
Blood lose in both groups was the same. In the group with medication 5 patients had haematometra (blood retention in the 3 day after procedure)–11,6%, in the second group 15 patients had blood retantion–34,8% ($P < 0,05$).
Conclusion: We found that pre-treating patients with misoprostol and following aspiration of concept is effective and safe method for termination of first trimester pregnancies especially in women gravida1.

P033

Audit of contraception before and after termination of pregnancy

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Introduction: Concern had been raised locally about the number of clients attending for repeat TOP despite regular contraceptive advice and provision of most methods of choice on site. Repeat request for TOP is perceived to be a problem even though the rate was similar to that in other parts of Europe and North America.
Aims and Methods: As part of the audit on repeat TOP, we aimed to make recommendations on how to minimise the risk of having repeat TOP. We therefore looked at the contraceptive practices of clients before their last TOP and what they intended to use after their last TOP and compared these with what was being used when they returned for another TOP
Results: 291 women had a record of their contraceptive practice before their last TOP, what method of contraception they were planning to use after their last TOP and the contraceptive used prior to their current TOP. Forty-five percent were not using any contraception and 30.9% were using condoms as their sole method prior to their last TOP. Contraceptive intentions changed towards a more reliable method after the TOP with more than 56.3% choosing COC and 21 % choosing DMPA. However when they returned for their current TOP contraceptive practices had changed again. Of the 164 women intending to use COC after their last TOP only a third (52) were recorded to be using COC prior to the current TOP. Nearly two-thirds (102) were using condoms or no contraception. Sixty-one clients intended to use DMPA after their last TOP but only two said they were using DMPA prior to their current TOP and 47 (77%) were using condoms or no contraceptives. Twenty-two women planned to use IUD/IUS following their last TOP but only 4 were using IUD/ IUS before their current TOP. Fifteen women were using condoms or no contraception.
Conclusion: Although clients chose good, effective contraceptives after TOP, their use was not always maintained after the procedure. Further work is needed to understand the reasons for the change of method and plans to improve acceptability and accessibility to more effective contraception are being developed to assist women in having more control over their fertility.

P034

Audit of repeat termination of pregnancy

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Introduction: The termination of pregnancy service (TOP) for Liverpool residents is provided by the Bedford clinic at the Liverpool Women's Hospital. Concern had been raised about the number of clients attending for repeat TOP, in some cases within a short space of time. Although there is regular contraceptive advice and provision of method of choice on site, repeat request for TOP is perceived to be a problem. Studies from the United States, Canada and Europe suggests that between 20–30% of clients requesting TOP have had at least one or more before.
Aims and Methods: To quantify the percentage of clients referred to the Bedford clinic who have repeat TOPs and to see how the proportion having repeat TOP compare with the proportion having repeat TOP in England and Wales and in other countries. Non-identifying details were collected from all the case notes of clients requesting TOP who were referred and seen for their initial assessment visit between 01/04/01 and 31/03/02. Details collected were; age at the time of current TOP; ethnic origin; postcode; primary care trust; referring agency; number of children; number of previous TOP; contraception before and intended contraception after, the last and current TOP. The data was analysed using the SPSS statistical package to allow identification of any significant association between repeat TOP and the variables looked at.
Results: The total number of women who had TOP was 2165; the age range was 13–46 years. Although 30.2% had had one or more previous TOP, only a minority (1.9%) had had three or more previous TOPs. Increasing age was found to be significantly associated with having previous TOP, with age group 30–34 most likely to have had three or more previous TOPs. Women who were classed as housewife/mother or with three or more children were more likely to have had three or more TOPs. No other significant associations were identified.
Conclusion: The level of repeat TOP in the year studied appears to be comparable with levels in many other countries and England and Wales overall. Results showing evidence of an association with increasing age and multiparty confirm that only the passage of time determines the likelihood of requesting repeat TOP as it allows more exposures to the risk of pregnancy. The reasons for repeat TOP requests are complex but local residents are no different to those in other countries. Efforts to understand the reasons will continue with attempts to reduce numbers where possible.

P035

Abortion in Portugal: men and women's practices and values (a comparative perspective)

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Introduction and Objectives: In the EU, Portugal has been one of the most resistant countries concerning legal and safe abortion. In a context where other reproductive health issues were significantly improved during the last decades, abortion is still a controversial theme and illegal abortion is a social drama. Our paper is part of a major social science research on 'Fertility and contraception: men and women life courses' (1998–2004). It aims at characterizing, typifying and interpreting Portuguese women and men practices and values concerning abortion.
Design and methods: A double methodological approach is used: an extensive analysis based on a national survey about family and fertility (Inquérito à Fecundidade e Família, INE, 1997); an intensive analysis based on in-depth interviews to 150 women and 90 men in fertile age- a qualitative sample selected from different generations, regions, social backgrounds and family conditions. The extensive analyses allows a general overview about the prevalence and patterns of abortion in the country; the intensive analyses provides a typological and comprehensive view of the same subject.
Results: the national survey evidences the fact that abortion is an event mainly affecting older women with 2 or more children, in a long lasting conjugal relationship, using some form of unsafe contraception. Social background and religion are not relevant distinctive traits. The extreme diversity of values concerning abortion, even within the sub-groups of supporters or oppositors of legal abortion, is another relevant result. Opposition to abortion relies in two main values: personal responsibility, intra-uterine life defence; support to legal abortion relies, on the contrary, in a complex and more flexible constellation of arguments (eg.: abortion as an exceptional and accidental event, the importance of a wished parenthood, the respect for intimate personal decision, the risk for women health and children's future). A traditional pattern remains: men very often delegate contraception and abortion decisions in women.
Conclusions: 1) there is an evident gap in Portugal between current legislation and empirical evidence concerning practices and values on abortion 2) health professionals should be aware of the diversity of behaviours and perspectives that women and men may have when they face an unexpected pregnancy 3) multidisciplinary research is a crucial instrument to improve policies and professional skills in the sexual and reproductive health domains.

SESSION 2: CONTRACEPTIVE RATES IN EUROPE

P036

Contraceptive use in premenopausal years

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Introduction: The objective of this study were to gain information about fertility characteristics and contraceptive use of women in premenopausal years.
Aims and Methods: Number of pregnancies, children, abortion and the last contraceptive method they had used aged over 50, who completed their family, were retrospectively evaluated from 1997 to 2002.
Results: From 1252 patient, 426 (34%) had 4 or more pregnancies, while 413 (33%) had 3 and 338 (27%) had 2 pregnancies. 376 (30%) had 4 or more children, 382 (30.5%) had 3 children, 375 (30%) had 2 children while 119 (9.5%) had only one child. In addition, 655 cases (52.3%) had no history of abortion while 291 cases (23.2%) had one abortion and 306 cases (24.4%) had two or more abortions, respectively Almost half of patients were born in city (50.1%). Regarding the last contraceptive method used, we observed that 635 patients (51.7%) preferred any contraceptive method,while only 233 patient (18%) preferred modern contraceptive methods. Coitus interruptus was the most preferred method with 415 patients (33.1%) and intrauterin device was the most preferred modern method with 151 patients (12%).
Conclusion: In the premenopausal years, as to prevent unwanted pregnancies efforts should be made to increase the use of modern contraceptive method.

P037

Contraceptive use and fertility charecteristics: changes within 15 years

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Introduction: To assess and comment on the differences in contraceptive use and fertility characteristics of women within 15 years, in a university hospital.
Aims and Methods: Place of birth, the last contraceptive method use, number of pregnancies, children and abortions were retrospectively evaluated among women over 50 and compared between years period of 1982–1987 (group I) and 1997–2002 (group II). Data were analyzed by Student's *t* test and chi square test.
Results: Use of any contraceptive method, intrauterine device, oral contraceptive were higher in group II, p values $p < 0.05$, $p < 0.001$, $p < 0.001$ respectively. Coitus interruptus was the most preferred contraceptive method for both groups and no significant difference was relevant in terms of its frequency used ($p > 0.05$). Number of pregnencies ($p < 0.001$), number of children ($p < 0.001$) were lower and number of abortion ($p < 0.001$) were higher in group II.
Conclusions: As expected, use of contraceptive method and use of modern contraceptive method were increased as time passes. Unexpectedly, coitus interruptus was the mostly preferred contraceptive method for both time periods. For the recent years, number of pregnancies and living children decreased and number of abortions increased. To conclude, there can be changes in contraceptive use fertility trends within years.

P038

The characteristics of the patients who applied to the Family Planning division of a university clinic in Turkey

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Objective: The aim of this study is to investigate the characteristics of the patients who applied to the family planning division.
Design and Method: The records of the all patients who applied to Family Planning Division of Obstetrics and Gynecology Department of Cerrahpaşa School of Medicine of Istanbul University between 1999 and 2002 were reviewed. The demographical data of the patients were evaluated with the purpose of revealing the characteristics of these patients.
Results: During the study period, 1296 patients applied in family planning division of our clinic. The mean age of the patients was 32.1 years. When the educational status was evaluated, 3.2 % was illiterate and only 20.1% had a university degree. The mean number of pregnancy was 2.6 and 34.3% of the patients experienced at least one dilatation and curettage. When the outcome of the last pregnancy was analyzed, it was found that the rate of curettage was 12.5 % in these patients. When births were excluded, the rate of curettage increased to 29.5%. When the contraceptive method of choice in the last 3 months was investigated, 49.0 % was found to exercise coitus interraptus and 1.3% was using timely intercourse. The dilatation and curettage rates were almost to times higher in the patients 35 and older (19.5% versus 9.8%) ($p < 0.05$).
Conclusions: The rates of application of the effective contraceptive methods have been insufficient in Turkey. The patient education is still one of the major key points in the contraception issue in Turkey.

P039

Aspects concerning the cervix pathology in the activity of the Family Planning Department

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Introduction: The multinational study made by WHO and published in 1993 underlines the fact that women that take contraceptive pills for a long period have a 2,2 times greather risk to develop a cervical cancer compared to the rest of the woman population. The purpose of this paper is to watch the cervical transformations at young woman that used oral contraceptives.
Aims and Methods: In 2001–2002 there were clinically, cytologically and colposcopically examined 500 women who requested oral contraceptives. The exams were performed in the Family Planning Department of the Filantropia Clinical Hospital, Bucarest, but the women population were only in a proportion of 83% of Bucarest, and 17% of the rest of the country.
Results: Following the investigations, it was noticed that among those women, aged between 18–25, the cervical pathology is dominated by the presence of the minor atypical transformations occured in massive specific and non-specifif inflamatory conditions. Therefore it is recommended the examination of all oral contraceptive users in order to identify the minor atypical regeneration processes, their treatment and supervision due to the possibility of infestation and re-infestation through unprotected sexual intercourse (non-specific infections and especially specific infections: HPV, chlamidia, trichomonas, etc.)
Conclusions: On the shown sample of woman population, no case of cervical cancer was detected for woman using oral contraceptive, and the minore atypical changements may be generated from the shown inflamatory factors.

P040

A survey of the attitude of Korean women toward contraceptive use

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Objective: A research was conducted on current methods of contraception used by Korean women. The objective was to find out which methods of contraception by Korean women are using, any problems they are experiencing, and which methods they prefer.
Method: Questionnaires were given 1,130 reproductive-age women who visited Soonchunhyang University Hospital in Seoul, Korea, from January 2000 to October 2001. Items on the survey included the method and duration of contraception used, side effects (if any), and level of satisfaction.
Results: The mean age was 35.1 ± 5.9 years and the most common occupation was that of housewife (68%). The mean parity was 1.7 ± 1.1, and the mean number of abortions was 0.8 ± 1.5. The mean period of contraception use was 4.6 ± 4.9 years. Condoms were the most common method used (29.0%), followed by intrauterine device (21.1%), tubal sterilization (13.5%), oral contraceptives (12.2%), periodic abstinence (9.3%), vasectomy (7.9%), coitus interruptus (6.4%), and other (12.4%). Among women over 41, sterilization was the most common method. Condom and oral contraceptives were the most common methods used by women under 40. Menorrhagia and leukorrhea were the most common side effects among women who used the intrauterine device. Women who had tubal sterilization and/or whose husbands had vasectomies were the most satisfied with their method of contraception.
Conclusion: The most common used contraceptive method reported by Korean reproductive-age women was the condom. The method of contraception used in Korea is changing from permanent methods to temporary methods. Therefore more women need to be educated in the use of condoms, oral contraceptives, and intrauterine devices.

P041

Differences and similarities in reproduction and its control determined by religious orientation

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The Objective of the study was to determine the influence of the religious orientation on reproduction and the use of contraceptive methods, as means to control it, before and after the first pregnancy.
Study Design and Methods: We included 120 women in a non-randomized, prospective study. The women were divided in two groups: 60 women were Orthodox Christians (30 Macedonians and 30 Serbs) and 60 women were Muslims (30 Albanians and 30 Turks). The women were interviewed using a specifically prepared questionnaire (translated to the language of each ethnicity). The obtained data was processed using the standard statistical methods.
Results: The average age of the women was 27.3 years ($\pm$4.2) without any statistically significant differences in both groups. In terms of the number of children there is a significant difference between the two groups: the Muslim women have 2.13 ($\pm$0.91) children on average, while the Orthodox women have an average of 1.55 ($\pm$0.59) children. Artificial abortions are more common in the Orthodox group than in the Muslim group but this is not statistically significant. The Orthodox women have a considerably higher level of education than the Muslim women. Before the first pregnancy, 81.7% of the Orthodox women used contraception, whereas a mere 20% of the Muslim women did so. A statistically significant difference on this matter can be observed between the two groups. Coitus interruptus is the most frequently used contraceptive method for the whole group. The use of condoms is considerably higher in the Orthodox group. The degree of contraception use for controlling the first intergenesical interval is greater in the Orthodox group, but this is not statistically significant. The number of women with two or more children is significantly higher in the Muslim group. In terms of the willingness to use contraception in the future, there is a significant difference between the two groups: the number of women that would use contraception in the future is considerably higher in the Orthodox group.
Conclusion: Although the study covers a group of women which populate the same territory, there are significant differences, in terms of reproduction and it's control, determined by the religious orientation. The Orthodox women start reproduction at an older age and have less children than the Muslims. The level of contraception use is also higher in the Orthodox group, both before and after the fisrt pregnancy. Coitus interruptus is the method most frequently used by both groups. Of the other methods of contraception, the Muslim women prefer IUDs, while the Orhtodox women prefer condoms.

P042

Reproductive behavior of the adolescents in St. Petersburg

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Reproductive attitude being formed in the family in the early age in the main determines perspective birth rate in the country.
Anonymous survey (1998–2002) of more than 6000 school children in St. Petersburg testifies to the fact that only 80% of boys and 89,6% of girls at the age of 15–17 years plan to have children in their own families, 93,0% of teenagers initially want to have a small number of children. In the opinion of young boys and girls an ideal number of children in a family are 2,0 and 1,8 and a planned number are 1,7 and 1,6 respectively; that is much lower than a level of simple reproduction. Undoubtedly, wide spread of harmful habits among schoolchildren in St. Petersburg results in the decrease of reproductive potential: thus 13,3% of them use alcohol regularly, 27,8% smoke, 7% tried to take drugs. The absolute majority of teenagers thinks that pre-marital sexual relations are quite possible. The number of virgins among 14 years old schoolgirls in St. Petersburg is 93,7%; at the age of 15 their number decreases and becomes 92,5% and the age of 16 the number is only 43,9%. Among the girls having sexual relations, 21,1% had two partners, 14,3% - three sexual partners and 29% - more than three. Only for 26,0% - 43% of girl families are the main source of information on physiology in adolescence, the figure for boys is only 6%- 14%. The figures of sexual relations are 13,0% - 22,0% and 4,0%–6,0% respectively. School is the source of information in adolescence on safe sexual life for only 4% of teenagers; the figure for doctors is a bit higher and constitutes only 4,0–0,8%. Mass media help 15,0–32,0% of teenagers get the required 'knowledge on sex'. And, regrettably, the main information on sexual life is provided by adolescents and sexual partners (36,0–48,0% - girls, and 43,0–61,0% - boys) and so, many sexual myths are being spread among teenagers which do not correspond to modern medical views on family planning. Among teenage respondents having sexual relations only 54,9% take measures to prevent pregnancy and sexually transmissible infections; 28,4% do it from time to time and 16,7% of adolescents don't take any measures at all. It is necessary to emphasis that modern effective preventive measures are used regularly only by 14,9% of sexually active teenagers.

P043

Contraception and press in Spain: 1997–2002

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Introduction: From the surveys realised by the Daphne Group, the importance of press in the women's opinion and attitudes related to contraception was emphasised.
Aims and Methods: The present study was designed to analyse the different information published in four main newspapers and four magazines – addressed to women – between the period from 1st of January of 1997 and the 31st of December of 2002. Information was classified in positive or negative according to several items defined by the authors.
Results: During that period 573 different articles were published in newspapers and 137 in magazines. Were classified as 'negative' 111 (19.3%) from those published in newspapers and only 6 (4.3%) from those published in magazines. Total number of negative impacts were 117 (16.5%).
Conclusions: In Spain the number of positive publications during the period analysed represents the 83.5% of the most common media. The impact of those positive impacts it's a possible factor that has influenced in the increase of the use of contraceptive methods.

P044

Contraceptive trends in Spain: 1997–2003

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Daphne Group

Introduction: The Daphne group was created to study the attitudes and the use of contraceptive methods in Spain and to promote actions to improve the knowledge of contraception in the general population and physicians. From 1997 until 2003 a biennial survey on the use of contraceptive methods has being performed between women in fertile age.
Aims and Methods: To know the trends of use contraceptive methods in Spain in women aged 15 to 49 years old during the period 1997 to 2003. A questionnaire was designed to investigate the rate of use of contraceptive methods in fertile women and the reasons of selection of the method. The same questionnaire was used in the years 1997, 1999, 2001 and 2003 and with the same number of women.
Results: The number of women included was calculated in order to be a representative sample of the total fertile age women, a number of 2.300 women per year have answered the questionnaire. During these years the use of any method of contraception has gone from 55.6% to 71,2%. Barrier methods, condoms, are the ones that have experienced the major increase (21% in 1997, 21.9% in 1999, 29.5% in 2001 and 35.7% in 2003). Contraceptive pills have has also increased (14.2% in 1997, 16.5% in 1999, 19.2 in 2001 and 18.3% in 2003). Intrauterine devices have remained stable around 5%. Concerning the information source about contraceptive methods 50% of women ask for contraception through a medical professional, doctor or nurse. This percentage has increased along the last years.
Conclusions: In the last 6 years contraceptive use has increased significantly among Spanish women achieving rates comparable to other European countries.

P045

Use of contraceptive methods in Spain: results of four national surveys by age groups

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Daphne Group

Introduction: A biennial survey on the use of contraceptive methods is being performed in Spain since 1997 among women in fertile age.
Aims and Methods: To know the rate of contraception use in Spain in women aged 15 to 49 years old. A questionnaire was designed to investigate the different contraceptive methods used in fertile age and the reasons why a specific method is chosen. The same questionnaire was used in years 1997, 1999, 2001 and 2003.
Results: A number of 2.300 women have answered the questionnaire every period studied. In the group of adolescents, ranged 15–19 years old, the most used method has been condoms, realising that there has been an increase of use that went from 14.2% in 1997 to 35.8% in 2003. In the group of women aging 20 to 29 years old, condoms is also the most used method and secondly the pill, use of pills has increased until 30% in this age group. In the group of 30 to 39 year-old women use of condoms is also the first contraceptive option followed by pills, with a decrease in the use of pills mainly after 35 years old (12% of women from 35 to 39 years old); this age group is also the one that most frequently use IUD, increasing from 5% in 1997 to 9% in 2003. In the group of women aging 40 to 49 years old the use of condoms and pills is very low, being the surgical procedures the ones preferred; it has been seen an increase of the number of male surgical contraception in the last years; surgical methods are actually used by 28% of women of this age group.
Conclusions: Contraceptive use in Spain has increased in all ages, mainly in adolescents, during the last 6 years, the most relevant methods are condoms and pills.

P046

Risk of unwanted pregnancy among Spanish women 40 to 50 years old

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Daphne Group

Introduction: Frequently the risk of unwanted pregnancy is associated with adolescents and, in Spain, little was known about this risk in the pre-menopause.
Aims and Methods: To know the risk of unwanted pregnancies in the group of 40–59 year-old women. We have used a questionnaire designed to know the sexual behaviour and the actual use of contraceptive methods, other aspects, like the real possibility of getting pregnant, were also analysed.
Results: From the 1875 women studied 84% were sexually active and 48% of them didn't use any contraceptive method. From those using contraceptive methods only 33.8% used an effective one (condom, pill, IUD, sterilization –male or female–). The reason for not using contraceptive methods were: 39% were not at risk of pregnancy because of previous surgery or sterility and 61% didn't have any consistent answer, just 'thought' that pregnancy was not possible. The final results were that 31.8% of women, aged 40 to 49 years old, were in risk for unwanted pregnancy. Our result were compared with previous existing data on voluntary abortion where the 35% of pregnant women between the ages of 40 to 44 and 52% of those between the ages of 45 to 49 decided to interrupt pregnancy.
Conclusions: These results confirm that in the pre-menopause effective contraception has to be continued until menopause occurs since the risk of unwanted pregnancy is high.

P047

Specificity of safe contraception in Latvia

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Introduction: Since 1990 the population rate has decreased from 2,67 million to 2,34 million. The natural growth is still with a minus, although, in total, the demographic tendences prove to be slow, though positive: the total number of legal abortions decreases, the birth- rate of population increases. In the age group from 10- 14 years and from 15- 19 years the young girls start sexual life earlier, however, 33% do not use any contraceptives at all, therefore this age group shows the greatest number of abortions when the first pregnancy sets in. In total, only 19,79% of fertile age women use safe contraceptives in Latvia.
Conclusions: There are several reasons which promote the slow increase of demographic indices, the great abortion rate and insufficient use of safe contraceptive methods: Little interest of state policy in allocating social allowances. Contraceptives are not included into the list of state reimbursed medicines in no age grpup and socially disadvantaged group, in difference to majority of EU countries. Price policy, introducting 5% VAT on medicines, the fact is unfavourable to patients. Insufficient number of hours in health education for children and adolescents.

P048

Educational level and contraceptive practice in three different female populations

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Introduction: The educational and socioeconomic level seem to influence the contraceptive behavior.
Aims and Methods: To test the hypothesis that attitudes towards the female contraceptive practice depend on the educational level, we conducted a retrospective study on representatives of three different subgroups in Greece and Germany: 127 Orthodox Christians and 120 Muslim habitants (group 1 and 2) of Thrace, a rural area in Greece, and 150 Muslim habitants (group 3) of Berlin, an urban area in Germany. The women were reasonably representatives in terms of age, religion and education. Interviews covered sexual history and contraceptive use in detail. Statistical analysis was performed using one way analysis of variance (ANOVA) followed by Tukey's test, chi-square test and multiple logistic regression analysis.
Results: There was a significant difference in the distribution of the three levels of education between the three groups (chi-square =17.3, degrees of freedom=4, p=0.002). Regarding the method or combination of methods practiced by the 3 groups, a significant difference was also found (chi-square =43.85, degrees of freedom=24, p=0.008). This significant difference is probably caused due to the high proportion of condom use (50.8%) in group 3 and the high proportion of interrupted intercourse (35.2%) practiced in group 2.High level of education was inversely related to the utilization of interrupted intercourse (odds ratio=0.347, p=0.014), periodic abstinence (odds ratio=0.221, p=0.033) and condom use (odds ratio=0.386,p=0.004). Higher level of education tended ($0.1 < p > 0.05$) to show a similar relation with the practice of interrupted intercourse and periodic abstinence, while significantly influenced the condom use (odds ratio=0.359,p=0.014).
Conclusions: The educational level as well as the female age and the religion tend to influence the contraceptive behavior.

P049

Sociodemographic background of oral contraceptive use among young women

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Introduction: Oral contraceptive (OC) use should be promoted in regular sexual activity to decrease the high abortion-rate in this age-group.
Aims and Methods: To assess the main determinants of OC use among young women. A self-completed questionnaire study of 332 clients (14–25 yrs) from 1 March 2001 to 31 May 2002 at the Contraception Outpatient Clinic for young women in the Department of Obstetrics and Gynecology, University of Szeged.
Results: About half of the respondents (48.2%) used OCs, which was significantly depending from the prevalence of sexual contacts ($P < 0.001$). Most of the adolescents want to use OCs in the future (74.0%). Thirty-four percent of the OC users knew the correct management of the patient failure of the OC pill, whereas among the non-OC users this rate was only 22% ($P < 0.05$). The contraceptive choice of the young women depended significantly on the available knowledge of all reliable methods (68.8% vs. 57.0%, $P < 0.05$).
Conclusions: OC is preferred by more educated teenagers with regular sexual activity. Our results highlighted the significant differences in information processes, awareness of contraceptives and knowledge of correct use of OCs between OC-user and non-OC-user youngsters.

P050

Sexual information of teenagers in Szeged: a questionnaire survey

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Introduction: The increase of sexual activity among the adolescents has become a danger to their reproductive health and consequently the rate of abortion among teenagers is above 10 % in Hungary.
Aims and Methods: The goal of this study was to explore sexual behaviour of teenagers. An anonymous self-administered questionnaire survey was conducted among adolescents. Data on contraceptive use were collected from 356 teenagers (217 girls and 139 boys) aged 15 to 19, from May 2003 to October 2003 in secondary schools of Szeged.
Results: The first sexual intercourse (356/153, 43.0%) was in 15.1 years, in average, without any significant differences between those of girls (15.2 yrs) and boys (14.9 yrs). Most of sexually active teenagers applied condom (153/73, 48%) due to irreglar sexual activity. The second popular method was the oral contraceptive (OC) pill (153/39, 25.5%). Almost all of the respondents are aware of the condom (96%) or OC (92%). About half of the teenagers knew the intrauterin device (51.4%) and calendar method (65.4%). OC was declared as a reliable method in 51.0% and condom in 64.2% of subjects. Seventy-eight percent of adolescents knew the possibility of emergency contraception, and only the minority of them (7.1%) used it against unwanted pregnancy.
Conclusions: Half of the teenagers has sexual activity, but a quarter of them uses unreliable contraceptives or relies on luck. The high rate of unwanted pregnancy could be prevented with promotion of wider use of condom among sexually active teens.

P051

European women's survey on oral contraceptive use

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Introduction: Whilst oral contraceptives (OCs) effectively prevent pregnancy, their effectiveness is dependent on user compliance. Many women use OCs, some for several years, and may find daily pill taking a burden. The aim of this large European survey was to collect information on women's behaviour and attitudes towards oral contraceptives.
Design and Methods: Telephone interviews were conducted in the Netherlands, Germany, Spain, France and Italy by female interviewers. Over 2000 women aged 18–40 years were interviewed (approximately 450 per country) about usage (current and past Pill use), attitude (perceived advantages and disadvantages), compliance (forgetting the Pill, frequency and causes) and preferences (frequency of intake and ideal form of contraceptive).
Results: A total of 2278 women took part in the survey. Of these, 78.6% had experience of Pill use (36.4% current users; 42.2% ex Pill users). The Pill was the most frequently used method of contraception in all countries (63% overall for current contraceptive users; n=1300) except for Spain where it was second to the condom. The Netherlands and France had the highest numbers of current Pill users (both 52%). The most frequently mentioned advantages of the Pill mentioned by current users (n=796) were reliability (60.2%), ease of use (45%) and regulation of periods (29.8%). Disadvantages mentioned by current and ex Pill users (n=1816) were forgetting to take it (42%), the physical burden of taking hormones (28.9%) and weight gain (21%). Of the current Pill users, 68% reported forgetting to take the Pill and of these women, 22.9% forgot one or more pills every month. The average frequency of missed Pills was 1 per month. The countries with the highest proportion of Pill users who missed pills on a regular basis were the Netherlands (80%) followed by France (70%). The most common reasons for forgetting the Pill were stress (23.3%), the occurrence of unexpected events (22.3%) and no particular reason (19.2%). When asked to give a spontaneous answer about what would be their ideal contraceptive (open-ended question), most (11.8%) women favored an oral method over insertion or injection methods, yet only 7.8% liked a daily method. The majority (79%) of women surveyed preferred a method that can be taken monthly or less.
Conclusions: The survey found that approximately two-thirds (68%) of women currently using the Pill forget to take it with the average frequency of one pill per month. The countries where Pill use was most frequent were also the ones where women were less careful about taking it. For those surveyed, the ideal contraceptive was administered once -a- month or less.

P052

Psychological and moral aspects of women undergoing pregnancy termination

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Introduction: Among Lithuanian women who terminate pregnancy are most frequently married women and those with university and college education. Their economic status has no influence on pregnancy termination. Women more often decide on pregnancy termination if they had a previous one.
Aims and methods: The study involved 130 women who voluntarily arrived for termination of up to 12 weeks pregnancy. Women were asked to fill in a questionnaire 0.5–1h before the procedure. Woman who arrived for pregnancy termination with ultrasonic diagnosis of missed pregnancy that required induced abortion, were excluded from the study.
Results: Women who arrived for pregnancy termination were asked to answer certain questions. Out of the total numbers of subjects 90 % assessed pregnancy termination as negative and only 8 % stated that it was nothing particular. Possible complications were familiar to 62 % of women. Other people's opinion was important only to 3 % of respondents, unimportant to 33 % and 35 % of women preferred to keep it secret. Pregnancy termination was discussed by 70 % of respondents with their partners, by 14 % with friends and by 14 % by mothers, 15 % of women sought councelling from the medical personnel. A prompt decision to terminate pregnancy was made by 50 % of women, 30 % needed longer consideration and 20 % of women had some doubts. Among those who arrived for pregnancy termination 65 % had strong religious beliefs, 15 % of women were free from religious beliefs and 20 % had weak religious beliefs. In future 89 % of respondents plan to use effective contraceptive methods. If women who have presented for pregnancy termination will become pregnant in future 3 % of them will terminate unwanted pregnancy and 8 % intend to give birth. Hormonal tablets are considered to be the best contraceptive method by 40 % of women, IUD by 18 %, condoms by 20 %, rhythm calendar by 21 %, withdrawal (coitus interruptus) by 9 % and femal sterilisation by 3 % of respondents.
Conclusions: Alternatives for induced abortions include development of moral qualities of the society, female and male sexual education and usage of effective contraceptive methods.

P053

Subjective efficacy of preventive methods: image is everything

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Modern contraceptive methods are changing the world. After the introduction of modern contraceptive methods, contraceptive behaviour increased globally from 9% during the 1960s to 58 % in 1999; but with a difference between developed- (65–80%) and underdeveloped countries (53%). Differences in contraceptive use can also be found within the developed counties: total percentages of contraceptive users are relatively equal, but the quality of the contraceptive use varies per country. Variations between abortion rates are the best illustration of these differences. For decades, the abortion rates in the Netherlands have been the lowest in the world. Unfortunately, in recent years statistics indicate that the quality of prevention behaviour in the Netherlands is deteriorating. The question arises what factors are responsible for this decline. In order to correctly interpret the abortion and STD statistics three main questions must be answered.First, exactly what variables influence the quality of prevention behaviour? Second, which sub-populations within Dutch society are more at risk for unwanted pregnancy and/ or contracting a STD? And finally, is every sub-population influenced in the same way by the different factors? Literature shows that one of the factors that influences preventive behaviour is the perceived efficacy of the preventive method. From 1989 until 2000 data was gathered from a representative sample of 5000 women in the age group of 15–50 years on their contraceptive behaviour (GfK study). This data contains detailed demographical information as well as information on contraceptive knowledge, contraceptive and condom use, reasoning on starting, switching and discontinuing of contraceptive methods, information sources used, information on (perceived) side effects and (perceived) efficacy of the preventive method. In this presentation data will be presented on differences in perceived efficacy for different subpopulations. Results of the questionnaire will be compared for, amongst others, different age groups, social economic status, level of education and the presently used preventive method. Results show, for instance, a strong trend for subjective efficacy to be relatively low for contraceptive methods the individual is not using and high for the method that they are using, and that these beliefs don't necessarily coincide with the objective efficacy of the preventive method.

P054

The experience of a family planning practice in a southern Portuguese community

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Introduction and objectives: Portuguese law contemplates sexual education and family planning as every citizen's fundamental right. The health centres, which are the primary health care providers in Portugal, are responsible for divulging and supplying the available contraception methods, as well as carrying out screening programmes for breast and cervix cancers. Évora's health centre covers a total of 56257 residents. It is an ageing population characterized by a low density, where about 66% of working adults have a job in the tertiary sector. Our objective is to characterize the women that use the family planning practice, as well as the contraceptive methods used.
Design and methods: We have 13876 women of reproductive age (15–49 year olds) registered in our health centre. Using our computer records, we carried out a prospective study selecting a cohort of women who have visited the family planning office from April 2002 to April 2004 (our active population, n=1667), analysing the several contraception methods used in our practice (pills, subcutaneous hormonal implants, intra uterine devices (IUD's), barrier, mixed and natural methods, as well as emergency contraception).
Results and Conclusions: Our practice coverage rate is of 12%. Investigating more deeply the reasons for this will be an interesting topic to study in the future with the objective to better the coverage rate value. The pill continues to be the method preferred by our users. Of particular note is the increasing demand for the hormonal subcutaneous implant as a contraceptive method of choice. It currently enjoys great acceptance among our women.

SESSION 3: DIFFERENT CONTRACEPTIVE METHODS (I.E. HORMONAL, IUDS, IMPLANTS)

P055

Experience with Implanon in a North East London family planning clinic

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Introduction: A retrospective survey of patients' notes was conducted to evaluate the long-term contraceptive implant (Implanon) in Waltham Forest, London.
Objective: To determine continuation rates of this new long-term hormonal contraceptive.
Results: Of the 142 implants fitted over the 3 year period (February 2000 to January 2003), 132 notes could be retrieved for retrospective analysis. Of the 132 women, 93% were self-referrals, 5% were from GPs and 2% were from Secondary care. Pre-insertion counselling was undertaken in 97%. The median age of fitting was 25 years. The most common indications for choosing implants were choice of a long acting method, suboptimal, compliance with pills or injectables, bad experience with other methods, associated medical conditions and prior usage of Norplant. 27 women (20%) required medical intervention for bleeding problems, in 8 women (30%) bleeding resolved with treatment, 4 women (15%) are continuing with medical treatment, in 12 women (44%) Implanon was removed due to failure of bleeding problems to resolve with medical treatment. No pregnancies have been reported so far based on a follow-up of 85% of women. 15% women were lost to both virtual and telephonic follow up. 22 implants have been removed by the end of the study period, with 60% (n=12/22) removals attributed to bleeding problems. The assumed lifetimes of Implanon using Kaplan Meier method are 0.90 at 12months, 0.80 at 24 months and 0.75 at 35 months. The confirmed life times are 0.84 at 12 months, 0.63 at 24 months and 0.53 at 35 months.
Conclusion: In our experience, Implanon is proving to be a highly effective, long acting hormonal method of contraception with reasonable continuation rates at 2 and 3 years. Effective pre and post insertion counselling is important in patients acceptance of side effects and has an enormous impact on continuation rates.

P056

Progestogen only contraception and venous thromboembolism – is accepted clinical practice at odds with manufacturer's guidance?

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Introduction: Progestogen only contraceptives have been regarded as the method of choice for clients requesting hormonal contraception with a history of venous thromboembolism (VTE), oestrogen being contraindicated. (World Health Organisation (WHO). Medical eligibility criteria for contraceptive use. Geneva, Switzerland: WHO 2000. Guillebaud J. Contraception your questions answered 3rd edition. Churchill Livingstone, Harcourt Publishers, Edinburgh, 1999; 285–288). Introducing clinical protocols for the newer products Implanon & Cerazette, it became evident that 'active venous thromboembolic disorder' contra-indicated their use. This in turn lead to a closer examination of the guidance for the more traditional progestogen only products.
Aims and methods: To elucidate the precise cautions/contraindications of all the progestogen only contraceptives with regard to VTE, firstly according to the product information issued by the manufacturers and secondly according to the British National Formulary (BNF). There was also communication with the pharmaceutical company Janssen-Cilag.
Results: In general the guidance from the manufacturers regarding VTE risk with the traditional progestogen only pills (POP) was even more stringent than for the newer products; with 'history of' VTE as well as 'current, existing or active' VTE often being a contraindication to use. This was at variance both with accepted clinical practice and with advice in the BNF. Interestingly in the case of Micronor, the product information for an identical pharmaceutical product in a higher dose (Micronor HRT) contained no caution regarding thromboemolic disorders on commencing treatment, unlike its contraceptive counterpart. The terminology used in the product information was often ambiguous, open to differing interpretations.
Conclusions: The information available regarding the use of progestogen only contraception in clients with history of VTE is inconsistent and confusing. Accepted clinical practice appears to be at odds with pharmaceutical guidance.

P057

How late can you give Depo-medroxyprogesterone acetate?

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Aim: To formally assess acceptability and outcome of management of clients who present for a repeat injection of Depo-medroxyprogesterone acetate (DMPA) 150mg/ml more than eighty-nine days after their previous injection, having had unprotected sexual intercourse (UPSI) after the protection of their previous DMPA injection ended.
Background: DMPA licence is for 89 days in the United Kingdom. Nurses provide a large proportion of the contraceptive care in our service using patient group directions (PGDs) which allow nurses to issue hormonal contraceptive methods without a prescription. In our service, clients who present for a repeat injection after eighty-nine days since their previous injection, having had pregnancy risk, are counselled and given the choice of (a) receiving their DMPA injection the same day with or without emergency contraception (EC) if appropriate, with full awareness that pregnancy has not been excluded or (b) EC if appropriate and waiting for their next injection until pregnancy is excluded by a pregnancy test three weeks after the last UPSI. They are informed that there is no increased risk of abnormality to a fetus if conception has occurred, based on currently available evidence. As option (a) is outside our current PGDs, nurses need to consult a doctor if a client chooses this option. As we wish to incorporate this option into our PGDs, we decided to audit the acceptability and outcome of this practice.
Method: A retrospective audit of case-notes of continuing DMPA users.
Results: Eighty-three cases were identified who met specified criteria for delayed use with risk of pregnancy during 2002/2003;18 had UPSI between 89 days and 13 weeks, 23 had UPSI between 13 and 14 weeks and 42 had UPSI after 14 weeks. Seventy-five clients (90%) chose to have DMPA on the day, without excluding pregnancy risk, and eight (10%) chose to wait until pregnancy was excluded before having the next injection. No pregnancies occurred. Twenty four (32%) attended for pregnancy test three weeks later as advised, 47 (63%) excluded pregnancy by test only at the time of the next injection and 4 (5%) did a home pregnancy test.
Conclusion: This is acceptable and safe clinical practice from both the clinicians' and the clients' perspective. It enables women who default an arranged date for a repeat injection to link back into effective contraception as soon as possible.

P058

Long-term safety and efficacy of extremely low-dose combined oral contraception containing 15 μg of ethinylestradiol and 60 μg of gestodene

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Introduction: The biggest advancement of combined oral contraception (COC) over the last 40 years consists of the reduction in doses of hormones to eliminate side effects. 15 μg of ethinylestradiol is the lowest dose that has been ever reached.
Objectives: The purpose of our study was to evaluate the long-term safety, efficacy, and side effects, as well as the reasons for discontinuation in patients using the extremely low-dose COC containing 15 μg of ethinylestradiol and 60 μg of gestodene in each tablet.
Design & Methods: From October 2001 untill December 2003, in 1144 cycles, in 88 women between 13 and 49, contraceptive's reliability and changes in gynaecological findings, body weight, blood pressure, biochemical parameters, cycle control and side effects were observed. The reasons for discontinuation were analysed.
Results: The contraceptive's reliability was absolute. There were no significant changes in body weight, blood pressure, and biochemical parameters. We diagnosed 8,7 % HPV infection and 1,9 % CIN I. The frequency of breakthrough bleeding was suprisingly low (5,8 %), evidently for the reason of the relatively small BMI (average 21,3 kg/m^2). The list of side effects didn't exceed the existing one. There were no serious adverse events included in the thromboembolism.
Conclusions: The extremely low-dose COC is generally tolerated very well and its level of safety is high. Concerning contraceptive effectiveness, it can be evidently relied on. The frequency of breakthrough bleeding was suprisingly small (5,8 %), probably because of the patients' relatively low BMI. No case of serious venous complication was observed.

P059

An assessment of the infection risk associated with intrauterine device insertion in two different clinical situations

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Objective: The presence of a sexual infection at the time of an intrauterine device (IUD) insertion increases the risk of pelvic inflammatory disease (PID) developing. There is some evidence that there is a higher rate of sexual infections in women who are attending for post-coital contraception (PCC) IUD's than in those who had their IUD'S inserted as an elective procedure. We wished to examine this in our community based sexual health service.
Methods: Using the department's computerised records system it was possible to access the records for all of the elective and PCC IUD's fitted in the last quarter of 2001. The data was entered into Microsoft Access and then analysed using SSPS. Basic information about the age and parity of the woman was collected as well as the number, type and result of swabs taken.
Results:

	Elective	PCC
Mean age	37	25
Median age	34	24
Nulliparous	25%	61.5%
Previous TOP	20%	20%
Chlamydia positive	0.65%	6.67%

There were no cases of gonorrhoea in either group. The PCC group were younger, more often nulliparous and had the higher incidence of Chlamydia but interestingly both groups had had an equivalent number of termination of pregnancies.
Conclusion: Having an IUD fitted for emergency contraception rather than, as an elective procedure is associated with an increase risk of an infection being present.

P060

A study on knowledge of women about condom and its relationship with the usage of condom in their partners

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Objective: Birth control is one of the major needs of our society at the present time. Unwanted pregnancies, in particular, is one of the most important issues in public health and family planning. Each year, particularly in developing countries, a large number of women die from complications of pregnancy. Most of unwanted pregnancies are preventable. There are various methods of contraception. One of these is wearing condom by men which can be effective if used properly. This study was conducted to determine the women knowledge and its effect on usage of condom in their partners in Kashan-Iran in 2003.
Design and Methods: In this descriptive- analytical study 498 women referring to kashan university primary health care centers, received condom for their husbands and completed prepared questionnaire from september to november in 2003.
Results:This study showed that 4% of our cases had poor knowledge, 31% medium level of knowledge and finally 65% acceptable knowledge of using condom. Furthermore, 15% of the husbands used condom improperly, 5% used it relatively well and 34% used it appropriately. There is a significant statistical relationship between knowledge of using condom in women and its usage in men ($p < 0.001$). There is also a meaningful relationship between level of education of partner and knowledge and practice about condom ($p < 0.001$). In addition, 22% of our cases had no information about the appropriate timing of usage of condom and 19% had improper reaction when faced up with torn condom.
Conclusions: Considering significant statistical relationship between knowledge and usage of condom, its strongly recommended to reinforce the education programs of partners in appropriate practice of birth control methods and particularly the use of condom.

P061

Levonogestrel-releasing intrauterine devices: clinical experience and acceptability

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Introduction: New contraceptive methods usually raise expectation and queries to the contraception specialist. The levonogestrel-releasing intrauterine device, despite being widely known, generates uncertainties with respect to its handling and acceptability because the introductor is different and the device involves a drug (levonogestrel).
Methods: We have analysed insertion problems and indications, acceptability and adverse side effects of the levonogestrel-releasing device (LNG-IUD). Five hundred women received LNG-IUD between 2001 and 2003 in our family planning center. The troubles getting insertion was stratified in three groups: 'easy', 'moderate' and 'difficult'. 'Easy' was reported when the intrauterine device was inserted on the first or second attempts; 'difficult', when the insertion was not possible or dilation of the cervical hole was necessary; and 'moderate' difficulty when the insertion was between the two other situations. The insertion indications were contraception, menorrhagia, and perimenopausal women carrying IUD or with myoma or endometrium hyperplasia. Benefits and troubles of LNG-IUD were explained to every woman and an ultrasound examination was performed after the first menstruation. We investigated the long-term acceptability of LNG-IUD in 180 women after six months of use and asked them about pain, spotting, menstruation, satisfaction, and improvement.
Results: The women's mean age for insertion of the LNG-IUD was 36.0 (17–49) years old. Insertion was 'easy' in 477 (95.4%) women and of 'moderate' difficulty or 'difficult' in 17 cases (4.6%). Only in 4 cases was the insertion of LNG-IUD found to be impossible. In 307 cases (85.2%), the most frequent indication was contraception, being in the 23.8% of the cases in menorrhagia of IUD carriers. In 28 cases (5.6%) insertion was prescribed as a result of menorrhagia, in 25 cases (5%) due to perimenopausal troubles and in 21 cases (4.2%) due to organic pathology (myoma or endometrial hyperplasia). In 286 cases, women had not previously used an IUD. In 4 cases women had experienced spontaneous lost, in 6 cases the IUD had moved towards the cervix, and in 3 cases the IUD had moved into the abdominal cavity, which required laparoscopy surgery for extraction. After 6 months, 10% of the women had pain and 4.4% of the women showed spotting for over 3 months. Menstrual bleeding had decreased in the 92% of the cases, and after 6 months from insertion 77.8% of the women were very satisfied with the LNG-IUD.
Conclusions: The levonogestrel-releasing intrauterine device is the contraceptive system of choice in women over 35 years old due to the ease of insertion, the changes in the menstrual bleeding pattern and the acceptability for the LNG-IUD of the user women.

P062

A comparative study on the dislocation rate of the Mirena® and the Multiload 375® intrauterine device

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Introduction: Displacements of intrauterine devices (IUDs) decrease their effectiveness. While expulsions are mostly noticed by the users, intrauterine dislocations can occur without causing symptoms. Women with intrauterine dislocations are at increased risk for pregnancy. In Switzerland the levonorgestrel – releasing IUD Mirena® (LNG-IUD) has been introduced in 1997. The clinical observation that women with one or two previous expulsions of a Multiload 375® intrauterine device (ML-IUD) do not expell the LNG-IUD was the reason for us to investigate, whether the rate of complete or partial expulsions might be different for this two types of IUDs.
Aims and Methods: In a retrospective cohort study we compared the number of dislocations in users of the ML-IUD and the LNG-IUD. The data were compiled from women attending our family planning clinic from 1997–2002. From a chronological list of IUD insertions we identified all women with a LNG-IUD and in each of these cases the next woman with an ML-IUD. Only IUD-users with a sonographic control of the correct IUD location after insertion were comprised. Altogether 107 women with a LNG-IUD complied with the inclusion criteria. Vaginalsonography for the control of the correct IUD - location was performed after insertion, 6 weeks later and thereafter 6 monthly. The observation period ranged from 6 weeks to 60 months. Parity, hysterometer length and previous IUD dislocations as possible factors influencing the expulsion rate in both groups were documented for all women.
Results: Altogether 1882 cycles with a ML-IUD and 1749 cycles with a LNG-IUD were evaluated. Parity, hysterometer length and the mean observation interval were not different between the groups. Six weeks after insertion a dislocation was documented in 11% of the ML-IUD users and 4% of the LNG-IUD users ($p \leqslant 0.06$). Over the whole observation period the dislocation rate for the ML-IUDs was 29% vs. 18% for the LNG-IUDs ($p \leqslant 0.05$). More than 50% of the dislocations occurred within six months after the insertion of the devices.
Conclusion: The rate of partial and complete expulsions is significantly lower for the LNG-IUD compared to the ML-IUD. The low rate of dislocations might contribute to the high safety of the LNG-IUD.

P063

Transfallopian expulsion of IUCD – a case report

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Introduction: The intrauterine contraceptive device (IUCD) is efficacious and relatively safe contraceptive, used by the number of women in the reproductive period. Many side- effects of IUCD have been reported. The most common are uterine perforation, unwanted pregnancy (intrauterine or ectopic) and genital inflammatory process.
A case report: a report about the 22-year old woman, with three children, the last one-five months old baby that she stopped nursing a month after the birth. Three weeks before the examination she was inserted IUCD, type NOVA. The third day after the insertion, her second, 2-year old child, fell on her abdomen while she slept. She felt severe short-duration pain in the lower, right part of the abdomen. The next few days, she felt periodically sharp 'pricking' in the abdomen during the physical activity and sexual intercourse. The physical examination showed the absence of the IUCD thread and painful sensitivity in the right adnexal region. The ultrasound study showed empty uterus and IUCD shadow in the Douglas cavity. Explorative laparoscopy was indicated. During the intervention, an empty uterus was registered, while one of the IUCD side arms protruded from the abdominal aperture of the right fallopian tube. The IUCD was removed simply by drawing out from the fallopian tube. The next day the woman was dismissed from hospital.
Conclusion: The mechanism of the described unusual case of transfallopian expulsion of IUCD may be the result of the severe abdominal trauma.

P064

Study of ovarian function in amenorrheic users of Mirena®

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Objectives: The objective of this study was to evaluate changes in ovarian activity and in cervical mucus in amenorrheic users of Mirena®.
Material & Methods: Twenty amenorrheic patients, who had been using Mirena® for three years, were studied during 60 days. Ultrasonography, blood sampling for hormone measurement of estradiol, progesterone and LH, as well as cervical mucus collection, were carried out twice weekly during 60 days.
Results: Fifty-two percent of women presented progesterone peaks >15.0 nmol/l, and follicular activity as assessed by vaginal sonography. Of these women, 25% presented persistent follicular cysts mm (mean maximum diameter=35.4 ± 1.7 mm). These follicular cysts disappeared spontaneously within a maximum of 55 days. Twenty-seven percent of women presented follicular development and normal follicular rupture with progesterone levels >15.0 nmol/l. Forty-eight percent of women presented no follicular development and no luteinic activity according to progesterone levels and vaginal sonography. All twenty women had sparse, viscous cervical mucus and the material collected was insufficient for analysis.
Conclusions: These results confirm previous findings that the most important mechanism of action of Mirena® is the local effect it exerts on the endometrium and on cervical mucus. This study also confirms that the majority of patients in amenorrhea have ovulatory cycles. The physical and chemical changes in the characteristics of the cervical mucus of amenorrheic patients result in the high efficacy rate of Mirena® as a contraceptive method.

P065

Medical eligibility criteria for using modern oral contraceptives in women with type 1 diabetes

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Objectives: At present in Russia a single tactic of contraception choice in diabetic women is absent.
Dosing & Methods: A total of 60 women with Type 1 diabetes were included in this study: 20 women received COCs consist of 20 mcg ethinylestradiol (EE) and 150 mcg desogestrel (DSG); 20 women received COCs consist of 30 mcg EE and 150 mcg DSG; 20 women received COCs consist of 30 mcg EE and 300 mcg norgestrel (NGS); 20 women received only progestagen pill with 500 mcg lynestrenol. Evaluation (indices of carbohydrate, lipid metabolism and hemostasis system) was performed before and after 3 and 6 months.
Results: The contents of lipids in blood among diabetic women, factor VII, activity of antithrombin III and platelet functions correlate with HbA1c level. The increase of platelet functions occurs with HbA1c level more that 7%, with the one more that 8% hyperlipidemia occurs for sure more often increase of HbA1c level (9% and higher) associated with hypercoagulability (decrease of factor VII, activity of antithrombin III).
COCs containing 20 mcg EE and DSG, as for containing only progestagen pill has not occurred the negative influence to the lipid metabolism. The use of COCs containing 30 mcg EE has been accompanied by the reduction of total cholesterol, cholesterol LDL levels and by the increase of cholesterol HDL level. The long duration and/or unsatisfactory compensation of diabetes, presence of hyperlipidemia may have their own place in the realization of venous thrombosis. COCs containing 20 mcg EE/DSG and only progestagen pill lead to the less expressed increase of platelet functions that of COCs containing 30 mcg EE and NGS. The use of COCs and only progestagen pill has not occurred clinically significant influence to the indices of plasma link and fibrinolytical system of blood plasma.
Conclusions: These data suggest that COCs can be used in women with uncomplicated Type 1 diabetes if clinical and metabolic monitoring can be ensured (HbA1c, 8%). Low-dose combined oral contraceptives and progestogen-only pill do not influence the glycemic control and have no adverse impact on plasma lipids. The results indicate that the intake of COCs associated with risk of venous thromboembolism, connected with a platelet activity and dependent from estrogen dose and progestogen type - the lowest risk for venous thromboembolism was founded for the combined COCs with the lowest estrogen dose (0.02 mg EE) and modern progestogen (desogestrel), and progestogen-only pill.

P066

Acceptability, safety and premenstrual symptomatology in women using an oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg

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Objective: To evaluate acceptability, safety and premenstrual symptomatology in a group of healthy women using an ultra-low dose oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg (Minesse).
Design and Methods: This was an open, non-comparative, multicenter study carried out in Brazil, involving 163 women aged 18–39 years (mean 25 ± 5 years). Patients were treated for six months with an oral regimen of gestodene 60mcg/ethinylestradiol 15mcg daily from day 1–24 of the menstrual cycle, followed by a 4-day pill-free interval from day 25–28 of the cycle. Evaluations carried out at baseline and after three and six months of pill use included acceptability as measured by the analysis of reasons for premature discontinuation, physical/gynecological examinations, blood pressure, weight, hemoglobin, hematocrit, SGOT, SGPT and urinalysis. To evaluate premenstrual symptomatology, the Moos Menstrual Distress Questionnaire (MDQ) was completed at baseline, and at the end of cycles 3 and 6 for 3 consecutive days (days 25, 26 and 27 of the cycle). A descriptive analysis of acceptability variables was carried out and Student's t-test for paired values was used to evaluate variations in safety parameters. Wilcoxon's test was used to compare the MDQ scores obtained throughout the study.
Results: Seventeen patients discontinued the study prematurely, ten because of adverse events, one due to a serious adverse event (pregnancy). No adverse metabolic effects were observed. The adverse event most frequently reported was breakthrough bleeding (32.7%). Menstruation tended to become more regular with increased time of pill use. Systolic and diastolic blood pressure was significantly lower at month 6 when compared to baseline ($p < 0.02$). Body weight and laboratory tests were unchanged. After six cycles, statistically significant changes were found in the total MDQ score ($p < 0.0001$) and in the sum of scores for all the factors evaluated except for behavioral change and autonomic reactions (pain, $p < 0.0001$; concentration, $p = 0.01$; water retention, $p < 0.0001$; negative affect, $p < 0.0001$; arousal, $p < 0.001$; control, $p = 0.04$).
Conclusions: The treatment was safe, well accepted and tolerated. Failure rate correlated well with that of other oral contraceptives. In addition, patients showed a statistically significant improvement in well being, as demonstrated by a change in several of the premenstrual complaints and symptoms measured by the Moos Menstrual Distress Questionnaire.

P067

Cycle control in women using an oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg

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Objective: To evaluate cycle control in a group of healthy women under 40 years of age in use of a ultra-low dose oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg (Minesse).
Design and Methods: This was an open, non-comparative, multicenter study carried out in four sites in Brazil, involving 163 women aged 18–39 years (mean 25 ± 5 years). Patients were treated for six months with an oral regimen of gestodene 60mcg/ethinylestradiol 15mcg daily from day 1–24 of the menstrual cycle, followed by a 4-day pill-free interval from day 25–28 of the cycle. All patients kept a menstrual diary throughout the study and were evaluated at baseline and after 3 and 6 months of contraceptive pill use. Student's t test for paired values was used to analyze the length of the menstrual cycle and the duration of menstrual bleeding. The Chi-square test was used to analyze the intensity of menstrual bleeding.
Results: A total of 146 women completed the study. The length of the menstrual cycle and duration of menstrual bleeding was significantly shorter in the 3rd and 6th month of pill use when compared to baseline. Mean cycle length decreased from 29.4 ± 1.1 days at baseline to 27.9 ± 1.8 days at month 3 ($p < 0.01$) and to 27.9 ± 1.6 at month 6 ($p < 0.01$). Mean duration of bleeding decreased from 4.4 ± 2.3 days at baseline to 3.8 ± 1.5 days both at month 3 ($p < 0.01$) and month 6 of treatment ($p < 0.05$). Although not significant, the intensity of menstrual flow decreased by the sixth month of study in 49.24% of users. The incidence of breakthrough bleeding in this study population was 32.7%. However, approximately 40% of all episodes of breakthrough bleeding occurred during the first treatment cycle, decreasing consistently throughout the subsequent cycles. By the sixth treatment cycle the occurrence of breakthrough bleeding was 8.6%. The incidence of amenorrhea and delayed menstruation was 7.4 and 4.3% respectively.
Conclusions: The findings of the present study are in agreement with other reports showing that this ultra-low dose oral contraceptive, in a 24-day regimen, has the beneficial effect of reducing both the intensity and duration of menstrual bleeding, offering good cycle control with a consistent decrease in the occurrence of breakthrough bleeding with duration of use.

P068

A survey of Norplant and DMPA: effects on women's weight and blood pressure

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Introduction: Any method of contraception has its own benefits and misuses. None of these methods may be clinically applicable to all. Effectiveness of contraceptive methods is of great importance when they are taken into account in (birth control programmer). Effectiveness and recklessness of the method plays a crucial part in women. Searching some contraceptive methods, human found long-term, effective methods, among which DMPA which is an acupunctural method and Norplant which are the most effective, contraceptive methods, with very low error coefficient, may be named.
Methods: The present survey is an analytical, descriptive study and retrospective cohort In this study, 184 women referring to the selected clinics in Isfahan city received DMPA and Norplant. Having taken then for a period of 3–6 months up to the time of sampling, they were surveyed for changes in their weights and blood pressures. To analyze the data, T Test and variance analysis were applied.
Results: T-Test showed a significant difference between women's weight before taking. Regarding systolic and diastolic changes in contraceptive methods we found just a significant difference in systolic pressure of the Norplant group at the time of entering the Clinic and 6 months later
Discussion: Although Norplant and DMPA affect on weight and systolic and diastolic pressures, these effects are not so significant. Anyway, those who use these methods should be controlled biannually for weight and blood pressure so that within time diagnosis, another alternative be replaced.

P069

Patient satisfaction and preference with the EVRA transdermal contraceptive patch compared to the previous contraceptive method

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Objectives: An open-label, multicentre phase IV study evaluated preference and satisfaction for the EVRA transdermal contraceptive patch, after 9 cycles compared to previously used contraceptive methods.
Design and Methods: To assess preference and satisfaction, 392 healthy women were enrolled. EVRA delivers 150mcg norelgestromin/20mcg ethinyl estradiol daily. Treatment cycles required 3 consecutive 7-day patch applications, followed by 1 patch-free week. At final visit patients ratedsatisfaction (Very satisfied/ some what satisfied/ neither satisfied/ dissatisfied/dissatisfied/ very dissatisfied) and preference for EVRA compared to their previous method. Pearl indices were calculated. Safety and compliance were also assessed.
Results: 302 patients completed > /=6 cycles. Baseline satisfaction with previous contraceptive method was 81% (42% very satisfied, 39% somewhat satisfied); 89% used oral contraceptives. After 9 cycles (n=279), 91% were satisfied with EVRA (70% very satisfied, 21% somewhat satisfied), and 75% preferred EVRA to the previous contraceptive (43% strongly preferred, 32% preferred); 9% had no preference; 16% preferred their previous method (14% preferred, 2% strongly preferred). Preference for EVRA was not different across age groups (18–20y 76%; 21–24y 77%; 25–34y 67%; 35–45y 74%). Of parous patients, 82% preferred EVRA, 9.5% preferred their previous method. Of nulliparous patients, 69% preferred EVRA, 21% preferred previous method. Overall and method-failure Pearl Indices were 0.934 and 0.481. The most common adverse events were application site reactions, breast discomfort, headache, and nausea. Across cycles, 88% of subjects had perfect compliance; this was not influenced markedly by age (18–20y 89%; 21–24y 88%; 25–34y 86%; 35–45y 93%).
Conclusions: Preference and satisfaction for EVRA was high compared to the previously used contraceptive method and was not influenced by age or parity. Compliance was good throughout for all age groups.

P070

NuvaRing improves cycle control in German women

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Introduction: Combined oral contraceptives (COCs) are often used for many years, and many women may welcome a form of contraception that does not require daily administration. NuvaRing is a once-a-month contraceptive vaginal ring that releases 15 μg ethinylestradiol (EE) per day and has superior cycle control compared with a COC containing 30 μg EE (data presented at this meeting). This study was conducted to collect information on cycle control, acceptability and tolerability in a large number of NuvaRing users in Germany.
Design and methods: This open, prospective, multi-centre study was conducted by gynaecologists in general practices in Germany. Women expressing a wish for contraception entered the study and used NuvaRing for 6 consecutive cycles, each comprising 3 weeks of ring use followed by a 1-week ring-free period. Information on cycle control, bleeding patterns and dysmenorrhoea was recorded at baseline and after cycles 3 and 6.
Results: A total of 5823 subjects underwent all three examinations. The mean age of the subjects was 29.4 years (SD 7.3). At baseline, 16.6% of subjects had an irregular bleeding pattern, but by the final examination, this decreased to 2.8%. Overall, duration of bleeding decreased from baseline to the final visit as shown in the table, which shows the percentages of women with different bleeding times.

	2–3 days	4–5 days	4–6 days	6–8 days	10–12 days
Baseline (%)	16.9	58.5	17.6	2.1	1.0
Final (%)	28.4	52.7	6.3	0.3	0.2

At baseline, 25.1% of subjects experienced mild bleeding and this increased to 43.4% at the final visit. The proportion of subjects who experienced moderate or severe bleeding at baseline decreased from 60.7% and 13.1%, respectively, to 44.5% and 2.4%, respectively, at the final visit. Breakthrough bleeding, reported by 16.8% of subjects at baseline, decreased to 4.9% at the final visit. The proportion of subjects who experienced dysmenorrhoea also decreased, from 25.9% at baseline to 5.7% by the final visit. The majority of subjects (81.8%) were either satisfied or very satisfied with NuvaRing, and most (72.1%) intended to continue using it after the study ended. Adverse events were recorded in 9.9% of subjects. There were 19 serious adverse events, 5 of which were treatment related.
Conclusions: These results show that in addition to being an effective, convenient and acceptable form of contraception, NuvaRing improves all aspects of cycle control, including severity of bleeding, breakthrough bleeding and dysmenorrhoea.

P071

Acceptability and tolerability of NuvaRing in Ireland

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Introduction: NuvaRing is a monthly contraceptive vaginal ring that has previously been shown to be effective, with excellent cycle control, a favourable tolerability profile and high user acceptability (Roumen et al. Hum Reprod 2001; 16: 469–75). As NuvaRing recently became available in the Republic of Ireland, a clinical experience programme was initiated to report the experience and acceptability of the method in Irish women.
Design and methods: This was an open-label, multicentre, non-randomised study. Each woman used NuvaRing for 3 cycles (each comprising 3 weeks of ring use followed by a 1-week ring-free period). The recruiting GPs or family planning doctors carried out assessments at baseline and after cycle 3, using specifically constructed questionnaires.
Results: Of the 177 women enrolled, 133 completed both assessments. Most women were aged 20–29 years (57%) and were using oral contraceptives or condoms (65%) prior to starting. The most common reasons for trying NuvaRing were not having to remember to take pills every day (52%), and novelty (47%). After three cycles of ring use, 76% of women had used all 3 rings and most found ring insertion (88%) and removal (91%) easy. Overall, 91% of women felt no vaginal discomfort or were not bothered by it and most either could not feel, or were not bothered by feeling the ring during intercourse (92%). The vast majority of partners (94%) said that they could not feel the ring or only felt it occasionally; of those who felt the ring, 90% said that they did not mind it. Compliance with the ring regimen was found to be difficult by only 2% of women. The great majority of women (94%) also said that they felt that NuvaRing had many advantages. The most frequently highlighted advantages were the monthly regimen (77%); offering the benefits of a pill without being a pill (57%); excellent reliability (51%); and allowing spontaneous intercourse (51%). Most women said that their experience with NuvaRing was better than their previous contraceptive (69%), that they would continue its use (79%) and would recommend it to a friend (86%). Of the 16% of women who expressed reservations about the method when starting the programme, 81% said that they would continue to use NuvaRing and 88% would recommend it to others. NuvaRing was well tolerated with minimal adverse events.
Conclusions: Based on clinical experience in Ireland, women found NuvaRing highly acceptable, easy to use, reliable and unobtrusive. The main reasons for liking NuvaRing were the monthly regimen and the benefits of the Pill without the daily pill taking. As in the clinical trials, the majority of women who tried NuvaRing liked it and would recommend it to others.

P072

The Mirena intrauterine system and user acceptability

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Introduction: The Mirena Intrauterine System (IUS) provides excellent contraception with high user acceptability. While the initial cost is expensive in comparison with other methods, retention rates lower long-term costs and effective counselling increases retention rates.
Objectives: To test the hypothesis that method acceptability of women users of the IUS within Morley Street Community Family Planning Service is high and that effective pre-IUS counselling increases the understanding of side effects, user acceptability and retention rates.
Design and Method: A self completion questionnaire was sent to all 356 users of the method over the period December 2003 to January 2004.
Results: 152 users responded. A high level of satisfaction was evident among users, many of whom indicated they would have a further IUS fitted after the 5 year period or would recommend the method to friends.
Conclusion: Results indicated that the majority of users were highly satisfied with the method. The IUS is a highly acceptable method, providing excellent contraceptive cover as well as additional non-contraceptive benefits to the user. It should be more widely available and strategies used to encourage its use in vulnerable groups.

P073

NuvaRing's contraceptive efficacy and tolerability are comparable to an oral contraceptive

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Introduction: Oral contraceptives (OCs) are the most frequently used form of hormonal contraception, but require daily dosing. NuvaRing is a once-a-month contraceptive vaginal ring that is used for 3 weeks followed by a 1-week ring free period. This large comparative trial was conducted to compare NuvaRing's contraceptive efficacy and tolerability with that of an OC containing levonorgestrel 150 μg and ethinylestradiol 30 μg daily.
Design and methods: This open-label, randomized, comparative, 1-year trial was conducted in 11 countries and involved healthy women (⩾18 years), seeking contraception. Subjects received either NuvaRing (n=512) or the OC (n=518) for 13 cycles, and used diary cards to record daily ring and pill use. Assessments and adverse event reports were made at clinic visits after cycles 3, 6, 9 and 13.
Results: A total of 149 women in each group discontinued: 70.9% of the NuvaRing group and 71.2% of the OC group completed the trial. The main reasons for discontinuation were adverse events (AEs) (11.3% NuvaRing vs 8.7% OC) and lost to follow up (6.4% for both groups). There were 5 in-treatment pregnancies in both the NuvaRing and OC groups; the Pearl Index for both groups was 1.2. Cycle control data were significantly better for NuvaRing compared with the OC (presented separately at this meeting). Both treatments were well tolerated and similar numbers of subjects experienced AEs in the NuvaRing (57.6%) and OC (54.3%) groups. A slightly greater proportion of subjects experienced treatment-related AEs with NuvaRing (28.9%) than with the OC (22.1%). Treatment-related AEs of the female reproductive disorders class were more common with NuvaRing (18.0%) than the OC (4.6%), mainly due to a higher incidence of local events (e.g. vaginitis, leukorrhea, ring-related events) with NuvaRing. Treatment-related events such as headache, nausea and breast pain were comparable for NuvaRing and the OC (7.2% vs 5.8%; 2.7% vs 4.0%; 3.1 vs 1.3%, respectively). There were 11 (2.1%) serious adverse events (SAEs) with NuvaRing and 7 (1.3%) with the OC; one SAE in each treatment group was considered to be treatment related. There were no relevant differences between the two groups for vital signs or body weight.
Conclusions: This study shows that NuvaRing has comparable efficacy and tolerability to an OC containing 150 μg levonorgestrel and 30 μg ethinylestradiol and supports previous findings that NuvaRing is effective with a good safety profile. Thus, NuvaRing offers contraceptive efficacy in a convenient formulation that only requires monthly dosing.

P074

Satisfaction and compliance of 1333 users of transdermal contraception in private gynaecological practice in Austria

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Objectives: EVRA ® transdermal contraceptive patch was approved in Austria in April 2003. Although extensive data has been obtained from large clinical trials, information on satisfaction, compliance, adherence and tolerance in a non-clinical trial population in Europe is limited. Objective of this study was to evaluate satisfaction, compliance, patch adherence and tolerability in women prescribed EVRA® over 3 consecutive, 4-week cycles.
Design and Methods: Open, non-interventional study in volunteer women requiring hormonal contraception. An interim analysis of data from 1333 women was performed using descriptive statistical methods.
Results: Between July and September 2003 more then 3000 women were included from private gynaecological practices across Austria. The mean (±SD) age was 27.2±7.6 years and the mean weight was 61.4±10.3 kg. 75.4% of the women had previous experience with oral contraceptives. Only 8.9% had no previous experience with contraceptive methods. 93% of women changed the patch as instructed in the package insert during the first therapy cycle, and 95% during the third cycle. Excellent skin adhesion was reported for 94.2% of the patches during cycle 1 and 95.1% of the patches during cycle 3. 89.3% of women rated contraception with EVRA® as highly convenient or convenient compared to their previous contraceptive method. 86% of women and 92% of gynaecologists were highly satisfied or satisfied with the usage of EVRA® by their patients. At the time of interim analysis of 1333 users, no pregnancies were reported. EVRA® was generally well tolerated ; no serious adverse events were reported . The most common side effects during the first cycle were skin reactions at the application site (7.0%), breakthrough bleeding or spotting (7.0%), breast symptoms (3.3%), nausea and vomiting (3.2%) and headache (3.2%). After three cycles, less side effects were reported with 4.9% of women reporting application- site related skin reactions, 6.1% breakthrough bleeding or spotting, 3.1% breast tension, 1.9% headache and 1.7% nausea and vomiting.
Conclusions: The use of EVRA®, a once - weekly contraceptive patch, showed high compliance, satisfaction and good tolerability in Austrian women treated in private practice. Adhesion of the contraceptive patch to the skin was very good.

P075

Sociodemographic properties and contraception use of pregnants before pregnancy

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Objective: To investigate the sociodemographic properties and contraception use of pregnants before pregnancy.
Materials and methods: 210 pregnant women who applicated Aegean Social Security and Maternity Teaching Hospital Department of Obstetrics between the years 1999 and 2002 were enrolled into our study group. The sociodemographic properties and contraception use of the pregnants before pregnancy were evaluated.
Results: Mean age of the pregnants was 22 (Range 15–36) years old and 62 of 210 (29.5%) pregnants were in 19–22 age group. Mean gravida was 2 (Range 0–5). Most of the pregnants (n:102, 48.6%) were graduated from primary school. 48 of 210 (22.9%) pregnants did not have taken any aid about contraception methods and only 28 of 210 (13.3%) had taken information about contraception from a doctor.71 of 210 (33.8%) pregnants had never used any kind of contraception methods before pregnancy and the most frequently used contraception methods were intrauterin device (21.9%), coitus interruptus(16.7%) and condom (10.0%). The reason for the termination of contraception was frequently desire of a child (n:85, 40.5%). 43 of 210 (20.5%) pregnants had at least one induced abortion. The highest number of patients (n:17 of 43) who had at least one induced abortion were the patients who had no education (39.5%).
Conclusion: We concluded that as the educational status increases, gravida number of patients decreases, modern contraception method usage increases and number of induced abortus decreases so we think that postpartum educational programs about reproductive health and contraception use must be presented more frequently to reduce unwanted pregnancies.

P076

Continued use of Implanon inserted following termination of pregnancy

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Introduction: Since 1999, we have offered implanon for post termination contraception. We were keen to determine the continuation rate of implanon use to ensure that insertion at termination of pregnancy is acceptable to women, as well as being cost effective.
Setting and methods: A dedicated family planning clinic in a district general hospital, led by a consultant community gynaecologist, who was the only trained implanon inserter within the district. This is a retrospective study. 58 women who had implanon inserted after termination of pregnancy from December 1999 until December 2002 were identified and their notes obtained and reviewed. Women moving out of district were lost to follow up. The rest came back to the family planning clinic for subsequent removal of the implanon for the reasons outlined above.
Results: Until the end of 2003, 47 (81%) of the women continued to use implanon for contraception. 11 (19%) of the women had the implant removed. The time from insertion to removal in these women ranged from 2 weeks to 35 months with an average of 15 months. There were no significant differences in the demographics of the two groups.
Conclusions: There is a high continuation rate of implanon for contraception when inserted post termination of pregnancy. Even within the group of women who removed the implant, this was carried out on average 15 months after insertion. Our study suggests that implanon is an acceptable contraceptive post termination of pregnancy and its continuation rate shows that insertion is a cost effective option.

P077

Effect of Implanon® on lumbar bone mineral density

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Objective: To examine the bone mineral density (BMD) changes in Implanon® users.
Design and methods: Forty-one women who chose Implanon® as a long term contraception method were recruited to the study. Ethics committee approval was obtained. Informed consent was given to all women who fulfilled the inclusion criteria. Inclusion criterias were: age between 18 and 41 years, not on medication affecting bone metabolism, not have a history of chronic disease affecting calcium metabolism, not smoking or smoking <5 cigarettes a day. The initial laboratory assessment included serum estradiol levels. Initial estradiol was taken on day 1–5 (day of insertion). Second estradiol was obtained 6 months after insertion if amenorrheic any day, if not on the third day of bleeding. The women whose test results were within the laboratory reference range underwent BMD measurement. Bone mineral density measurements were done in the anteroposterior position at lumbar spine (L1-L4). The dual energy x-ray absorptiometry technique was used for measurements. The reason for selection of lumbar vertebrae for comparison was that, trabecular bone is most sensitive to factors that alter bone mineralization and a high percentage of trabecular bone was found in lumbar vertebraes. The BMD measurements were performed at baseline and after 6 months. Changes in the t, z and total scores of the BMD were compared for statistical significance using paired samples t test.
Results: Mean age of the patients was 27.9 ± 5.03 years. The mean duration of time from their last pregnancy was 30 months. Three percent of the patients had no education while 52% of the patients graduated from primary, 20% from secondary and 25% from high school. Serum estradiol levels at 6 months were not statistically different from baseline levels. Although t, z and total scores of the BMD at all levels of lumbar spine tended to increase, only increase in t ($p=0.03$) and total ($p=0.04$) scores of L3 vertebrae were statistically significant.
Conclusion: This study suggests that Implanon® is associated with slight increase in all BMD scores but only changes in L3 vertebrae were statistically significant. Since this study is limited within 6 months of period, changes in BMD values after longer usage may be more apparent.

P078

Effect of Implanon® on serum lipids, liver function tests and hemoglobin levels

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Introduction: Implanon® is a single rod, 4 cm in length and 2 mm in diameter, containing approximately 68 mg of etonogestrel in a polyethylene vinyl acetate copolymer membrane. Published studies about the effects of Implanon® on lipid, liver function metabolism and hemoglobin levels are limited.
Aims and methods: This prospective study aimed to assess the possible effects of Implanon® on serum lipids, liver function tests and hemoglobin levels over a 6-month period. A total of 82 healthy volunteers of childbearing potential, aged 19 to 41 years, were enrolled in the study. Serum concentrations of total cholesterol (TC), triglycerides (TG), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), very low-density lipoprotein cholesterol (VLDL-C), aspartate aminotransferase (AST), alanine aminotransferase (ALT) and hemoglobin (Hb) levels were tested before and at 6 months after insertion. Baseline mean parameters were compared with mean parameters at 6 months for statistical significance using paired samples *t* test.
Results: Mean age of the patients was 27.5 ± 4.8 years. The mean duration of time from their last pregnancy was 24.3 ± 37.3 months. The gravidity and the parity of the patients were ranging from 1 to 8 and from 0 to 3, respectively. All the baseline parameters tested were within the laboratory reference ranges. Mean changes in TC, HDL, ALT and Hb levels were statistically significant. Baseline mean TC and HDL levels were 166.63 and 50.2 mg/dl and decreased to 153.91 and 43.04 mg/dl 6 months later, respectively, which were statistically significant ($p=0.001$, $p=0.000$). Although mean TG, VLDL and LDL concentrations tended to decrease during the study, these slight decreases from baseline levels were nonsignificant. An increase in mean ALT level was observed at 6 months which was statistically significant ($p=0.03$). Mean baseline value of ALT was 17.9 mg/dl and 20.9 mg/dl at 6 months. A slight increase was also seen in mean AST levels but this increase was not nsignificant ($p=0.1$). Statistically significant elevations in Hb levels were observed ($p=0.03$). Baseline mean value of Hb was 13.23 g/dl. It increased to 13.59 g/dl at 6 months.
Conclusion: Implanon® has a positive effect on hemoglobin and TC levels. Although a decrease in HDL-C was observed, this change was not a serious concern as HDL-C did not fall a risky values.

P079

One year follow-up of patients on Implanon® for contraception: a multicentric prospective study

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Objective: To evaluate the acceptibility, side-effects, bleeding paterns and acompliance of women on Implanon®.
Design and Methods: Patients who applied to 10 Family Planning Centers and chose to have Implanon® insertion after counselling were recruited in the study. and an informed consent form was filled in. Patients with contraindications to use long-acting progesteron were excluded. The demographic characteristics, the reason for preference, time of insertion, body mass index (BMI), mean arterial pressure (MAP) were recorded. Pateints were given a menstrual calender. At the end of one year after insertion, patients satisfaciton with the method, bleeding patterns analysed using a 90 day evaluation period , BMI and MAP were recorded. Patients who left the method were interviewed.and reason for this was noted.
Results: Among 576 women recruited in the study the mean age was 28.5 ± 5.4, gravida 2.5 ± 1.7, live birth 1.7 ± 0.9, number of living children 1.7 ± 1.9, number of voluntary termination of pregnancy 1 ± 1.1. Seventy-six percent of the patients wanted to have no more children, whilst 21% wanted to conceive after 1–3 yeras, and 3% after 4 or more years. The main reason for leaving the previous method used was method failure (42.7%).and the main reason for prefering Implanon® was safety and long-term effectiveness. At the end of one year patient satisfaction was 91% whilst 55 patients including five patients satisfied but had other reasons for removal left the method. Whilst there was no change in the MAP, BMI increased from 23.9 ± 3 to 24.0 ± 3.4 ($p < 0.05$). Forty-three percent of the patients were amenorrheic, 26% had prolonged bleeding, whilst the incidence of normal, infrequent, and frequent bleeding were 15%, 13% and 2% respectively. The main reason for leaving the method was bleeding problems (47%) and amenorrhea (12.7). No pregnancies were encountered in the study period.
Result: Implanon® is a reliable, safe method . The acceptance and compliance among Turkish women was high. Bleeding wes the major reason for leaving the method.

P080

Vasectomy outcome of voluntary male surgical contraception at a metropolitan maternity hospital

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Objective: The main purpose of this prospective study is to determine the outcome of vasectomy over a nine month period.
Design & Methods: The demographic data, sexual function before and after surgery and awareness of the method of voluntary no-scalpel vasectomies, between January and September 2003, performed at SSK Ankara Maternity and Women's Health Teaching Hospital Family Planning Center by two trained surgeons were analyzed. All the patients were contacted by telephone and invited for follow-up consisting of counseling, inquiry about sexual dysfunction and a semen analysis. Of the 279 men analyzed and contacted by telephone, only 117 (40%) came for a follow-up.
Results: The mean age at vasectomy was 40 years (range 29–52 years). All the patients were married with a mean duration of 16.9 years (4–30 years). Twenty-four percent had more than three children. There was no significant difference between the number of girls or boys. Only 1.7% of men had above-matriculation educational status, while 60.2% had primary school education. The wives of 72% of men had at least one voluntary termination of pregnancy. Fifty six percent of the men became aware of vasectomy through our family planning education program given to couples after voluntary termination of pregnancy. Thirty three percent of the patients became aware of vasectomy through family planning clinics or health personnel, 9.3% of them heard about vasectomy from a friend and only 1.7% received information through the media. Prior to vasectomy, 59% of the couples had problems with previously used contraceptive method. There was no intraoperative complication and the only complication encountered was a post-vasectomy pregnancy. On direct questioning, postoperatively sexual desire and performance remained unchanged in all of the patients. Nine patients (7.7%) had >/=500,000 sperm/ml in their semen. Five of the nine patients had a repeat vasectomy but four patients did not want to have the procedure again.
Conclusions: Vasectomy did not effect the sexual function of men in our study. Public awareness is important in creating a demand for vasectomy. Patients should be encouraged to come for a follow-up visit and counseling on vasectomy should always convey the possibility of failure and partner pregnancy.

P081

Vesical calculus formation around a migrated Copper-T 280a

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The most widely used contraceptive method in Turkey has been intrauterine device during the last 15 years. Perforation of the uterine wall with intrauterine device (IUD) and migration of the device into the pelvic or abdominal cavity or adjacent organs is a major but uncommon complication seen with an incidence rate of 0.87 per 1000 insertions. This complication occurs most frequently at the time of insertion but may also occur later following an incomplete perforation and migration. A case with perforation of the uterus and migration of the intrauterine device to the urinary bladder with secondary vesical stone formation is presented. A 28 –years old patient was admitted for IUD removal after the threads of the IUD could not be found during the speculum examination. Pelvic X-ray and transvaginal ultrasonograpy demonstrated the presence of the IUD outside the cavity but with a close neighbouring to the myometrial layer of the anterior wall of the uterus at a lower level. Hysteroscopic examination showed a normal intact endometrium with no sign of the IUD, and laparoscopic examination showed a thick omental adhesion obliterating the lower segment of the uterus. After adhesiolysis the thread and the stalk of the IUD was removed. An onsite transport pelvic X-Ray was taken showing the missing arms inside the pelvic cavity. Systoscopic examination showed the missing arms inside the urinary bladder with the presence of vesical calculus formation around the arms and removal was performed using a forceps. Postoperative follow-up was uneventful. Insertion of the IUD must be carried out by trained staff and patients should be encouraged to come for routine follow-up visits. Radiologic work-out must be carried out liberally when ever there is a suspicion of complete or incomplete perforation.

P082

Implanon: our three year experience

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Objective: To assess the acceptability, efficacy and safety of Implanon since its release in Portugal in 2001.
Method: We followed every woman that attended our out- patient clinic that chose this contraceptive method.
Results: Most women had no information about this method prior to the consultation. Bleeding irregularities were the most commonly reported side- effect followed by weight gain, moods and headaches. The wish for pregnancy led to the majority of removal requests.
Conclusion: Implanon is well tolerated when the patient is well-informed prior its insertion. This method had excellent, reversible contraceptive efficacy.

P083

The effects of increasing the copper load on IUD performance: a systematic review

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Objectives: Most modern IUDs contain more than 300mm^2 of exposed copper to increase efficacy. We undertook a systematic review of randomised trials that had differing copper loads but identical plastic frames to assess the effects of increasing the copper load.
Design and methods: Medline and the Cochrane Library (2004) were searched for all randomised trials of IUDs, the abstract were reviewed and possible articles retrieved. Trials were included that compared IUDs with identical frames but cooper loads that differ more than 100 mm^2 in copper surface area. Trial quality was assessed to see if effects varied with quality. Ratios of cumulative rates, or ratios of Pearl rates when cumulative rates were not available, were combined using the general variance-based method, and a fixed effect model. A random effects model was used for the one meta-analysis with heterogeneity.
Results: 9 trials, involving 14,625 women, were included, 3 using the Multiload frame, and the remainder used the TCu frame, all comparing TCu380A with either TCu200 (2 trials) or TCu220 (4 trials). None of the Multiload trials showed any difference in efficacy at any time period to 3 years. The two-year combined pregnancy rate ratios (RR) for high versus low copper load was 0.88 (95%CI 0.45 to 1.65, 3 trials). In contrast the TCu380A IUD had consistently lower pregnancy rate than TCu200 (RR at one year was 0.31, 0.11 to 0.52, 2 trials). There was marked heterogeneity (p=0.007) for trials comparing TCu380A and TCu220. At 3 years follow-up there was no statistically differences in pregnancy rate (RR 0.99, 0.07 to 14, 2 trials). The expulsion rates of high and low dose copper devices were statistically similar and homogenous for all devices compared (RR 1.22, 0.74 to 1.99, 6 trials at one year; RR 0.95, 0.74 to 1.22, at 3 years, 3 trials). There were more removals for bleeding and pain with the high load devices at 1 and 2 years (RR 1.26, 1.11 to 1.43 at two years, 5 trials), although by the third year of use the rates were statistically similar (1.02, 0.89 to 1.19). Only one trial continued beyond 5 years, so the benefits of extra copper on duration of use are difficult to gauge.
Conclusions: The effect on pregnancy prevention of incorporating more copper onto the IUD frame varied with the carrier frame. The lack of effect with Multiload may be because of the smaller increase in copper load, while the benefit for TCu380A may also be related to placing the extra copper on the arms. Excess removal for bleeding and pain can be expected with higher load devices but the effect did not persist in the trials in this review.

P084

The TCu380 Slimline or TCu380A: a systematic review of comparative data

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Objectives: TCu380S (GyneT Slimline) is an IUD very similar to TCu380A but has been modified so that the copper collars are seated flush on the horizontal crossbar of the device. This is intended to facilitate manufacture, loading and insertion of the device. Despite its popularity, the device has been withdrawn from many markets. This review examined the evidence comparing the Slimline version to the standard TCu380A.
Design and methods: Medline and the Cochrane Library were searched for randomised trials comparing TCu380S to the standard TCu380A, and the articles retrieved. Trials were assessed for threats to validity. Data was combined using the general variance based method where studies are weighted to the inverse of the variance.
Results: Two trials in three reports, involving 11,564 women, were included which compared TCu380S to TCu380A. After the first year the pregnancy rate tended to be lower with the Slimline version, though not significantly (rate ratio 0.22 95% CI 0.24 to 1.18, one trial, at the end of the fifth year). The absolute difference was around 1% in the later years. The expulsion rate was higher at one year with TCu380S (rate ratio 1.73, 95% CI 1.17 to 2.55, two trials), but this tended to decline, and at 5 year the cumulative rate though still higher, was not statistically so (rate ratio 1.25, 0.83 to 1.89, one trial). There was no difference in removals for bleeding and/or pain at any interval (rate ratio 1.03, 0.75 to 1.43 at one year, two trials).
Conclusions: The TCu380S is a popular version of the worldwide standard, TCu380A, because of the ease of loading the device. If the Slimline device is easier to insert, this is not reflected in reduced expulsion rates. Any excess in expulsions in the trials in this review was not associated with a higher pregnancy rate. Greater efforts should be made to reinstate this popular device where it has been withdrawn.

P085

The comparison of analgesic effects of local anesthesia and piroxicam in legal abortions

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Aim: In this prospective study our aim was to determine whether piroxicam (P) used either alone or combined with the local anesthetic Lidocaine hydrochloride (LH) had any superiority over local anesthesia alone or placebo, and decide whether piroxicam could be used as a safe, economical and efficacious alternative for pain control.
Materials and Methods: 177 women requesting termination of pregnancy were included in our study. The participants were double blindly and randomly divided into four groups. Group 1 (n=40) only used placebo orally, Group 2 (n=48) had only paracervical blocking with LH, Group 3 (n=48) received only 40 mg P administered sublingually, and Group 4 (n=41) had both LH and P. All of the pregnancies were terminated by means of suction curettage using nr: 5 and 6 flexible Karman canulas and a Karman injector. 10 minutes after the procedure, all of the participants were questioned for pain perception using the five-point pain scale. x^2, Mann-Whitney U, Levene, Anova tests and Kruskal-Wallis one way variable analysis and Pearson correlation tests were used for statistical evaluation of the data.
Results: Pain scores were the highest in Group 1 ($p < 0,05$). Group 2, Group 3 and Group 4 followed respectively. P combined with LH both clinically and statistically gave the best results for pain control ($p < 0,05$).
Conclusion: We conclude that premedication with P and paracervical blocking with LH is a safe, economical and easy to apply way of pain management in legal abortion procedures.

P086

The comparative trial of the effects on various parameters of two 30 μg EE monophasic oral contraceptives containing 0.3 mg norgestrel and 0.075 mg gestodene

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Aim: In this prospective study we aimed to compare and investigate the safety, effects on various metabolic parameters and the acceptability by the Turkish women of two monophasic 30 μg EE oral contraceptive (OC) pills, one with 0,3 mg norgestrel, and the other with 0,075 mg gestodene.
Materials and Methods: The material of our study consisted of 72 healthy women who were randomly divided into two equal groups, among women who applied to the Family Planning Unit of Haydarpaşa Numune Training and Research Hospital in Istanbul, Turkey, with a request of oral contraceptives. At the initial, 3rd and 6th month visits blood pressure, fasting blood sugar, serum total cholesterol, triglyceride, HDL, LDL, VLDL, hepatic enzyme levels were measured and the two groups' values were compared with student t and Mann Whitney U tests.
Results: During the study period, none of the participants developed pregnancies. The side effects (headache, nausea, spotting, breast tenderness) were statistically similar in both groups, and did not cause discontinuation of OC use. In the norgestrel group there was a statistically significant rise of total serum cholesterol, triglyceride, LDL, VLDL, total cholesterol/HDL and LDL/HDL levels. A statistically significant drop was observed in HDL levels. A sudden increase was found in blood pressure and hepatic enzyme levels at the 6th month visit. Although there was a rise in fasting blood sugar levels, it was not statistically significant. In the gestodene group there was a statistically significant increase in systolic blood pressure, fasting blood sugar, total cholesterol, triglyceride, HDL, VLDL, AST, LDL/HDL, total cholesterol/HDL levels. No statistically significant change occurred in the diastolic blood pressure, LDL and ALT levels. While there was no statistically significant difference with regard to blood pressure, total cholesterol, LDL, total cholesterol/HDL levels between the two groups, we found a statistically significant difference in fasting blood sugar and AST levels at the 3rd and 6th month evaluations and ALT, HDL, LDL/HDL and triglyceride level differences only at the 6th month evaluation for the gestodene group.
Conclusion: We conclude that the OCs containing gestodene have a more favorable effect on the lipid profiles owing to its less androgenic properties.

P087

The experience with depot-medroxyprogesterone acetate used as a contraceptive method among Turkish women

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Introduction: Injectable contraceptives are safe, highly effective and easily applicable birth control methods. Depot-medroxyprogesterone acetate (DMPA), which is known as Depo-Provera in the market, is the mostly studied and most widely used injectable contraceptive.
Aims and Methods: In order to study the efficacy and safety of DMPA, 129 women who applied to the Family Planning Unit of Haydarpaşa Numune Training and Research Hospital in Istanbul, Turkey, and chose DMPA as a contraceptive method were enrolled and evaluated. The safety, efficacy and side effects of DMPA and the sociodemographic properties of the participants were evaluated and compared with current data.
Results: It was observed that DMPA was most commonly used in the 30–34 years of age group (28.7%) and was preferred mostly among multiparous women (99.2%). They preferred this method mainly because they had difficulties while using other methods (51.9%) and it was a long-acting method (17.8 %). After the first injection, menorrhagia (18.9%) and amenorrhea (21.6%) were the side effects which were mostly encountered. As the number of injections increased the menorrhagia rate decreased and amenorrhea became the main side effect. We did not observe any unwanted pregnancies and weight gain in long-term use. Surprisingly there was approximately a decrease of two kilograms at the end of the first year. Headache, spotting and irritability were reported very rarely.
Conclusion: DMPA is a safe, efficacious, and easy to apply contraceptive method. All women have a right to receive thorough counseling which is a must for high quality family planning services in order for women to make a decision of their own.

P088

The frequency of complications in IUD users in family planning clinic, Shariati hospital, Tehran (1997–2002)

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Object: To determine the frequency of complications in IUD users during 5 year period in Shariati hospital.
Design & Methods: The data sheets of women with IUDs (T Cu 380) were reviewed and the complications were recorded. These IUDs were inserted in family planning clinic of Shariati hospital during 1997–2002. If the women didn't return or didn't follow up for 6 months, were excluded from study.
Results: Three hundred fifty IUDs were inserted in this clinic during this period. 67 cases were excluded due to follow up less than 6 months. Abdominal cramps was seen in 22.6% severe bleeding in 6.07%, menstrual irregularities in 25.8%, infection in 18.02% and pregnancy in 1.41%. No case of EP or expulsion was seen.
Conclusion: The bleeding disorders were seen mostly (64.7%) in elder women (>44 year old). The majority of infections were during the first 6 months of insertion and in young couples. The two most frequent complications seem to be due to other factors than IUD.

P089

The colonization of IUDs with Actinomyces and other bacteriae

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Aims: In a study carried out prospectively in the Family Planning Unit of Haydarpaşa Numune Training and Research Hospital in Istanbul, Turkey, we aimed to investigate the range and frequency of bacterial colonization of the removed IUDs especially by Actinomyces.
Materials and Methods: 135 randomly chosen women among IUD users and who applied to our family planning unit with a request of removal of their IUDs consisted the material of our study. The IUDs were placed in Triptic Soy Broth and in anaerobic media containing SPS, immediately after the IUD strings were trimmed. Vaginal swabs were obtained for Gram staining. All remarkable findings were recorded after regular gynecological examinations. Two passages were made from each culture medium for microscopic examination and sheep blood media. All aerobic and anaerobic cultures were evaluated after relevant incubation periods.
Results: The shortest IUD wearing time was one month while the longest one was 15 years (5.1 ± 3.5 years). The most common clinical findings presented were menorrhagia (25.9%) and pelvic pain (16.3%). Mann-Whitney U, x^2, Fisher's exact x^2 and Spearman's correlation tests were used for statistical evaluations. In Gram stains at 100 magnification, the presence of $\geqslant 15$ PNL was evaluated as occurrence of infection (n=81, 60%). On the Gram stains 26 of the women (19.3%) had clue cells, 6 women (4.4%) had both PNL and yeast cells. There was no correlation between the duration IUD wear and existence of infection ($p > 0.05$). The microorganisms identified after the incubation periods were Staphylococcus coagulase negative (35.6%), Lactobacilli (17.7%), Enterococcus spp. (14.8%), Eschericia coli (13.3%) Streptococcus spp. (8.9%), Gardnerella vaginalis (7.4%), Candida albicans (5.9%), Peptococcus spp. (2.2%), Mobilincus spp. (1.5%), Pseudomonas spp. (1.5%) and Actinomyces spp. (1.5%). There was a significantly high statistical relationship between Actinomyces colonization and the use of IUD exceeding 10 years ($p < 0.01$).
Conclusion: The rate of Actinomyces colonization in our study is similar to current literature. We conclude that IUDs should not be used beyond expiry dates since we found a correlation with long-term IUD use (approximately 13 years) and Actinomyces colonization.

P090

The effect of depot-medroxyprogesterone acetate on bone mineral density and lipid metabolism

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Aims: We aimed to investigate the effects of depot-medroxyprogesterone acetate (DMPA) used for contraceptive purposes on bone mineral density and lipid metabolism in a study done prospectively in the Family Planning Unit of Haydarpaa Numune Training and Research Hospital in Istanbul, Turkey.
Materials and Methods: 21 women randomly chosen among women regularly attending our family planning unit and using DMPA in the past twelve months consisted the material of our study. 23 women with an IUD were chosen as the control group. All of the participants were thoroughly examined after a detailed history taking and consequently all women underwent bone mineral density measurements using Lunar-DPX technology and venous blood samples were drawn in order to evaluate lipid metabolism changes.
Results: The statistical evaluation of the data obtained was done by using the t-test and x^2 test. The age means, demographic and socioeconomic properties, environmental factors, reproductive histories, nutritional habits medical history and body mass index did not differ significantly between the two groups statistically. It was found that DMPA did not cause a decrease in the bone mineral density ($p > 0{,}05$) and did not have an adverse effect on serum lipid profiles ($p > 0{,}05$) compared to the control group. In the DMPA group serum estradiol levels were found to be significantly low when compared to the control group ($p < 0{,}05$). In all participants fasting glucose levels were in normal ranges. In the 66.7% of the DMPA group amenorrhea was reported ($p < 0{,}05$).
Conclusion: When compared with the control group it was found that DMPA did not cause a decrease in the bone mineral density and did not change the serum lipid levels adversely.

P091

Subdermal Implant: our experience in teenagers

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Introduction: Subdermal implant containing 68 mg of etonogestrel has been introduced as a contraceptive method in Portugal for two years. In D. Estefnia Hospital, a Pediatric Hospital, the department of Gynaecology has a specific consultation for the teenage population. The objective of this work is the avaliation of subdermal implant in teenagers.
Design and Methods: in two years (2002 and 2003) we have selected 30 teenage girls for this kind of contraception . This is a retrospective study. We avaliated: age, obstetric indice, duration of use, prior contraceptive method, associated pathology, the new menstrual pattern, the change in weight and secondary side effects.
Results: we avaliated thirty (30) girls with ages varied from 11 to 19 years old. Too girls were lost for follow up. Nearly 60% of these girls have a child or had been pregnant. The depot medroxyprogesterone acetate was the most common prior contraceptive method. The more frequent menstrual pattern was amenorrhoea. Mental retardation with or without neurological handicap was the most associated pathology (20%); other situations were: talassemia minor, cystic fibrosis and cronic B hepatitis. The variation in weight was not estatistically significant. In three girls there were side effects: mastodinia (1), increased hirsutism (1) and a case of depression we think was multifactorial. No girl intended to take off the implant. There were no reported pregnancies.
Conclusion: Subdermal implant seems to be a good contraceptive choice in this group without impact in bone mass. In girls with a neurological problem who are incapable of self-care the amenorrhoea associated is one more advantage of this method.

P092

The effect of Implanon® and a non-medicated intrauterine device on the development of breastfed infants

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Objective: The effect of an etonogestrel-releasing implant (Implanon®) and a non-medicated IUD (Multiload-cu 365 SL) on the development of breastfed infants over a 3-year follow up period was assessed.
Design and Methods: The study was designed to investigate the safety and acceptability of Implanon and the non-medicated IUD in lactating women, and the effects of treatment on the development of the breast-fed infants. Healthy lactating women, 28–56 days post-partum, were recruited and were free to choose between the implant and the IUD. The results relating to the effect of Implanon and the IUD on parameters of lactation and transfer of etonogestrel to breast milk have been published previously (Reinprayoon D. et al. Contraception 2000; 62:239–246). The development of the breastfed infants was studied over a 3-year follow-up period and is reported here. Statistical analysis of anthropometric parameters of the children was done using a random coefficients model (longitudinal analysis).
Results: Forty-two women were included in the Implanon group and 38 in the IUD group. Mean duration of treatment and breast-feeding was 988.8 and 421.0 days in the Implanon group and 909.1 and 423.4 days in the IUD group, respectively. After 3 years of follow-up, there were no differences between the groups in the development of the infants (body length, biparietal head circumference and body weight). No abnormalities were reported in psychomotoric development or on physical examination. No treatment-related side effects were observed among the children in both groups. The most frequently reported adverse events were 'respiratory tract disorders' and 'skin and appendages disorders'.
Conclusions: No differences were observed in the growth and development of the breast-fed infants in either the Implanon or IUD groups during the 3-year follow up period. There were no differences in safety-related parameters between the two groups. Implanon is therefore a safe contraceptive option for breast-feeding women.

P093

Satisfaction and non-contraceptive benefits with NuvaRing®, a novel vaginal combined contraceptive method in a clinical experience program in Brazil

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Objectives: The objectives of this clinical experience program were to evaluate user and partner satisfaction and non-contraceptive benefits such as improvement of Pre-Menstrual Syndrome (PMS) and dysmenorrhea with NuvaRing (15 mcg ethinyl estradiol/120 mcg etonogestrel) a new contraceptive vaginal ring.
Methods: Women who participated in the 6-cycle observation were asked to answer a questionnaire by their physician at baseline and after 1, 3 and 6 cycles of using NuvaRing. In total, 2620 women successfully completed follow-up after 6 cycles.
Results: On study completion, 97.4% of women were satisfied or extremely satisfied with the product and 98.5% of users would certainly or most probably recommend NuvaRing to other women. After 6 cycles of use, 89.6% of women reported that NuvaRing was extremely easy to insert and 87.6% reported that ring removal was also extremely easy. In addition, 76.6% reported never feeling the ring during sexual intercourse and 67.6% said that their partners also never felt the ring. Ninety per cent of partners had no objections to them using the ring. At baseline, oral contraceptives were elected as the preferred method by 37.7% of women participating in this study, and after completion of the study, 84.5% of women chose NuvaRing as their preferred contraceptive method. With regard to non-contraceptive benefits, improvement of PMS was reported by 81.3% of NuvaRing users while improvement of dysmenorrhea was reported by 77.7% of women after the sixth cycle.
Conclusions: NuvaRing was found to be a highly acceptable method to Brazilian women. Most of them would recommend it to other women and chose it to be their preferred contraceptive method. In addition, improvement of PMS and dysmenorrhea were reported by more than two thirds of women after 6 cycles of NuvaRing use.

P094

Ultrasonographic features of the endometrium and the ovaries in women on Implanon®

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In an observational study we included 188 consecutive women presenting for follow-up after insertion of an Implanon® contraceptive device. Thirty patients had more than one follow-up examination. The bleeding pattern was considered 'abnormal' if, in the last 3 months, there were more than 5 episodes of vaginal bleeding, or in case of prolonged bleeding exceeding consecutive 14 days. Mean age was 29.7 years. Forty seven percent of women had an abnormal bleeding pattern. Most bleeding episodes were of less intensity than menses. Mean endometrial thickness (ET) on ultrasound measured 2.9 mm (SD 2.0). Ovarian follicle growth exceeding 5 mm was seen in 60% of cases. Ovulation was demonstrated in one woman. Univariate analysis showed a positive association ($p < 0.01$) between ET, bleeding pattern and bleeding intensity. Follicle growth was positively associated ($p < 0.01$) with endometrial thickness, bleeding pattern and interval between insertion and examination. Multivariate analysis showed that the ET was on average 1.25 mm thicker in women with abnormal bleeding ($p=0.0001$). The odds to find follicle growth was 2.8 times higher (95% CI 1.2–6.2) in women presenting with a 3-layer type of endometrial lining.
Conclusions: Abnormal uterine bleeding is quite frequent and unpredictable in women on Implanon®. Ultrasound findings suggest that this adverse effect could be secondary to incomplete ovarian inhibition and estrogen stimulation of the endometrium.

P095

Bacterial vaginal flora in Implanon users

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From 160 women presenting for follow-up 3 to 12 months after insertion of an Implanon® contraceptive a vaginal smear was examined for detection of bacterial vaginitis and disturbance of lactobacillary defence. Comparison was made with 117 control women not using contraception. There was no statistical difference in the occurrence of bacterial vaginosis or aerobic vaginitis between users and non-users. However, women having an implanon had more often abnormal vaginal flora (abnormal lactobacillary grades) than women not on contraception (p=0.0024), especially during the first three months after placement. The lactobacillary grades improved gradually to normal with longer implanon use (P=0.048).
Conclusions: Abnormal vaginal flora is more often encountered during the first three months after the placement of implanon, but this association gradually disappears thereafter. This association may may linked to the increased likelihood of prolongued vaginal bleeding. Bacterial vaginosis or aerobic vaginitis is not more frequent in implanon users.

P096

Mechanical contraceptive methods and their complications in Iran

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Objectives: One of the priorities in research in developing countries is detecting of not using of modern contraception in some couples. One reason for not wing of contraception is incomplete information about it .we decided to plan a project to detecting rate of use of IUD and condom, their complication in users, women information about it and their complication and correct use.
Material and methods: This project was a descriptive – cross sectional study which conducted in boushehr, golestan and kordestan provinces and Islamshahr city in Tehran.
By using systematic random sampling method. 200 clusters which contain of 20 family were choosed and with married women aged 10–49 interriew as conducted. Finally 1500 eligible subject were questionaired . thrugh self completed questionaire.
Results: 74% of subject knew IUD and 55% believed that it has complications such as menoraggia or spotting (69/4%) recurrent pelvic infection (35/1%), back pain (%24/2), expulsion of IUD(%17/6), dysmenorrea (%7/2),unwanted pregnancy(%18/3). 18/9 of subject used IUD as a contraceptive – for one – ten years. Their reasons for IUD selection were low complication (%54/5), easy use (%42/4) and effective contraception (%47). 33% of IUD users mentioned some complications sueh ay mensturel irregularitiy %56/5, pelvic infection %36/5 , back pain %37/6, dysmenorea %17/6. In regarding to condom, %58/2 knew it. %56/3 knew its correct use but only %6 knew emergency contraception. %6/7 of women in this study used condom for 18–42 monthes and none of them mentioned any complications. most of them mentioned to low complications as a reason for using it and also easiness of using.
Conclusion: It is necessary to inform women who use condom about emergency contracption for reducing of unwanted pregnancy during usage, and also it is suggested to introduce new different varity of IUD for reduction of menstrual complications and also providing appropreate counselling family planing program for reduction of misconception about IUD.

P097

Comparision of efficacy and complications of ınsertion of IUD in postplacental/postpartum period and postpuerperal/ınterval period: 1 year follow-up*

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Aim: To compare the efficacy and complications of postplacental and early postpartum intrauterine device (IUD) with post-puerperal and interval insertion at the end of one year follow-up.
Material and Methods: The study was carried out at a teaching hospital setting in collaboration with the Nursing School. Patients who chose to have intrauterine device (Cu-T 380A) insertion and accepted to participate were recruited in the study after being counselled and consented.The experimental group (Group I) consisted of 84 patients who had postplacental (59 vaginal delivery, 25 cesarean delivery) and 46 patients who had early postpartum insertion (N:130 women), whilst the control group (Group II) covered 62 postpuerperal 76 interval cases (N: 138). The demographic characteristics, obstetric histories were recorded and the patients were followed-up for a year. The data collected during the women follow-up at the end of the one month, the house-visits at second and sixth month house-visits and telephone calls at 12 th month by filling in the nurse follow-up forms. The groups were compared statistically in terms of continuity of the method, complications as expulsion, misplacement, complications and efficacy. The statistical analysis was carried out using Chi-square, Fisher's exact Chi-square, mean and percentage calculations.
Results: At the end of one year follow-up 38.6% of Group I, 72.3% of Group II had continuity of the method, the results showing a statistically significant difference between the two groups. Among Group I, 84% of the patients who left the method were from the early postpartum group mainly due to IUD expulsion (78.2%). In Group II the main reason for leaving the method was IUD misplacement (27.8%). The incidence of complete and partial expulsion was significantly high in Group I but the two groups were not different statistically from each other in terms of IUD misplacement, uterine perforation, heavy bleeding and pelvic inflammatory disease. In Group I expulsion was observed at an avarage of 57.64 days while partial expulsion was found at an avarage of 69.56 days. The method efficacy was the same in both goups. In Group I, become pregnant was %3.0 (4 women) and in Groups II was % 2.9 (4 women).
Conclusions: Postpartum IUD insertion is an acceptable, efficient method of contraception. Counselling, integration of the family planning activities with antenatal and maternity services and training the staff in insertion techniques is required for improvement of the results.
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SESSION 4: EMERGENCY CONTRACEPTION

P098

Efficacy and cycle changes of emergency contraception with levonorgestrel with women at different ages

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Objectives: There exists certain reservation in prescribing emergency contraception (EC), mainly for fear of possible occurrence of disturbances in the menstrual cycle (MC). This applies particularly to the fear of prescribing such a type of contraception to teenagers. For these specific reasons, the present study aims to assess the efficacy of EC with Levonorgestrel (LNG) and the possible cycle changes after its use by women from different age groups.
Design & Methods: The study is an open-label one, including 158 (n=158) healthy, non-pregnant women, with regular menstrual cycle. The subjects were divided into three groups. The first group – G1 included 52 girls aged between 16 and 19 years. The second group – G2 included 55 women aged between 20 and 25 years. The third group – G3 includes 51 women aged between 26 and 30 years. All subjects have had one unprotected or faultily protected sexual intercourse. All of the women participating in the study had administered 0.75 mg LNG within the immediately following 72 hours. The same dosage was administered repeatedly 12 hours after the first intake. The efficacy of the EC has been estimated following Dixon's method. Variational analysis has been applied for processing the data obtained from the study.
Results: A single pregnancy was registered in each of the three surveyed groups, amounting to pregnancy rate – 1.92 %, 1.82% and 1.96%, respectively. There were not significant differences in the efficacy rate in the three groups – G1 (78.76 %), G2 (80,38 %) and G3 (79.61), respectively. The ratio of women with unchanged cycle in the groups is – G1 51.92 %, (G2) – 56.36 % and G3 – (54.59). No significant differences conditioned by the different age range of the three groups were registered in the menstrual cycle changes and the length of bleeding.
Conclusions: Emergency contraception with LNG provides effective contraception without serious changes in the menstrual cycle irrespective of age differences as the results in all three studied groups show.

P099

An Indian experience with intrauterine device-CuT 200B and oral levonorgestrel (LNG) as emergency contraception

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Objectives: To study the profile and perception of women seeking emergency contraception (EC) and to evaluate the efficacy & side effects of 0.75mg oral LNG (2 doses) and CuT200 B for EC.
Design and Methods: Women requesting for EC after single act of unprotected intercourse in the current menstrual cycle were offered 0.75 mg LNG (2 doses) 12 hours apart within 72 hours and CuT 200B inserted within 120 hours of unprotected intercourse as EC. A total of 632 women who fulfilled the selection criteria and gave informed written consent were enrolled in the study at 8 Human Reproduction Research Centers of ICMR. The subjects were followed up at one week after the expected date of next menstrual bleeding to elicit the information on pregnancy, side effects and perception about EC. The efficacy was assessed by crude pregnancy rate as well as percent pregnancy averted.
Results: Of the 632 acceptors, 46.8% sought EC due to non-use of any family planning method, 10.8% forgot to use condom, 26.1% women sought due to condom breakage /slippage, 6.8% sought due to IUD expulsion/displacement. Forced sex was the reason given by only 0.9% of women. The average age and parity were 27.3 years and 2.2 respectively. Nulliparous/unmarried/widow constituted 5.7 % of women. The relative acceptances of the two methods were 36.1% of IUD and 63.9% of LNG. Majority (82.2% and 73.2%) of women sought LNG and IUD within 48 and 72 hrs respectively. Six pregnancies were reported in the LNG group (3 user failure and 3 method failure) giving a typical use failure rate of 1.66 %. The percent pregnancies averted with LNG was 76.9 which is comparable with the WHO study which reported a failure rate of 1.7 % and percent pregnancy averted as 77.0 with the LNG 0.75 mg two dose schedule. There was no pregnancy reported with CuT 200B in the present study. Side effects with LNG were nausea, headache and dizziness that ranged between 10–14% and with IUD low abdominal pain (49.1%) and irregular bleeding (13.2%) were the major complaints. Women's perception of EC in the study indicated that majority (93.2%) would like to consult a doctor before use. 62% women expressed that adolescents should be made aware of EC.
Conclusions: 0.75 mg LNG (two doses) is an efficacious and acceptable method for EC as the pregnancy rate was 1.66% and it averted 77.0% of the excepted pregnancies in Indian women on typical use. CuT 200B in the study averted all the expected pregnancies. Most women in the study indicated preference of availing LNG pills from a health facility after consulting a doctor.

P100

Emergency contraception with Postinor

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The unwanted pregnancy is a special problem having an ample psychological and psyhical impact on the young couple, usualy without sexual education and having limited sexual experience.
The use of an emergency contraception method after an unprotected sexual contact is reducing the risc of unwanted pregnancy.
Objectives: We followed the contraceptive efficacy of a levonorgestrel emergency contraceptive – Postinor (G Richter) and possible side-effects.
Design and method: The study was performed on 100 patients, age bellow 25 years, from a young collectivity, having different level medical knowledge asking for an emergency contraceptive. In 96 of cases the contraceptive method request was under 48 hours after intercourse and in 4 cases after this interval , but not exceeding 72 hours. The emergency contraceptive (Postinor) was taken 2 tablets at 12 hours interval each, following the side effects as nausea and vomiting, headache, menstrual troubles, respiratory troubles and uterine and endometrial ultrasonography changes.
Results: In 3 cases (3%) occurs nausea and headache, treated with symptomatic drugs; menstrual troubles were experimented by 4 cases (4%) and 17 patients (17%) had intermenstrual spotting and nothing especially in the rest of cases. All cases were evaluated by ultrasonography: in 5 cases (5%) we find endometrial hyperplasia; as failure of the method we had 3 unwanted pregnancies (3%).
Conclusions: In the young women the risk of unwanted pregnancy is a reality; the current use of Postinor had a contraceptive efficacy of 97% and non-important side-effects. We recommend the use of this emergency contraceptive under medical supervision to exclude the possible side-effects.

P101

The attitude towards emergency contraception in women having legal abortion

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Introduction: Despite the fact that it was introduced in practice some decades ago, emmergency contraception remains an insufficiently known and used method of contraception. Its advantages and indications are unknown for the majority of population in our country.
Aims and methods: Our prospective study tries to asses the attitude towards emmergency contraception of women having a legal abortion. For this purpose we used a questionnaire study applied to 107 women attending our clinic for legal abortion.
Results: Most of the patients were under 30 years old (68%), represented urban population (66%) with low instruction level, had at least one child (70%) and one legal abortion (90%) in antecedents and have used a contraceptive method in the past (68%). Only 29 of the 107 women interviewed (27%) were informed about the existence of emmergency contraception and only 3 of them had successfully used the method. The 26 remaining didnt use the method because they were informed to late or incorrectly about the method. The main sourse of information were other women and not the mass-media or the medical personnel. Asked if they would use such a method, 78 (73%) were affirmative. The causes of the underuse of emmergency contraception are: few women are aware of it, few doctors and nurses inform the patients about it, most of the information received from other patients are incorrect, the information in mass-media are insufficient.
Conclusions: The emmergency contraception is a method highly acceptable among women having legal abortion, but underused because of the luck of information about it.

P102

Effects of a preovulatory single low dose of mifepristone on ovarian function

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Introduction: Mifepristone has been used as an effective drug for emergency contraception when administered within 120 h after unprotected intercourse. A comparison of different doses of mifepristone showed that a dose of 10 mg is as effective as a dose of 600 mg in preventing pregnancy, while causing less disturbance of the menstrual cycle. The effect of mifepristone on the menstrual cycle is dependent on the adjusted dose and the timing of the treatment. Previous studies have shown that follicular phase administration of high doses of mifepristone inhibits LH surge and delays folliculogenesis. The purpose of this study is to examine whether administration of mifepristone in a single low dose during the preovulatory period has similar effects on ovulation.
Material and methods: Healthy women with regular menstrual cycles were studied during two consecutive menstrual cycles. Either mifepristone or placebo was given in a randomized double blind order when the leading follicle reached a diameter between 15–17 mm. Daily ultrasound and serum hormone measurements were obtained until follicular collapse. Statistical analysis was performed using Wilcoxon signed-rank test.
Results: Eight women entered the study while one woman was excluded afterwards from analysis because her LH surge had already appeared on the day of treatment. Mifepristone caused a three-day delay in follicular collapse, occurring on day 16 in control cycles and on day 19 in mifepristone treatment cycles ($p=0.02$). The LH surge was delayed from day 14 to day 17 ($p=0.01$). The median cycle length was 26 days in control cycles and 30 days in mifepristone treatment cycles ($p=0.03$). Progesterone measurement 7 days after follicular collapse did not differ significantly between both cycles.
Conclusions: A single dose of 10 mg mifepristone administered during the preovulatory phase of the cycle delays the LH surge and postpones ovulation.

P103

Risk factors for Chlamydia infection among young women coming to family planning clinics for emergency contraception

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Objective: To investigate the sexual behavioural characteristics of women requesting emergency contraception (EC) and their potential risk of chlamydial infection.
Design: Cross-sectional study between October 2002 and July 2003.
Setting: Family planning clinics in Manchester.
Participants: Women below 25 years, requesting EC.
Method: Volunteers were asked to complete a questionnaire in the clinic and return a urine sample one week later for chlamydia testing.
Main outcome measure: Descriptive statistics.
Results: 127 women were recruited, with a mean age of 20.5 years (SD: 2.7). Only 16.1% women were first time users, and 68.3% had requested EC at least once during the last year. Women who currently smoked and reported >2 partners were more likely to be multiple users. Current use of oral contraceptives was low; 38 women reported a previous pregnancy, of which 25 had been terminated. Thirty-six urine samples were tested for chlamydia, and 4 (11.1%) were positive. Most women did not consider themselves at high risk of infection.
Conclusions: This study suggests high- risk behaviour, lack of contraceptive continuity, high abortion rates and repeat EC use among users of EC. The failure of many young women to return urine samples after having left the clinic indicates a need for in-site testing. Studies in more representative samples are required.

P104

Knowledge about emergency contraception in women attending a termination of pregnancy clinic

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Objectives: Emergency contraception, if correctly used, may prevent pregnancy after unprotected coitus and lower the incidence of unintended conception. This study was undertaken to assess the knowledge of emergency contraception among women who presented to our unit requesting termination of pregnancy (TOP).
Methods: Interviews were conducted with 204 women requesting TOP in our service. Information about their knowledge and use of emergency contraception was obtained. In addition, demographic data was recorded and they were questioned about their understanding of basic reproductive physiology.
Results: Almost 70% of the women who requested TOP had an educational level above grade 10 (senior high school). Forty four percent of the patients presented in the second trimester and 56% in the first trimester. Most of the patients were multiparous (72%). At the time of conception of the index pregnancy, 122 of the patients had not thought they were at risk of pregnancy. About one third of the group had been using some form of contraception. Only 38% of the whole group had every heard of emergency contraception and 8 had utilised it prior to the index pregnancy. Most of the women presenting for TOP (87%) had no knowledge at all of when they were most likely to conceive during their menstrual cycle. In addition, despite educational campaigns, 72% of the women said that they did not know how and when to use emergency contraception. The majority of the women said that more information about emergency contraception and easier access were essential. Many of them expressed resentment at not being aware of this possible method of preventing unwanted conception.
Conclusions: Despite the fact that most of these women had a high school education, knowledge about emergency contraception was limited. Particularly concerning was the very poor understanding of basic reproductive physiology. As this is central to avoiding unwanted pregnancy, educational strategies which inform about physiology as well as contraceptive availability are urgently needed in our reproductive health services.

P105

Comprehensive knowledge of emergency contraception does not always result in improved use of the method: evidence from women attending an unplanned pregnancy clinic

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Background: Emergency contraception (EC) provides a safe and effective means of preventing at least 75% of expected pregnancies resulting from unprotected sexual intercourse. Knowledge of emergency contraception is crucial to its proper use. In the United Kingdom (UK) there is increasing awareness of this method but estimates of use are low; and there were 175,600 abortions in England and Wales in 2002.
Objectives: To discover the extent of knowledge and use of EC in women attending a dedicated unplanned pregnancy clinic.
Design and method: A review of the literature suggested that we could expect 20% of women to have correct knowledge of EC. An anonymous questionnaire was offered to all women attending for their appointment at the clinic and it was completed in the waiting room prior to the consultation.
Results: There was a 100% response rate (222 women). We found 39% (87/222) were under age 20 and over two-thirds (77%, 171/222) of the group described themselves as single. Of the women, 97% (215/222) admitted being aware of EC and 65% (116/178) knew the correct time frame for use (within 3 days); however, 44 respondents did not answer this particular question. We found 68% (152/222) of the sample were using contraception at the probable time of conception, when 40% (89/222) were aware of a failure of their regular method or unprotected sexual intercourse occurred in barrier contraception users. Very few of this alerted group obtained EC (17%, 15/89) and no-one else in the sample admitted using it. So, only 6.8% (15/222) of the whole sample obtained EC on this occasion even when 58% (128/222) had used EC previously.
Conclusion: The majority of women attending the unplanned pregnancy clinic had heard of EC, knew how to use it correctly and could all give examples of where to obtain EC. However, only a tiny proportion of this group of women actually took EC, even when over half of them recognised a possible or actual failure of their contraceptive method and risk of pregnancy. The decision making process influencing a woman's use of EC is obviously complex, with more than just factual knowledge being important. Advance prescribing may be one possible solution to improve accessibility of EC and may increase effective use of EC.

P106

Is alcohol a factor in unsafe sex among women seeking emergency contraception? A two part study

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Objectives: Alcohol is one factor identified in the literature as playing an important role in determining: a) whether sex takes place; b) whether contraception is used and used effectively. However, the relationship between alcohol and unsafe sexual behaviours is not a clear one. This research was initiated by Dublin Well Woman Centre (DWWC), as feedback from their staff and other practitioners suggested that alcohol consumption was associated with an increased demand for emergency contraception (EC). This research aimed to describe the pattern of alcohol consumption among women requesting EC during the period in which unsafe sex took place. A comparison group of non-EC clients was used to examine whether drinking patterns were different between client groups. This research tested the hypothesis that variables such as age and relationship status would affect alcohol use, contraceptive use and unsafe sex.
Design and Methods: Both quantitative and qualitative approaches were used. Questionnaires were administered to consecutive attendees at a sample of DWWC clinical sessions, representative of all available clinic times for a 9 week period. Data were analysed using SPSS computer software. Clients presenting for EC were invited to participate in a semi-structured interview. Interviews were tape recorded, transcribed and analysed using a thematic analytic approach.
Results: A total of 230 women seeking EC completed the questionnaire (97% response rate) and 222 non EC clients (95% response rate). The demographic and social characteristics of the EC group closely mirrored those of the non EC group. For example, 64% versus 36% were young women between 20–29 years respectively; 38% versus 45% had a third level qualification; 61% versus 79% had full time jobs and 77% versus 84% were in a relationship of some description. Statistical tests found that the drinking patterns of women requesting EC did not differ significantly from other clinic clients. Prior to seeking EC, 64% of the EC clients reported to having used some form of contraception on the occasion when unsafe sex occurred. Findings suggest that whether women requesting EC drink alcohol or not, a majority of women used contraception. Eight interviews were conducted with EC clients (the majority declined to participate). Both quantitative and qualitative data suggested that women experience problems with using contraception correctly and consistently.
Conclusions: These findings directly challenge the myth that women who request EC, do so after casual sex and after being drunk. This data has important clinical implications with respect to the training of family planning practitioners, contraceptive advice and risk communication and addressing information needs of women.

P107

Knowledge, attitude and practice survey toward emergency contraception among women undergoing surgical abortion in Rome, Italy

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Introduction: according to growing worldwide acceptance and promotion of emergency contraception (EC) as a measure to reduce unwanted pregnancy, we undertook a study to assess knowledge, attitude and practice toward EC among a sample of women undergoing voluntary surgical abortion in a university hospital in Rome.
Aims and methods: to test the hypothesis that lack of knowledge and negative attitudes about the method may limit its impact, we interviewed 197 women who underwent a surgical abortion by the Day Surgery Centre, Department of Gynaecological Science Perinatology and Child Care, University of Rome 'La Sapienza' from April to July 2003. Women were randomly selected and interviewed before hospital discharge, by trained interviewers. Out of the 201 women selected, 4 refused the interview (respondance rate 98%). Statistical univariate and multivariate analysis has been performed using SPSS software.
Results: women's median age at time of interview was 31 years. Sixty percent of the interviewed was nulliparous and single. Twenty six percent of the sample had a low educational level ($<$secondary school) and 74% a higher degree ($\geqslant$secondary school). Although 98% of the sample had heard about EC, mostly through relatives, friends and media, knowledge of the EC components, of the correct time for taking it after unprotected sex, as well as knowledge of it's efficacy and side effects rated very poor. Thirty eight percent of the interviewed was not aware about medical prescription need, 72% reported EC should be assumed within 24 hours from intercourse and less than 20% had a correct idea of EC efficacy. Fourty percent of the sample reported that EC causes an abortion and more than 30% that is responsible for neonatal malformations. Better knowledge was associated to previous EC use and to women's higher educational level. Nevertheless, attitude among EC was positive. Eighty percent of the sample would recommend the method to a friend.
Conclusions: this small pilot study revealed how modern methods of EC resulted desirable among women who underwent surgical abortion and how level of awareness was poor among them. Nevertheless, in Italy part of medical providers limit support of EC because of anti-abortion sentiment. We believe EC needs promotion by making information regarding the methods mechanism of action and safety, key features of future educational campaigns. Further studies on knowledge, attitude and practice among providers (family doctors, gynaecologists and pharmacists) and among school students and women in reproductive age are also recommended.

P108

Is sex at weekends more risky: and analysis of visits for emergency contraception to community clinics

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Objectives: The need for emergency contraception is greatest at weekends, at times when access is most limited. This study examines the use of emergency contraception in an inner city community service by day of week to assess if the weekend deficit in provision is compensated by increased use on Mondays.
Design and methods: A database of contraception clinic visits was examined for prescriptions of emergency hormonal contraception by day of week. Assuming equal need for each day of the week, we estimated the weekend requirement for Saturday to Monday by tripling the Wednesday use, which we considered a conservative estimate.
Results: 254,376 visits were recorded over 5 years, or which 19,393 were for emergency hormonal contraception. The proportions of all visits on Monday to Saturday were 22%, 22%, 24%, 17%, 14% and 2% respectively. The corresponding proportions of visits for EHC were 30%, 21%, 18%, 13%, 13% and 5%, indicating a greater demand for EHS on Mondays and Saturdays. The average annual Wednesday use of EHC was 689, suggesting a conservative weekend requirement of 2,066. The annual weekend provision (Saturday to Monday) was 1,357, suggesting an annual weekend deficit of 709. Clients in age groups 12–15 and 16–19 had disproportionately fewer visits on Mondays and Saturdays (Mondays 28% and 27%, Saturdays 4% and 3%). Asian/Asian British and Black/Black British clients also made proportionately fewer visits for EHC on the same days (Mondays 25% and 28%, Saturdays 2% and 4%). The proportion of visits on Mondays and Saturdays for EHC fell slightly between 1997 and 2000, and remained stable since.
Conclusions: This analysis suggests that there is a significant shortfall in use of EHC at weekends, equivalent to one day's use using a conservative assumption that daily needs at the weekend are similar to midweek. It is unlikely that other sources for EHC compensate for this. If the recent evidence suggesting the lack of a trend in efficacy for EHC with increasing time to treatment is confirmed, expanded provision on Mondays may compensate for the weekend deficit. The provision should be targeted at younger and minority ethnic groups.

P109

5-years of working experience of the Russian Centre of Emergency Contraception

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In Russia two-thirds of unplanned pregnancies outcome with induced abortions that is why the problem of emergency contraception is very urgent. The Russian Centre of Emergency Contraception was created on the basis of the Research Centre of Obstetrics, Gynecology and Perinatology with the assistance of the 'Gedeon Richter' Company. The objective of the study was to make an analysis of a 5-years experience of the Russian Centre of Emergency Contraception (CEC). For five years 1335 women, aged from 15 to 25, have obtained health care service at the CEC. Among the cohort of patients 40% had one sexual partner, 35% had the first sexual contact, 10 % had casual sexual contact, and 6% were raped. The circumstances leading to the unprotected sexual contact were as follows:contraceptive failure in the use of condom 42%; contraceptive failure in interrupted intercourse 41%, sexual intercourse without contraceptives 13%, incorrect use of spermicides and oral contraceptives 6%, violence 6%. We evaluated 1003 cases of the use of levonorgestrel ('Postinor', Gedeon Richter, Hungary) as a medicine for postcoital contraception and 342 cases of the use of Uzpe regimen (Ovidon). Levonorgestrel efficacy was 100%. The onset of menstruation after levonorgestrel was distributed as follows: in time menstruation in 26%, shortening of menstrual cycle in 52.6%, prolonged cycle to 7 days in 7%, prolonged cycle to 2 weeks in 3.5%. Pregnancy was registered in 5.4% of women using Uzpe method that testified of a high efficacy and tolerance of levonorgestrel. All patients were further recommended to use planned contraception.

P110

Knowledge concerning and attitudes towards emergency contraceptive pills among Hungarian women waiting for induced abortion

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Introduction: Unwanted pregnancy is common in Hungary, every third pregnancy ends up in induced abortion.
Aims and Methods: To investigate knowledge about and attitudes towards emergency contraceptive pills among women waiting for induced abortion. Survey by self-administered anonymous questionnaires in the waiting room.
Results: The response rate was 86.4% (216/250). The mean age of the participants was 27.5 years. 60.6% (131/216) answered that they had a permanent partner. As many as 100 of 216 (46.3%) had a history of one or more previous abortions. The corresponding figure among teenagers (<18 years) was 26.9% (n=58). 25% (54) of all did not use any form of contraception at the time of intercourse lresulting in conception. All other women stated that they had used various contraceptive methods. Women who were regular smokers had more provious abortions (P=0.01) and a shorter education (P=0.001). The concept of the fertile window was known by 51.9% (n=112). Only 35.2% (n=76) could not define the fertile window. The facilitty of emergency postcoital contraception was known by 51.9% (n=112) of all women. More teenagers than women over the age of 18 had heard of postcoital hormonal treatment. 58% of the participants were considering preventing fertilisation by a pill while only 19.6% (22/112) had concise knowledge about the ttime window of effectiveness. The duration of the recommended time window was underestimated by 71.4, overestimated by 8.9% of participants giving an answer at all; 48.1% of all participants (n=104) answered 'I don't know'. A higher proportion of women above 30 years declared that they would have used postcoital contraception if they had known more about the method than of younger persons (especially under 18 years of age) . More than half of the women (52.8%) thought after completion of the questionnaire that they would use emergency contraception in future. The commonest source of information concerning postcoital contraception was friends (32.1%, n=36/112) and the media (34.8%, n=39/112). Only 7.1% of responders assigned a positive role in this issue to health care providers.
Conclusions: Unwanted pregnancy and induced abortion are common in Hungary. Most responding women stated that they became pregnant incidentally, without using effective contraception. Emergency contraception is generally known but hardly used. The fundamental problem is that women do not have the exact knowledge about the accessibility and appropriate application of these preparations. Health care providers prescribe the medication only if requested. New information strategies are needed. They should encourage women to keep emergency pills in the bathroom cabinet or in their hand-bag like other medicaments.

P111

Access to emergency contraception

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In Portugal since 1984 the family planning services and contraceptive methods are free. Despite that, we estimate that we have 20 000 not legal abortions per year. Emergency contraception can reduce the risk of pregnancy after unprotected intercourse by as much as 95% and it is available without a medical prescription since 2002. The aim of this study was to assess the knowledge, attitudes and practices regarding emergency contraception in pharmacies of our city. The study questionnaire was administered in 31 pharmacies simulate the demand of emergency contraception. In majority (64.5%) the sell was done by qualified professionals. In 6.5% the sell was refused, in 29.0% was done without questions and in the 65.5% the pharmacist inquired about the need for this form of contraception. The information about safety, secondary effects and form of use was in majority of cases well done, 89.7%, 62.1% and 65.5% respectively. The information about the results of emergency contraception was correct in 72.4% of cases. In 75.9% of cases there was no orientation for family planning appointment and only in 41.4% the pharmacist talk about a contraceptive method for the future. The pharmacist were not enough informed about the emergency contraception and we have to do more to sensitize these professionals for the family planning services.

P112

The knowledge of pharmacists regarding emergency contraception

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Introduction: The widespreading of emergency contraception could decrease the high abortion rate in Hungary.
Aims and methods: The aim of the study was to determine the knowledge of pharmacists regarding emergency contraception. In a questionnaire survey performed in four counties in Hungary, 136 pharmacists answered questions designed to test their knowledge regarding emergency contraception. The statistical analysis was tested with the chi-square probes.
Results: Almost all of the pharmacists were aware of the maximum interval of use of emergency contraceptive pill (EC) use after an unprotected intercourse and the time interval between the two doses of EC pill (96% and 98%, respectively). Almost three-quarters (70%) knew the most fertile period of the cycle, as the most proposed time-interval for the use of EC pills. The awareness of the side effects of the combined emergency contraceptive pills was extremely high (100%). The knowledge of failure rate of EC pills was low (24.3%). Seventy-eight per cent knew that EC pills can not prevent pregnancy after implantation. Almost ninety percent believed that the EC is the only one available contraception after an unprotected intercourse.
Conclusions: Pharmacists' knowledge of emergency contraception is of paramount importance to make EC pills available over-the-counter and easier access for the indigent women to receive proper advice. EC could be more propagated for the teenagers and risk groups concerning contraception.

SESSION 5: EMPOWERMENT AND NEGOTIATION ISSUES

P113

Can people read the literature we give them?

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Objectives: To assess whether the literature provided by the Sexual Health service is compatible with the functional health literacy level of service users.
Design & Methods: 1. Assessment of reading ability of service users aged over 16 attending a family planning clinic for contraception using REALM (Rapid Assessment of Adult Literacy in Medicine). 2. Analysis of written information given out in clinics by SMOG-Simplified Measure Of Gobbledygook (for readability score) and SAM (Suitability Assessment of Materials for readers with low literacy skills) which considers factors such as layout. The information included pack inserts from contraception and information leaflets.
Results: 22 people took part. The REALM test suggested that 9 (40%) would have difficulty fully understanding most patient education materials. Of 44 leaflets assessed, the mean SMOG readability score was 10.5 suggesting that 35 (79%) of leaflets would not be understood by people with low literacy skills. The SAM rated 2 leaflets as suitable for readers with low literacy skills.
Conclusions: 23% of Scots have low literacy skills. Low literacy is associated with poorer health outcomes. Written information is increasingly provided for health service users, but written information currently supplied in our clinics may not be fully understood by many clients because of the way it is written and presented. The challenge is to minimise the disadvantage of low literacy by providing understandable information in appropriate formats.

P114

The development of a client-led transgender support group at the Sandyford Initiative in Glasgow

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Introduction: At the end of 2001, a client of the gender dysphoria service at the Sandyford Initiative – Glasgow's centre for reproductive, sexual and emotional health – highlighted the need for a peer support group for transgendered people. In conjunction with the Sandyford's community access worker they established an innovative model of peer support, which since its inception in March 2002, has completely changed levels of community participation for this user group.
Method: To enable transgendered people, along with their partners and families to access peer support by developing a group process. This should demonstrate reciprocity in that group members would have the space to discuss personal issues, and the Sandyford Initiative would receive valuable feedback on its services to recruit skilled volunteers to facilitate the group from a position of experience and sensitivity.
Results: From an initially small membership, the group now meets bi-monthly and approximately 20 people attend each meeting from a pool of around 50 people. The group have produced their own holistic client information leaflet which is used both within and outwith Sandyford; they have successfully challenged the referral route into transgender counseling; they have presented at an international gender dysphoria symposium on the development of the group; they work with the library and information staff to ensure that resources purchased are appropriate. As the group has become more widely known and recognized as a model of good practice, it is continually approached to be involved in needs assessment work such as the participatory appraisal work undertaken by the National NHS INCLUSION Project. The group is now involved in supporting the development of a sister body in Edinburgh and the establishment of a national advisory group which will ensure community representation in developments such as any Scottish Managed Clinical Network on gender dysphoria.
Conclusion: The support group has developed into an accepted and successful mechanism for ensuring transgendered people's participation in the ongoing development of services at the Sandyford Initiative. Moreover, the group has facilitated invaluable peer support for this client group and has acted as a safe and supportive springboard for people coming out as transgendered who can then access appropriate services as and when they feel ready.

P115

Effectiveness of sexual health service delivery within a drop in centre for street sex workers

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Introduction: Street sex workers (SSW) are a socially excluded and difficult to reach group. The majority are drug users and many have no fixed home. Their consequent chaotic life style and fear of discrimination or judgemental attitudes explains their difficulty in accessing standard services. The Linx project actively supports SSW to overcome these barriers and assists them in accessing a range of services. In late 2002 a drop in centre for SSW was opened. Twice weekly there is a session from 8–11pm when SSW can drop in for a chat, meal, a wash and to obtain condoms and clean clothes. Outreach Linx workers make contact and distribute condoms on the street where they inform the women of the service available and give them a lift in and back if requested.
Aims and Methods: to pilot a sexual health service within the Linx drop in sessions providing pregnancy testing, contraceptive advice and supplies, blood testing for viral infections and hepatitis B vaccination. By making personal contact it was hoped this would also assist in easing access to mainstream contraception and infection screening services.
Results: An outreach health adviser from the genitourinary medicine clinic with experience of working with sex workers and a senior doctor in contraception agreed to attend an evening drop in once a month. In the first six months 9 women were seen at six sessions on 15 occasions. In the second six months a further 14 women were seen at seven sessions. Over the year 35 visits were made. Eleven women started a hepatitis B vaccination programme and 10 made arrangements to attend for full infection screening. Three started on Depo-Provera and two had Implanons fitted. The Linx staff were trained in performing and interpreting pregnancy tests. A number of women were referred in directly by the Linx workers to either the contraception or infection testing services. An audit of both the SSW and the Linx Project workers showed that the women were very pleased to have this service and felt more confident about requesting help at Linx than at standard health services.
Conclusions: an outreach service in a space where the SSW feel safe can improve the access of an often marginalised group to health services and reduce the risk to public health of not offering protection against unwanted pregnancies and infections.

P116

Helping women with learning difficulties to access cervical smear tests

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Background: A survey of 103 women with a range of learning disabilities (LD) in Widnes and Runcorn (an urban area in North West England) found only 7 had had a cervical smear within the last 5 years. In 2000, the UK Government Department of Health issued 'Good practice in breast and cervical screening for women with learning difficulties'. A project was set up using this recent guidance, including a female General Practitioner (GP) and two specialist nurses in LD.
Objectives: To discover why the uptake of cervical screening was so low in that group of women. To increase access to cervical cytology by engaging women with LD along with their carers and support workers.
Design and methods: The GP provided a list of women with LD in her practice who were eligible of the National Cervical Cytology Screening Programme, aged between 20 and 64 years. The three professionals decided who should make contact with each woman, either face to face, by telephone or letter according to the woman's needs. A person centred approach was used with consideration of cognitive abilities. Desensitisation was provided using videos, pictures, the gynaecological manikin and smear taking equipment.
Results: We identified 25 women with LD, 23 had never had a smear while 2 women had had a cervical smear in the past. These 2 women attended for a cervical smear after a reminder. The professionals and carers together decided that a cervical smear would be too traumatic for 8 women. Despite intensive efforts, and desensitisation for 6 women, no-one else had a smear. It was discovered that usually the GP had made the decision regarding the ability of the woman to cope with a smear and, in some cases, the carer's were making the decision for the woman without fully understanding the need for informed consent.
Conclusions: The project led to multi-disciplinary decision making with each individual, allowing full consideration of all the issues. However, desensitisation and obtaining informed consent was time consuming. Recalling past experiences of gynaecological examinations or possible sexual abuse meant some women were reluctant to even discuss the possibility of having a smear. Some carer's saw the procedure as very frightening and possibly harmful to their clients. A clinical pathway is being developed which local GPs are being encouraged to follow to increase access to cervical smears by women with LD.

P117

Contraceptive counselling by male or female doctors – is there any difference?

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Objectives: Contraceptive behaviour is an important determinant of women's reproductive health. With regard to problems concerning acceptance and compliance a highly qualified and individually adapted contraceptive counselling is crucial. It depends on the counsellor's knowledge and experience about contraceptive methods as well as his / her communication skills, background, personal attitudes and probably his or her gender. We therefore wanted to investigate how gynaecologists use to counsel and whether there might be any gender differences in counselling.
Design and methods: On the basis of a questionnaire we interviewed by telephone 24 female and 24 male practising Swiss gynaecologists between September and October 2002. We asked them about the content and strategies of their contraceptive counselling as well as their opinion concerning important aspects for the choice of a method and the patient's compliance. The data were analysed by descriptive statistics.
Results: Half of the gynaecologists were 41–50 years, 8 were 30–40 and 4 over 50 years old. 36 of them were practising in an urban, 12 of them in a rural area. Their counselling comprised medical aspects such as information about various contraceptive methods (80%), health risks (75%), side effects (50%), contraceptives' efficacy (more often cited by male physician than female 58 vs. 38%), STD (male doctors 33% vs. 62%), emergency contraception (17 vs. 0%) and personal aspects such as the patients needs, family planning (25%), partnership (12 vs. 25%) and sexuality (5 vs. 12%). From 7 aspects that had to be quoted about their importance for the choice of a contraceptive method efficacy was considered very important by 100%, reversibility by 83%, side effects by 85% and convenience by 79%. Naturalness and costs were more often quoted as important by female and health benefits by male gynaecologists. Side effects are considered the most important factor for patient's compliance by male and female gynaecologists (60% each), while counselling and information is predominantly cited by female and patient's character and personality by male doctors.
Conclusions: While reproductive health issues were central topics of the counselling, sexual health issue are still often neglected. According to our results gender differences occasionally influence the choice of the topics as well as the attitude towards the patient.

P118

Health personnel improvement for STI/AIDS prevention program

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Objective: This study aimed to decrease community high-risk behaviours via health personnel improvement for STI/AIDS prevention program.
It was designed to implement special training course on communication, health education and counselling for health network staff who cooperate with regard to STI/AIDS.
The topics of their training programme were: Communication, Counselling. Harm reduction, Out reach programmes, Resource mobilization, Mass media campaign.
Results: Based on the outcome of this three-stage training workshop. These suggests are recommended based on the out time .the training piagre. 1- Interaction with the local communities and health personnel should be more focused 2- Seminar/awareness workshop for health personnel and stakeholders should be organized and appropriate IEC material should be prepared and delivered to them. 3- Personnel contacts and networking should be established to intervene like-minded people in the community to involve them for community mobilization on STI/AIDS prevention programme.
Conclusions: Success of STI/AIDS prevention programmes must be conducted through the balanced partnership of community, health staff and governmental support. For this aim health personnel improvement should be considered as an important vital.

SESSION 6: ETHICAL ISSUES

P119

Holistic approach to the analysis of sexual health within Chilean sub-cultures

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Context: The concept of 'sexual health' encompasses physical, mental and social aspects, each incorporating further integral components. All sub-factors combine to determine the subjective quality of sexual health, and in essence the status and modality of sexual health. As such, it is important to consider these qualities, in analysis and/or comparison of sexual health in a community and/or it's sub-sectors.
Objectives: To reflect utilising a holistic approach, the status of sexual health in Chile by demonstrating the variance in sexual health, and access to appropriate healthcare across a sub-cultural spectrum.
Methods: An investigation into the variance in sexual health and access to healthcare across diverging sub-cultures was accomplished; utilising the techniques of participant observation and 3-dimensional inquisition/interview conducted in the native language (Spanish). The research method basis remained grounded in the integration of existing health indicator models; in addition to specifically devised questionnaires, of both quantitative and qualitative nature. All completed questionnaires were fielded for transcription, translation and evaluation.
Main Outcomes: The 13 sub-cultures selected for analysis reflected a discrepancy in sexual health quality within the Chilean community, surpassing socio-economical and gender barriers. The results of the study indicated that indeed the community is anti-gregariously sectioned on the basis of socio-economical determinants, and that this division impairs the distribution of access to healthcare and one's sexual health. A further derivation from the investigation demonstrated the importance and efficacy of individual perception of 'good' sexual health, in determining and evaluating sexual health as a status.
Conclusion: The Chilean community is non-egalitarian; producing a fragmented society, segmented on the basis of socio-economic dynamics. This subdivision adversely impacts health equity as a concept, causing a stratified distribution of healthcare. This inherent societal fragmentation impinges upon the quality of sexual health maintained by an individual, and thereby influences the direction of the sexual health of the community as an entity.

P120

Perception of compliance with ethical principles during clinical consultation for termination of pregnancy

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Introduction: Everyone should have the right to make fully informed and voluntary decisions about their reproductive health care. Reproductive health can present clinicians with ethical problems because of the complex interaction between the individual patient and clinician. Informed consent is generally required for patients who undergo an invasive medical procedure, such as induced abortion. A prerequisite for informed consent is that each individual understands the information provided and voluntarily agrees to receive the treatment. During the consultation, the clinician attempts to adhere to certain ethical principles required for informed choice and informed consent. The literature on perception of ethical problems is scarce and perception of compliance with medical ethical principles during clinical consultations may be similar or different between patients and independent observers.[1] Differing perceptions of adherence to ethical principles may generate patient-clinician conflict and may hamper the quality of care.
Aims and Methods: To ascertain perception of compliance with medical ethical principles during clinical consultation for termination of pregnancy, explore congruence / discordance between medical students' and patients' perception of adherence to ethical principles and to test the hypothesis that for each patient, medical students' perception of compliance with medical ethical principles will differ from the patients' perception by as much as 50%. Patients were recruited by way of a convenience sample of volunteers already referred to the clinic. 44 women consented to participate (of whom, 41 returned their questionnaires). Medical students were those participating in a third year Ethics Special Study Module. Each medical student observed closely the general appearance, behaviour and body language of each patient during consultations and completed a questionnaire. Each patient completed a similar questionnaire independently.
Results: Both patients and medical student perceived that medical ethical principles were complied with by the clinicians. However, there was 10 % discordance in overall perception between the two groups. In real terms, this meant greater patient confidence that medical ethical principles had been complied with during clinical consultations.
Conclusions: While the perceptions of both groups were close, patients' perceptions are possibly of more value than the medical students' as theirs are highly speculative involving attempted objective assessment of essentially highly subjective feelings. However, it is reassuring that clinicians unconsciously attempt to comply with to medical ethical principles during clinical consultations for termination of pregnancy.
Reference: Walker RM, Miles SH, Stocking CB, Siegler M. Physicians' and nurses' perceptions of ethics problems on general medical services. *J Gen.Intern.Med* 1991;6:424–429.

P121

Young people and consent – should competence be applied more consistently?

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Introduction: The issue of young people and consent is an area of particular concern to all who work in sexual health, as young people are having sex and wish to avoid the unwanted consequences, but do not always wish to involve or agree with their parent's views. There appear to be inconsistencies in UK law as it stands regarding the provision of consent by young people to medical procedures. These inconsistencies are particularly apparent in those young people who are just below the age of legal capacity. Young people below the age of 16 years who are deemed competent to consent to medical procedures and treatment are allowed to provide that consent, however, their choice may be overruled if they refuse a procedure. In other words, the level of competence required to refuse a procedure is higher than that required to consent.
Objectives: To look at the relevant case law from Gillick and beyond, through to more recent legislation and look at the impact this may have on future cases. To look at the guidelines set down by The British Medical Association and the General Medical Council. To evaluate the general conditions set down for the assessment of competence, with particular reference to the young person. To explore the ethical issues relevant to applying the level of competence more consistently. To offer a possible alternative to the current legal framework.
Methods: Literature review and critical evaluation of the legal cases commonly used as a benchmark in these situations.
Results: There is an inequality in the way competence to consent is applied in young people under the current legal framework. Previous case law lays down no precise guidance, and Mental Health legislation is a commonly used tool used to override a young person's decision. There are many problems associated with the assumption of competence based on age, as this ignores the fact that individuals develop at different rates. There are no standardised guidelines to follow when assessing competence in young people. It is ethically more acceptable that when conflict occurs, the views of the individual to whom the decision relates should take preference if they are competent.
Conclusion: Professionals working in sexual health have had some areas clarified, but will still encounter situations where they need to exercise judgement without clear guidance.

P122

Caesarian section: a privilege or a necessity?

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Introduction: In Turkey, caesarian section rates are increasing. The overall caesarian section rate increased from 5.7% in 1988 to 13.9% in 1998. In Turkey, caesarian section rates are higher for women of high socioeconomic level. While the WHO suggests an upper limit of 15 % for caesarian section rate, it is controversial that people spending more money to private sector in order to get quality care services take more risk. Or, more educated women take more risk when compared to uneducated women. The question is that: can the caesarian section be considered as a favour for high socio-economic-level women or as an inequality in health for the same group; or vice versa.
Aims and Methods: In this study we compared caesarian section rates of two different types of hospitals in order to find out the related factors. This descriptive study was conducted in a Governmental Hospital (GH) and in a University Hospital (UH). All the deliveries during one month period that occurred in these two hospitals were recruited into study. Data regarding indications for caesarian section and related factors were collected from hospital records. SPSS for windows was used for data analysis.
Results: Since we used hospital records, there was limited data about possible related factors. Therefore we used data of another study to compare two groups of women regarding their educational level. In the GH; 9.7% of women were uneducated where the majority of women were primary school graduates. In the UH, only 3% of women had no education while 58.2% had high school or university diploma. In GH more than half of the women had no health insurance. In the UH, caesarian section rate was 36.1 % while it was 28.8% in the GH and the difference was statistically significant. When we look at the indications, 26.7 % of the caesarian sections were elective in UH, while this figure was 11.8% in GH.
Conclusions: Factors affecting caesarian section should be further investigated with both qualitative and quantitative studies. This may help to solve this controversial situation.

P123

Confidentiality, sex and teenagers

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Introduction: There is opinion by some in society that children are being encouraged to keep their life secrets from their parents.
Aims and methods: To review the current UK law and ethical debate to test the question whether this is a recipe for disaster and harm is being done by doctors keeping the secrets.
Results: The autonomy of the patient is being eroded by the need to obtain information his/her medical treatment to improve the medical services. However the need to maintain privacy is important for the individual when seeking medical advice. The doctor is obliged to disclose information in certain circumstances but generally will only breach confidentiality if there is likely to be harm to a third person. Common law cases acknowledge that the sexual activity of an individual is the most secret part of his or her life. There are specific laws relating to sexual health that enable the patient to maintain their right to privacy in the sexual health consultation. Recent cases in relation to the human immunodeficiency virus are testing the duty of the doctor to report infection to the sexual partner against the wishes of the patient. The young person under sixteen has the same rights as the adult in seeking confidentiality if the young person is competent to understand the advice they are given. This right also applies to the sexual health consultation even if technically the young person is acting outside the law. The doctor will not only try to prevent the spread of infection to the sexual partner, but also has to weigh up any concerns about sexual abuse. The doctor will generally only disclose concerns to the appropriate authorities and not to the young person's parents. There is not much evidence that providing sexual health advice to those under sixteen is producing a benefit. The individual may be protected, but in general there is no overall improvement in the teenage pregnancy rates and there is an increase in sexually transmitted infection in this age group. Because it is difficult to get a conviction for under age sex, young people tend to disregard laws which, in general, are there to protect them as they develop into adults. Also the rights of privacy for young people may be in conflict with the rights of parents to have a private and family life. There is no law of privacy in the United Kingdom to give guidance in this area.
Conclusion: It would appear, therefore, that children are supported to keep areas of their life secret from their parents. The recipe for disaster is not for harm to the individual but harm to the family in society.

SESSION 7: GUIDELINES, PROTOCOL DEVELOPMENT AND IMPLEMENTATION

P124

Use of a national guidance document to audit quality of care in the first prescription of combined oral contraception

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Introduction: In 2003 the Faculty of Family Planning and Reproductive Health Care (FFPRHC) published evidence-based guidance for the first prescription of the combined oral contraceptive pill (COC). The guidance provides information to clinicians on steps to be taken before providing a woman with her first prescription of COC. It has 38 evidence based recommendations with a further 14 good practice points. Ten of these determine whether a patient is medically eligible to use the COC (eligibility recommendations) and 22 cover topics to be discussed with the patient (information and appropriate use recommendations). We undertook a study to investigate how the guidance could be used to test the quality of care relating to first pill prescribing and to what extent the recommendations are being met in a large family planning clinic in Edinburgh.
Methods: To investigate whether the recommendations relating to medical eligibility were being met 109 sets of case notes of new patients presenting to the clinic and prescribed the COC were scrutinised using a standard audit record sheet. To investigate whether the information recommendations had been met a questionnaire was designed to test a patients knowledge of the COC including risks, benefits and appropriate use. A doctor interviewed 50 women attending for repeat prescription of the COC.
Results: From the case note review 68% of patients were prescribed the type of pill recommended by the FFPRHC guidance for their initial COC. When patients were first prescribed the COC their blood pressure (BP) was recorded in the notes in 90% and the BMI in 59.6% of cases. From interview 72% of patients had been given supplementary written information; 92% knew that the COC increased their risk of venous thromboembolism (VTE); 24% knew it increased their risk of breast cancer. Knowledge of the health benefits of the pill was quite good.
Discussion: The tools we developed to test implementation of the guidance were not difficult or time consuming to use but are not perfect. Some of the FFPRHC recommendations are easier to audit than others. Despite the shortcomings of the tools, the clinic performance could improve.

P125

Evaluation of use of an audit tool for infection risk reduction in a community based sexual health centre

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Introduction: In recent years there has been an increase in the concern about the risks to health from receiving treatment and care. Infection Control is an important issue for NHSScotland both in terms of safety and wellbeing of patients and of the efficiency and effectiveness of the service.
Aim: To evaluate the use of an audit tool to minimise infection risk in a community clinic setting. The Sandyford Initiative is a community clinic specialising in sexual and reproductive health. It is part of the Greater Glasgow Primary Care Trust.
Method: As part of the process of ensuring that standards for healthcare associated infection (HAI) are met the audit tool has been developed by the primary care trust infection control nurses. The audit tool is a document which defines acceptable standards for a managed environment which mimises the risk of infection to patients and staff. The infection control audit tool has been used in Sandyford since May 2003.All clinical areas, toilets and staff facilities have been audited.
Results: The area where most improvement can be demonstrated is in the handwashing facilities section. 'Handwashing facilities' incorporates the appropriateness of fixtures, soap and solution dispensers, handwashing practice and the condition of immediate areas. A program for ongoing audit has been arranged in response to the findings and subsequent scoring in each area. This section is audited monthly, irrespective of the previous score. The initial score was 60%. This improved to 100% when the guidelines in the standard statement were followed. Raising awareness of hand hygiene practice through posters and training sessions has improved practice.
Conclusion: Improvement in control of infection has been demonstrated. To date more improvement in standards is seen in clinical practice than in cleaning standards. The audit is now ongoing and areas where improvement in cleanliness is required will be audited frequently until the standards are being maintained.

P126

Does liquid-based cytology improve smear-taking performance in an ordinary clinical setting?

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Liquid Based Cytology (LBC) has demonstrated its applicability to a national screening programme. In trial settings, there is a reduction in unsatisfactory smears compared with conventional cytology. This audit demonstrates the changes to cytology results shortly after the introduction of liquid-based cytology in a non-trial clinical setting in a busy sexual & reproductive health clinic. These results were consistent for individual smear takers, although numbers of smears taken in each time period were small for some staff.
This audit shows that expected changes to cytology results were obtained, and that staff did not require a long time to learn to take smears successfully using the new technique.

	Conventional Smears July–August	Liquid Based Cytology October–November
Total Number of Smears	497 (100%)	545 (100%)
Total Number Reported Negative (%)	437 (87.93)	439 (80.55)
Total Technically Unsatisfactory	35 (7.04)	9 (1.65)
Abnormal/unclassifiable	2 (0.4)	0
Mild Dyskaryosis	18 (3.62)	23 (4.22)
Moderate Dyskaryosis	5 (1.01)	9 (1.65)
Severe Dyskaryosis	3 (0.60)	3 (0.55)
Borderline Nuclear Abnormality	37 (7.44)	62 (11.37)

P127

The faculty of family planning and reproductive healthcare guidance on 12-month supply of the pill – is it happening?

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Objective: To identify whether the UK Faculty of Family Planning and Reproductive Healthcare (FFPRHC) guidance advising the provision of up to 12 months supply of oral hormonal contraception to women established on the pill, is being followed by providers in a central family planning service in Scotland.
Design: For a one-week period, all case records of patients who were attending for hormonal contraception were audited at the end of the clinic session. Staff were not informed of the audit. The woman's age, fertility intentions, duration of pill use, use of the same brand of pill and duration of supply of the pill that doctors prescribed for women were extracted from the notes.
Results: 104 sets of case notes were reviewed. 26 women (25%) were given twelve packets of pills. For these women the duration of use of current brand of pill ranged from 9 months to 10 years. None of them was starting oral contraception for the first time. 41 women (39%) received six packets of pills. Four of these women (9.7%) had a medical problem including raised B.P, history of migraine, or a problem with facial spots. 37 women (35%) received a three-month supply. 67% of these women (25) were starting this pill for the first time. For the others, the reasons for offering only 3 months supply included smoking over 20 cigarettes daily, breakthrough bleeding, significant weight gain. All women given only three months supply were invited for review before they had used their full supply.
Conclusions: Despite the UK FFPRHC guidance, only 25% of women are being supplied with 12 packets of oral contraception at routine follow-up. While there appear to be good clinical reasons in most cases for providing only three packets of pills, many women who are getting only six packets, could probably be given enough to last for one year. The results will be fed back to the clinic staff together with a reminder of the guidance and the audit will be repeated in six months time.

P128

Child protection in the family planning setting

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Introduction: Recent deaths from long-term child abuse in the U.K., highlighted the need to ensure a robust system, acceptable to clients and staff, for managing children perceived to be suffering, or at risk of, abuse. Our clinics provide open access, confidential contraceptive services to a population of 612,000 at 26 sites including 4 young people's clinics, with a total annual attendance of 59,000 of which 1,700 are <16yrs of age. If a minor discloses abuse, physical, sexual or other, our strict confidentiality rules must be broken and the case passed to the appropriate agencies. Luckily this is rare. However, much more often, the situation is not clearcut; we are worried about a young client's situation past, present or future, or a perceived risk to others, but do not feel that immediate referral is in their best interest.
Design & Methods: We developed procedures, in consultation with experts in the field, to enable these children to be monitored and supported. The case is discussed immediately with a senior clinician; the client is informed of our concerns, and reliable contact arrangements are made, eg mobile phone, school. Within 24hrs, a member of our in-house Child Protection Supervision Group (CPSG), of experienced nurses and doctors, will be consulted, also other agencies as necessary. All staff receive training to make them aware that children suffering, or at risk of, abuse may attend our clinics, and are informed of the new procedures with regular updating.
Results: The protocols are implemented when abuse is suspected. Each clinic site holds a Child Protection Folder containing instructions to staff, forms for detailing the concern and labels to be stapled to the inside of the case notes. Labelling the notes alerts staff to previous concern and ensures that these vulnerable clients are fast-tracked to consultation with a senior clinician at each visit. A copy of the case notes with a completed form is sent to the CPSG and securely filed when any necessary immediate action has been taken. Cases are reviewed quarterly until the young person is no longer a concern, or reaches 18yrs (19yrs if from vulnerable groups eg learning disabilities, looked-after children) and is passed to adult services.
Conclusions: Robust and acceptable child protection systems can be implemented within a confidential community family planning service.

P129

Promotion and prevention in the systems of health

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Ajaah-Togo, Lome, Togo

Integration of promotion and the medical prevention is very depending. The basic community, the district for example remains the ideal framework to ensure this integration which will cuts to support one associations of the Young people fighting for has better health. The state in this box will cuts to ensure coordination and the legal facility by creation of network gathering all the sectors so have to make practical all the medical decisions and programs decided At the bases within the framework of the national dialogues of medical policy. Does will this dialogue cut to gather all the components of the company and especially associations of defense and promotion of health such have for example, the Association of the People living room with the VIH/SIDA, the handicapped people, the diabetics. In medical shorts to allow the democracy to be real drunk without has participation of all in medical programs, any assured guarantee of success is not. Very of ten the populations remain refractory because of the taboos and prohibits received gold lived. Then it would be necessary that the state makes call at organizations gold associations for execution of the programs of health; what naturally full call adhesion the medical state must raise the secrecy and inform the populations one the epidemy risks. The recognition of the state one existence of the aids in the countries in africa was late. What increased the progression of the virus. Another example is the will cholera which prevails in hot period. The government of Togo always denied existence of this evil which however made devastations. stigmatization and discrimination its money current in our countries, we dont't want that for our Africa.

P130

Nurse-led appointment system

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Introduction: Abacus is a busy City Centre Clinic providing contraception, sexual and reproductive health services, which deals with 24,000 drop-in visits per year. The service is open six days and four evenings a week.All nurses can deal with uncomplicated consultations including starting and continuing pills and injectable contraceptives. Clients are seen in order of arrival and given the length of time they require, which can be anything from 5 minutes to an hour depending on their needs. Clients are mostly very happy with the service but we have had complaints from some, returning for repeat pills and injections with no problems, if they have to wait for a long time.
Aims and methods: To ease pressure on busy clinics and reduce client waiting times by providing a limited, nurse-led, appointment system to deal with repeat visits that can be predicted as being short. We designed a paper slip to give to established pills or injectable contraceptive users, with no problems. It gives their clinic identification number, the name of the last person they saw and the phone number to make appointments. These can only be made up to a week in advance. There are six slots of 15 minutes each between 9:00 am and 10:30 am on three mornings a week. These are currently the quietest clinic times. The staff was informed by notices in the rooms and the monthly newsletter in September 03.
Results: After a slow initial phase the service is proving successful and clients appreciate not having to wait to be seen in busier clinics. This is especially appreciated by women working in the city centre who find it difficult to justify a long absence from work but can arrange to arrive slightly late at work every few months.
Conclusion: It is possible to combine our ethos of open access and giving clients the time they need with an efficient service for people who lead busy lives and wish a quick appointment. As the system has only been in place a short time, the impact on waiting times in busier clinics is still being assessed. An audit will be carried out when the service has been in place 6 months.

P131

Further development of patient group directions for first time issue of hormonal contraception by nurses

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Introduction: For the past 10 years our service has actively encouraged and supported our trained family planning nurses to work to an extended role. The majority of nurses now issue first time and repeat hormonal contraception to clients without the need for the client to be seen by a doctor. Central to this way of working are the patient group directions (PGDs), a set of guidelines setting the parameters within which the nurse may work independently and highlighting issues which the nurse should discuss with a doctor before proceeding. A framework of casenote review, regular feedback and clinical update sessions as well as individual discussions with doctors provides ongoing support and development. Working to the PGDs has proven very acceptable to the nursing staff such that they have become highly competent in their extended role, so much so that most now feel that they are actually restricted by the PGDs and wish to develop further.
Objectives: We set out to review the current PGDs and identify areas where they could be improved to further enhance the extended role of the nurse.
Methods: Formal group discussions were held at regular update meetings to identify limitations within the current PGDs. Information was also gained from informal one to one discussions.
Results: The main issue identified centred on the 'out of licence' use of hormonal contraceptive preparations. Although such use is common practice in any modern contraceptive service it falls outside the nurses code of practice. After reviewing the legislative situation we felt that we could include a number of specific 'out of licence' uses within the PGDs thereby enabling the nurse to proceed without discussion with a doctor.
Conclusions: The updated PGDs have been completed and have been accepted and approved by the Primary Care Trust. Their continued use enables the service to function more efficiently helping staff to develop further and improve job satisfaction.

P132

A new approach towards an old problem. Combined oral contraceptives in uterine bleedings and dysmenorrhea in girls

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Combined oral contraceptives (COC) have been used in the practice of juvenile gynecology for many years. Most authors suggest using high-dose monophasic COC, 4 –6 pill per day. In such cases haemostatic dose often reaches 200 – 250 mcg EI per day. On the basis of our 8-years experience it was proved that in a whole good haemostasis was noted after 2 pills of high-dose COC (100 mcg EI), at the same time the use of a high dose of medicament caused marked side effects in the form of vomiting and sickness. After the bleeding has been arrested the patients as a rule used low-dose medicaments during 1–3 months. A control examination 3 – 6 months after the medicament withdrawal revealed preservation of cycle disorders in all patients. Hormonal haemostasis with a low-dose Regulon (ethinylestradiol 30 mcg, desogestrel 150 mcg) allowed not only to reduce haemostatic dose of oral contraceptives to 60–75mkg reducing the dosage but also to eliminate side effects in 95% of patients. Indications of pill every 4 hours and possibility to achieve haemostasis within 24–36 hours contributed to that fact. Regulon was further indicated for 3 – 6 months during that period a successful correction of somatic status and the coexisting endocrine and metabolic disorders caused by the forming syndrome of polycystic ovaries. Recurrence was found in 5% of patients. An important aspect of juvenile gynecology is also treatment of dysmenorrhea. Up to now there haven't been clear criteria for patients enrollment for gestagen and OC treatment. Our study demonstrated that there were clear criteria that allowed choosing hormonal effect. It turned out that for patients with severe course of the disease on the background of premenstrual ratio of estradiol and progesterone towards reducing progensteron on the background of normal or elevated estradiol level as well as parasymptomatic direction of tonus of vegetative nervous system the most of an effect could be achieved with low-dose OC: Novynette (ethtinylestradiol 20 mcg, desogestrel 150 mcg), Lindynette, logest (ethinylestradiol 20 mcg, gestoden 75 mcg). It is worth to note that COC are reliable preparations of choice for girls with dysmenorrhea having sexual life. The data demonstrate the possibility of good correction of the traditional methods of treatment of girls of pubertal age with more frequent diseases leading to frequent loss of working abilities and significant decrease of life quality.

P133

Standard practice preview – a way to solve the new problems in reproductive health services

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Aims: Reproductive health services often use guidelines in dealing with basic issues (contraceptive, sexually transmitted diseases, genital cancer, etc.). As the efficiency and quality of the services improve, the number of patients addressing the Centre increases and, as a result, the number of problems and situations which are not covered by the guidelines and which require periodical reviews also increase.
Tools and Methods: The solution adopted by the WWC Iasi was to perform a Practice Standard Review using the Learning Resource Centre (LRC). The algorithm for conducting the Practice Standard Review was (1) Identifying the problems by the members of the staff, establishing the research area (Cochrane, Ovid,Hinari); research for data in the available literature performed by the LRC coordinator and update of the bibliography; (2) Assembling information, identifying the efficient practices, choice of the less expensive solution; (3) Creation of the Practice Standard Review; the dissemination strategy, criteria for evaluating efficiency, staff compliance; (4) In some cases – pointing out the possibilities for financial intervention.
Conclusion: The Practice Standard Review was modelled following repeated modifications and it is not excessively thorough (in some cases, written Practice Standard Reviews may prove useful). No statistical results and no original research preformed within the institution are necessary. The review includes the entire evidence base published, critics, as well as conclusions and recommendations for practical implementation in our Centre. The Practice Standard Review is an efficient, flexible and achievable solution for medical practice and it is highly adapted to the needs of a reproductive health service.

P134

Monitoring the practice standard review efficiency

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Objective: To prove the efficiency of the practice standard review, by analysing the monitoring criteria for the practice standard review applied to infertility problems treated within the WWC Iasi.
Tools and method: Between 2000–2003 we conducted periodical practice standard reviews for various problems related to couple infertility (infertility with ovarian causes, male infertility, artificial insemination). We maintained the same efficiency monitoring criteria for each practice standard review we performed. These were: number of couples who addressed our service, number of couples with infertility from unidentified causes, number of pregnancies following infertility treatment. Our retrospective survey emphasises a progressive increase in the number of couples who addressed the services of the WWC Iasi (2001, 2002,2003). A decrease by in the number of cases of infertility from unidentified causes (from 53% to 16%). An increase by 9,27% of the number of pregnancies resulting from infertility treatment.
Conclusions: A thoroughly controlled practice standard review is the ideal method to ensure that medical practice is performed according to the latest evidence base. It is essential to encourage the staff to keep up to date with the latest evidence base in this domain. The question that remains is that of the balance between the need for autonomy of the staff and the need to control the practice standard reviews.

P136

Management of PID: are we getting it right?

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Objective: To establish from the Gynaecology Departments if women with suspected Pelvic inflammatory Disease (PID) are being managed appropriately.
Method: The Junior Doctor on call for Gynaecology in all the hospitals in the Northwest region of England and North Wales was interviewed by telephone. This was a structured interview using a questionnaire.
Results: All the doctors interviewed routinely took a high vaginal swab (HVS) for culture and sensitivity and an endocervical swab for Chlamydia (CtS). Only 45% of the doctors used the correct technique of taking the endocervical swab. 34% of the doctors took a second endocervical swab for gonorrhoea in charcoal medium. Out of office hours, 21% of doctors stored all the swabs at room temperature, 38% stored them in the refrigerator and 41% did not know how they were stored in their hospital. The choice and duration of antibiotic treatment varied greatly from hospital to hospital. It was the policy in 21% of the units to refer all women with suspected PID to the Genito Urinary Medicine (GUM) clinic, whereas 55% of the units referred only those women with a positive test result.
Conclusion: This study suggests deficiencies in the management of women with suspected PID in the hospital setting in the region surveyed. It is essential that protocols for diagnostic tests, treatment and follow-up including referral to GUM clinic (for screening sexually transmitted infections and sexual contact tracing) are drawn up according to the National Guidelines. Adherence to protocols may avoid serious sequelae such as infertility, chronic pelvic pain and ectopic pregnancy.

SESSION 8: IMPROVING ACCESS TO SERVICES

P137

Sexual and reproductive health – what do men know and want?

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Introduction: In Scotland men make little use of sexual and reproductive health (S&RH) services. While women are seen as having rights of choice about reproductive healthcare, men have responsibilities. This argues in favour of addressing men's sexual health needs and reviewing key issues of service delivery. If we wish to have a holistic approach to S&RH there is a need to include and involve men. With this in mind we undertook a pilot study to determine the need for an all-encompassing S&RH service for men in Edinburgh, Scotland, and consumer preference for type of service delivery.
Methods: A self-administered questionnaire was distributed to a sample of men attending a genito-urinary medicine clinic (n=127), a variety of cafes and a cinema (n=143)and to men attending a family planning clinic (n=110). Men were asked questions designed to assess their level of knowledge, use of services and preference for service design.
Results: 95% of men completed the questionnaire. The main source of information about S&RH was school or friends but not health professionals. Knowledge regarding the definition of safe sex was rather poor (28%). 73% of men who had sex with women said they would use a condom in a new relationship. Whilst 84% of men who had sex with men said they would use a condom for anal sex in a new relationship. only 16% said they would for oral sex. The men wanted a confidential, knowledgeable service and ease of access was not an issue. The main areas of interest were safer sex issues and male contraception. The overall preference was for provision of services by their family doctor. While 78% of men felt that group education should be offered only 13% wished to access such a service.
Conclusion: Men require more education about S&RH. They are keen to access services and are quite specific as to the types of services and mode of delivery preferred. Whilst better services and access are required for men, the need for education is far greater and unless men's knowledge base is improved then regardless of service availability many men will remain unaware of their need to access these services.

P138

Moving towards patient and public involvement within a nurse-led sterilization service

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Introduction: A nurse led sterilization clinic was piloted collaboratively between Hull and East Yorkshire Women's and Children's Services, Hull and East Riding Community Health Family Planning/ Community Gynaecology and the Booked Admissions Project.
Aim: To provide a more easily accessible and specialised service which treated sterilization as a contraceptive option amongst others within family planning, taking into account other health benefits of reversible alternative contraceptive options.
Design and Method: A consultant led pilot, based in a Community Gynaecology and Family Planning Clinic, run by a family planning nurse with a gynecological background using a care pathway. In the pilot, women who meet the criteria for the nurse led clinic are asked to contact the booking office for an appointment on a date to suit. They are sent written information. They are seen by the nurse and explore all contraceptive options. If they proceed with sterilization the patient books a bed on the day and date of choice. If an alterative method is chosen, access to that service is arranged. A sample of patients from the pilot and 20 from the routine service were identified. Experiences were compared through a patient questionnaire on information given and views of the service. Documentation in case notes was audited using RCOG standards.
Results: Presently awaiting results of the Audit. Evaluation suggests the service is perceived as a positive development by both staff and patients.
Conclusions: It was identified that many women were still unaware of alternative reversible long term methods of contraception as well as risks and efficacy of sterilization. Therefore accurate information giving on sterilization and all contraceptive options is essential. Easy access to alternative methods chosen is also an important part of the service.

P139

Teenagers' use of sexual health services: perceived need, knowledge and ability to access

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Introduction: An individual teenager's use of services may depend on perceived need; on knowledge of sexual health and local services; and on ability to access. This paper presents the first UK large-scale quantitative analysis of these factors, comparing those who use services with those who do not.
Methods: 15/16 year olds were questioned about their use of sexual health services in the *SHARE* trial of a school sex education programme in 25 schools in Lothian and Tayside, Scotland (N=5,747). Multilevel statistical models examined the role of different factors in shaping patterns of service use.
Results: A third of teenagers had used a service, and use was strongly related to sexual experience. In addition, some family influences and being a school leaver were associated with service use, although we found no evidence for class, ethnic or religious barriers to use. Proximity to specialist clinics was linked with greater use, while low spending money and high parental monitoring were associated with less use. Teenagers with better knowledge, who rated their school sex education as effective, who were comfortable talking about sex and who had discussed contraception with peers were more likely to have used services. Differences in use related to sexual experience, knowledge, feeling comfortable talking about sex and talking with peers helped to explain gender differences in service uptake.
Conclusions: There is potential to influence service use through better knowledge and confidence imparted through school sex education, and by improving the links between services and schools.

P140

Partnership working: the key to improving access to a more holistic sexual health service in South London

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Introduction: Lewisham has an ethnically diverse population with significant levels of deprivation and very high rates of fertility, abortion and sexually transmitted infections (STI).
Aim and Methods: To examine the effect of partnership working on three recent local initiatives designed to improve access to a more holistic sexual health service. 1. Improving access to community sexual health services by young people. In 1999 Waldron family planning clinic (FPC) in Deptford extended its opening hours and adopted an open access ''walk-in'' system. This was combined with a targeted outreach programme, which included developing close links between the clinic and local schools, youth services, social services and voluntary sector organisations. 2. Improving access to Emergency Hormonal Contraception (EHC) by making it available through community pharmacies. In 2000 pharmacists in Lewisham, Southwark and Lambeth, working with the Health Action Zone (HAZ) and the local community sexual health department, were one of the first services to supply EHC under patient group directions. 3. Improving access to STI treatment by providing a community based service for the management of uncomplicated genital infections. In 2001 Lewisham Primary Care Trust (PCT) supported the development of the existing STI testing service in Lewisham FPCs to include treatment and client led partner notification.
Results: 1. Improving access to community sexual health services by young people. The number of new clients under 16 years increased by 12 fold in the first 18 months. The number of young people citing a school education class as their source of information about the clinics increased by more than 5 fold. 2. Emergency Hormonal Contraception (EHC) provision by local pharmacists. 4,164 women were supplied with EHC in 2002/3 and 98% of service users indicated that they were satisfied with the manner in which the pharmacist dealt with their enquiry. Over 70% of women accessed the pharmacy service within 24 hours of unprotected intercourse, significantly higher than equivalent figures from General Practice or FP services. 3. Providing a community based service for the management of uncomplicated genital infections. In 2001/2 Lewisham FPCs treated 648 STI. At Waldron FPC the incidence of chlamydia in the population tested rose from 6.9% to 10.3%. 84% of clients with chlamydia received treatment compared to 52% when clients had to be referred to genitourinary medicine clinics (GUM). The median time from test to treatment fell to 14 days from 19 days when clients had to attend GUM for treatment.
Conclusion: Partnership working amongst local stakeholders is key to developing an easily accessible, innovative, high quality and ultimately more holistic sexual health service in Lewisham.

P141

The Sandyford Initiative Sexual and Reproductive Health Service, Glasgow telephone helpline: improving access to sexual and reproductive health services

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Introduction: Funding was allocated in the 2000/01 Health Improvement Programme budget to provide a dedicated telephone helpline for healthcare professionals to support sexual and reproductive health management in community settings. Previously all client and professional calls were taken randomly by clinicians working in busy clinics. Because of the volume of calls this led to delays in clients attending the clinic being seen.
Method: The project was piloted in one Local Healthcare Co-operative before the service was implemented to all healthcare providers in Glasgow. Subscribers were actively recruited by providing initial information about the new service with an invitation to subscribe and participate in the evaluation of the service by completing a survey or taking part in short 1-1 interviews. Subscribers consisted of General Practitioners, practice/hospital nurses, health visitors, midwives, social workers, carers and support workers, children's support workers and pharmacists.
Results: 60% of subscribers returned the survey. 3 participated in interviews. Preliminary evaluation showed that subscribers were comfortable with specialist nurses dealing with enquiries, almost all enquiries were dealt with immediately, rapid return of call if medical advice was required and satisfaction with ability to provide rapid referral for clients with most problems. Many professionals felt that a dedicated client helpline would be valuable. Training needs for helpline staff would have to be met.
Conclusion: The results demonstrated the value of a dedicated telephone helpline for professionals. In response to demand further funding was sought to expand the helpline to enable it to provide immediate access for clients, as well as professionals, to evidence based information, advice and counselling on all aspects of sexual, reproductive and emotional health. Clients would also be able to access test results. Today the helpline is staffed weekdays, business hours, by a team of trained, experienced nurses who receive around 900 calls per month. Approximately 40% of total calls are for test results.

P142

Health and lifestyles of family planning attenders in Glasgow – why a holistic approach is necessary

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Background: It is well recognised that poverty adversely affects health and wellbeing. Glasgow City contains 75% of the most deprived postcode sectors in Scotland and has one of the poorest health records in Western Europe. 67% of the community based family planning clinics in Glasgow are based in these areas of severe deprivation. It is therefore assumed that clients attending these clinics will have greater health and social needs than those attending clinics in less deprived areas.
Aims: To ascertain information on the health, social circumstances and lifestyles of family planning attenders in Glasgow in order to identify health and social needs with a view to improving service provision and providing a social model of health care to all clients.
Method: A self-administered questionnaire was offered to all clients attending the community based clinics and a smaller number attending the central city based clinic over a one-week period in 2002.
Results: Questionnaires were completed by 624 clients of whom 580 attended the community clinics (response rate 89%). The majority of clients were female, Caucasian, under the age of 35 (73%) and unmarried (68%). The majority had children (52%) and 19% lived alone with their children. Several areas of health need were identified: Smoking: 43% of clients smoke, domestic abuse: 16% of clients had experienced domestic abuse and 61% of those had never sought help, debt: 27% of all clients had concerns regarding debt, mental health: 33% of clients had attended their GP with anxiety or depression and 9% were currently taking antidepressants and weight: 51% were unhappy with their weight with 88% of these clients considering themselves overweight. Some clinics demonstrated considerably higher prevalences of smoking, domestic abuse and anxiety/depression than the average.
Conclusions: This study demonstrates that there are clearly unmet health and social needs among women attending family planning clinics in Glasgow. We must attempt to address these issues as they will impact on clients' sense of wellbeing and ultimately their sexual health. This has implications for the appropriate targeting of resources and the appropriate training of staff to enable them to confidently address these issues.

P143

Improving access – reaching out with a ''Clinic in a Box''

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Introduction: How one small NorthWest London Hospital Trust's Family Planning and Reproductive Health Service has developed an outreach service.
Method: Imaginative and prudent use of funding combined with extended nurse prescribing and pro-active liaison has led to satellite/link and signpost nurse-led services, taking a ''Clinic in a Box'' directly into schools, colleges, young parents, and hard-to-reach and at-risk young people groups, thus improving access to contraceptive services, advice and information.
Conclusion: The poster will show how the success of the pilot ''Clinic in a Box'' project within the teenage parent group (63% now using long-term contraception) has provided a framework to expand and develop the outreach service within Harrow.

P144

Interval versus postabortive counseling: demographic characteristics and effect of reproductive desire on method selection (14332 cases)

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Objective: To compare the demographic characteristics, reproductive desire and selected contraceptive methods of cases who had applied to our clinics in interval period and for uterine evacuation of pregnancy.
Materials and Methods: 8308 cases who had applied to our clinic for contraceptive method application in interval period and contraceptive method applied 6024 cases after uterine evacuation in between 01.01.1999 and 31.07.2003 were enrolled into the study. Demographic characteristics like age, education status, number of alive children and former contraceptive methods of the cases were recorded. Reproductive desire of the cases were evaluated. Contraceptive methods of both groups selected after counseling were analysed. Statistical data were evaluated with chi-square test.
Results: Fiftysix percent of the applicants were graduates of primary school (This rate was 59% in the uterine evacuation group and 54% in interval group). 50% of the cases were in between 21–31 years of age (52% of the uterine evacuation group and 50% of the interval group). Cases older than 43 years were 9% of the interval group and 3% of the postabortive group. 41% of the cases had 2 children, 28% of the cases with 1 child and 20% of the cases had 3 children. 63% of the cases had no desire for more children (This rate was 66% in uterine evacuation group and 16% in interval group). The rates of the selected contraceptive methods of 14332 cases were as follows: intrauterine device (IUD) 49%, oral contraceptive (OC) 28%, Depotmedroxyprogesterone acetate (DMPA) 10%, surgical sterilization 6%, monthly injection 5% and vasectomy 2%. These rates were 58% IUD, 22% OC, 7% DMPA, 7% monthly injection and 6% surgical sterilization after the uterine evacuations. 49.4% of primary school graduates preferred IUD, 26.7% preferred OC, 11% preferred DMPA, 6.4% preferred surgical sterilization (tubal ligation), 4.9% preferred monthly injection and 1.3% preferred vasectomy. These rates were IUD in 45.1%, OC in 34.3%, DMPA in 9.8%, monthly injection in 5.7%, surgical sterilization (tubal ligation) in 3.9% , vasectomy in 0.8% of high-school graduates. IUD was the most preferred contraceptive method among all of the age groups with a rate over 50%. Fiftyone percent of the surgical sterilization applied cases had three or more children, 38% had 2 children and 2% had one child. 52.6% of 3095 cases with no previous contraceptive method preferred IUD and 21.3% preferred OC. 58.6% of the 3800 cases using coitus interreptus as contraceptive method preferred IUD and 19.2% preferred OC. 49.4% of the 1834 cases using IUD as contraceptive method preferred IUD and 27.3% preferred OC. 15.5% of the 1830 cases using OC as contraceptive method preferred OC again. IUD, OC, DMPA and monthly injection were chosen by 3050 cases (who desire children after 2 years) with rates of 49.7%, 32.5%, 12.2% and 5.5%, respectively.
Conclusions: Socio-cultural levels of the cases applied for uterine evacuation were observed to be lower. Post-abortive counseling was found to be effective in method selection. The most frequently chosen contraceptive method was found to be IUD, whereas oral contraceptives and monthly injections were preferred more frequently than the other groups in group with high education level.

P145

'Youth-friendly' health services

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Introduction: Since the International Conference on Population and Development in 1994, there has been an upsurge in efforts to provide appropriate sexual and reproductive health services to young people. These new initiatives have been developed in response to the evidence that young people often feel unwelcomed at traditional family planning or reproductive health clinics, combined with an increased awareness of the special needs and rights of youth in the area of sexual and reproductive health. To overcome these obstacles the Division of Family Planning of the 2nd Dept of Ob/Gyn. University of Athens ''Aretaieion Hospital'' use a model programme so as to provide ''youth-friendly services'' based on evidence documenting what young people want. The services that the Division of Family Planning provide are the following: programs in the Greek islands distributing informative booklets with condoms. These were realised in 3 islands, and were distributed 4000 informative booklets. The phrase that characterizes these programs is the ''Youth to Youth''.Speeches in schools, high school and middle school with subjects of sexual and reproductive health. Each year speeches in over 40 schools in all Greece, in over 3000 students are given. Each year is realised an educational seminar which follows 2 seminar circles. The seminar is watched annually from 200–300 professionals of health. Organises speeches in provincial cities in collaboration with other Family Planning clinics, pharmaceutical and medical associations, with subject ''The Sexual health and contraception'' Over 10 speeches annually. Informative events in world days as the day of AIDS distributing informative booklets in collaboration with the Youth Team of the Hellenic Family Planning Association. Answers in questions of public on issues of sexual and reproductive health via the hot-line that functions in the department. The feedback of these services is the increase of calls in the department and the increase of visits in the department at 10% concerning the previous years.
Conclusion: Providing ''youth-friendly services'' we create a powerful link between the professionals of health and the young people. Investing in adolescents health and rights will yield large benefits for generations to come.

P146

Does nurse prescribing improve younger clients' access to contraception?

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Introduction: The Harrow family planning service has had a nurse specialist (NS) working as an independent prescriber since January 2003, a second nurse started in September 2003. Both prescribe within their own NS clinics as well as during doctor (Dr) led sessions. The Nurse-led clinics are aimed at helping to increase access for clients of all ages, but especially for the teenage population who tend to be erratic and spontaneous users. This audit looks at nurse prescribing patterns over a 3-month period (September –December 2003) and compares it with the general prescribing in the other sessions during the same period.
Result: Initial results found prescribing between the types of contraception differed very little between NS and Dr clinics. Predictably the combined oral contraceptive pill was the most prescribed for both groups, 71% for NS and 79% for Doctors. Where prescribing patterns differed was within the age ranges of clients, with the NS clinics seeing twice as many women between 16–24 year olds.

P147

The development of a care package for clients with a learning disability accessing contraception and reproductive health services

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Introduction: Clinical staff had reported concerns when dealing with clients with a learning disability (LD). The identified issues related to the client's capacity to consent to contraception, breast and cervical screening and the ability to obtain an accurate history from the client/carer. When a history and/or consent were not obtained, the consultation could go no further and clinical staff believed the health care needs of these clients were not being met.
Aims & Method: The goal was to develop a care package appropriate to the diverse needs of these clients, ensuring that they were provided with the same rights of access as all other service users. From February 2003, multi-disciplinary meetings were held to identify options for the new care package. Several issues were raised including, barriers to access, communication, provision of an adequate support network and promotion of the new development to all clinicians throughout the city. Five areas were developed.
Results: 1. Referral/assessment forms were designed to ensure an appropriate medical, social and sexual history could be obtained with particular emphasis on assessing client communication methods. 2. An aid to assessment of the client's competency to consent and in particular, identify whether preparatory work/education would be beneficial. If the latter was requested, the option of providing this service at home would be feasible via referral to the Domiciliary team. If consent and preparatory work were both declined an option would be given for follow up at a later date. 3. A guide for good practice in assessing the client's capacity to consent was developed and was included in the package for reference purposes. 4. Several information booklets were obtained for inclusion in the LD package: these booklets were specifically developed for women with LD's by People First (Liverpool), who themselves have LD's. 5. Instructions for the new proposal were drafted to aid clinicians in the use of the new package. 6. The final LD package was agreed in November 2003 and is now being piloted for a 12-month trail period, from January 2004.
Conclusion: Multidisciplinary working has led to a package which enables staff to feel more confident in carrying out consultations with clients with LD's and these client's are more confident to access health services.

P148

The effect of pre-examination information on the anxiety level for the gynecologic examination

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Objective: A cross-sectional study was performed to investigate the difference of level of anxiety between the pre-informed and uninformed patients on the gynecologic examination.
Design & Methods: 120 cases who applied the gynecology polyclinic of Department of Gynecology and Obstetrics of Cerrahpaşa School of Medicine, Istanbul University were randomly selected. 60 cases were informed about the scope of the gynecologic examination in a standardized manner and the 60 were examined without any information. After the examination, State-Trait Anxiety Inventory was applied on the subjects. The data were analyzed by 2 and Student's t-test. $P < 0.05$ was accepted as statistically significant.
Results: The difference of state and trait anxiety levels was not found statistically significant between the pre-informed and uninformed groups. The mean of state anxiety was 45.5 ± 10.7 in the pre-informed group while it was 44.9 ± 10.2 for the uninformed group. Pre-information just before the examination was not sufficient to decrease the anxiety levels of the cases due the gynecologic examination.
Conclusion: Most of the patients want to be informed by a health personnel. However, as the pre-information just before the examination is not sufficient to diminish the anxiety levels of the patients, they should be ''educated'' extensively long before the examination to succeed this goal.

P149

A systematic review of research on young women's uptake, choice, and discontinuation of contraceptives: descriptive mapping

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Objectives: Improving the reproductive health of sexually active young women requires access to and appropriate use of safe and effective methods of fertility control. The aim of this review is to produce a synthesis of research evidence on the factors related to the uptake, choice, and discontinuation of contraceptives among young women.
Design & Methods: A systematic review was carried out to synthesise evidence on the effectiveness of interventions to increase contraceptive use, and young women's own views about contraceptive uptake, choice and discontinuation. Data from systematic reviews, outcome evaluations, and non-intervention research, including quantitative cross-sectional studies, longitudinal studies and qualitative studies are included. In the descriptive mapping stage relevant research from 1970–2003 will be identified and described. Twenty-two electronic bibliographic databases, 7 key journals, and the citations of relevant papers were searched.
Results: 16041 potentially relevant papers were identified and screened for retrieval. Of these, 11048 were excluded due to irrelevant focus, topic, population or study type. Further screening is currently underway. The mapping process allows the range of research relevant to the topic area to be described using broad classification terms: study type, country range, populations, study focus and investigated factors, research designs and methodological attributes. Studies will be classified according to the research design used, and the inclusion or exclusion of key methodological information, for example, the presence and comparability of control groups, the reporting of sample size, sample demographics, response rates, and characteristics of non-responders. The psychological, physical, family, interpersonal and socio-cultural factors affecting the uptake, choice and discontinuation of contraceptive methods among young women, and what they think should be done to increase contraceptive use and reduce discontinuation will be identified. The factors interventions have addressed will be identified and interventions that have been effective in increasing contraceptive use and reducing discontinuation will be highlighted. The process and the results of the descriptive mapping will be presented, demonstrating the range, nature and content of the reviewed research.
Conclusions: The descriptive mapping stage of the systematic review will provide a comprehensive guide to the literature in the field, ensures the inclusion of a wide range of research and allows gaps in intervention studies to be identified. This will provide researchers, policy-makers and practitioners with a comprehensive guide to the evidence to aid the future development of research, policy and practice, and of more effective interventions.

P150

Internet counseling on contraception by the Study Group for Contraception in Korea

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Objective: To introduce 4 years of data collected from an internet website on contraception counseling by obstetricians of the Study Group for Contraception.
Methods: The cumulated data, including number of visitors, page views, utilization of contraception contents, on-line counseling and its contents from the internet home page, www.piim.or.kr, owned and operated by the Study Group for Contraception in Korea from March 1999 to December 2002, was analyzed.
Results: The number of visitors to the homepage grew tremendously from 129,769 in 1999 to 1,537,751 in 2002. Also, the number of page views increased from 1,556,877 in 1999 to 9,957,462 in 2002. The most frequently visited topic was general information on contraception; whereas the second most frequently visited was the on-line counseling site. The number of counseling requests ranged from 300 to 700 each month. The three most frequently asked questions were related to oral contraceptives, emergency contraception, and pregnancy probability, respectively. The questions in relation to oral contraceptives increased annually from 9.8% in 1999 to 33.3% in 2002; it could show the changing trend of oral contraceptive use. Questions in relation to oral contraceptives were on methods of administration and dosage (25%), side effects (23%), indications (11%), contraindications (8%), non-contraceptive use (9%), missed doses (8%), and other (6%).
Conclusion: This study indicates that the investigated website has been providing appropriate knowledge and information on contraception and has proven itself to be an effective communication tool to further enhance understanding of contraception in Korea via its user-friendly approach. However, the on-line website limits certain communication, such as improper delivery of information by unauthorized on-line users. We also need to make it even more user-friendly and attractive to young people in their teens and twenties. These kind of people especially do not frequent hospitals, do need this kind of information and do surf the net all the time. Hence, this kind of counseling website has much potential.

P151

Warts and all! A review of specialist sexual health services for young people

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A review of specialist sexual health services for young people was carried out in Lothian as part of Healthy Respect, the National Demonstration Project focussing on the sexual health needs of young people.
Objectives: to find out from service providers more about who uses specialist or targeted young people's sexual health services in Lothian; to find out from young people aged 13 – 16 what their perceptions of sexual health services are, how they find out about them and what they want in terms of provision; to find out from young people aged 13 – 25 who use specialist sexual health services when, how and why they engage with services, what they think about the services they use and how they would like them to change.
Methods: A range of approaches were used including on line and self completion questionnaires for young people, group work with young people, one to one interviews with young people and asking for information from service providers regarding their service and service users.
Results: 378 young people and 11 service providers responded. The review has highlighted some key lessons from both service providers and young people, which will influence future sexual health services planning.
Conclusion: Healthy Respect embraces the recommendations suggested within the review and is keen to support those working in specialist sexual health services for young people to develop a young person friendly service. This presentation will provide recommendations on how to do this.

P152

The exponential benefits of taking sexual health services out of the clinic and into sex working communities using a 'needs-led' approach to overcome the stigma barrier

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Introduction: In April 2001 a Nurse Practitioner was tasked to pilot contact with sex trade workers (STWs) in response to the steep rise in levels of syphilis, gonorrhoea (including ciprofloxacin resistant) and chlamydia. It was believed that there was a link between clients attending the genitourinary medicine (GUM) clinic with resistant gonorrhoea and STWs.
Aims and Methods: Most STW take pride in working safely but don't always realise some of the dangers (infection risk due to oral sex). Due to stigma and other issues which STWs often have (insecure accommodation, substance misuse, criminal justice, histories of abuse) they have felt alienated from health services in general and particularly GUM with its invasive questioning about partners and lifestyles. The Practitioner forged working relations with a number of agencies: Portside, working with sauna based STWs; Safe in the City, working with young male STWs; The Linx Project, working with female street STWs. Through ''cold-calling'', she linked to escort agencies whose positive response has led to regular input at agency get-togethers – sexual health is now a priority in their service delivery. Street STWs and young male STWs proved the hardest to link into services which led to a clinic being piloted at The Linx Project, delivered with the assistance of a local FP&RHC Consultant and further contacts developing with a young man's hostel and a homeless Drop In.
Results: Outreach to STWs on their own ground is followed by fast-track appointments at GUM for both STWs and their partners (some of whom are unaware that they are being fast tracked as they do not know their partner is sex working). The Practitioner sees them from initial assessment, through testing to results and treatment. In 2001–02 there were 16 new presentations at the GUM and 8 reregistrations, in 2002–03 46 and 41 respectively. The non-judgemental approach of the Practitioner has led to requests for help with other issues (hepatitis B and C, contraception, general health). The pilot has been extended and the post is now permanent.
Conclusions: Having a dedicated Practitioner based in GUM but accessing the client group on its own territory can lead to greater health benefits than just the detection and treatment of STIs. A sensitive, aware and needs led outreach approach has resulted in greater take up of services by individuals and their partners.

P153

Importance and feasibility of holistic sexual health care in primary and tertiary care setting in London

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Introduction: Unwanted pregnancy, contraceptive and sexual health related problems constitute a significant cause of sexual morbidity, especially in young subjects in the UK. This is at least, partly due to lack of integrated care provided by the clinicians responsible for the care of these patients.
Aims of study: To test the hypothesis that holistic care implemented by a multidisciplinary team of clinicians interfacing between primary, secondary and tertiary setting can improve the total contraceptive, reproductive and sexual care of young patients
Patients and Methods: We undertook an observational case control study in a small cohort of 10 clients in 3 geographic areas in West London involving 3 centres. Five clients of the received holistic care (group A), whereas another 5 recruited from other two centres (Group B) received sexual and reproductive care by the community family planning in a primary care setting.
Results: Group B patients had more sexual morbidity compared to Group A. This was due to inconvenience experienced during referrals to different disciplines at distant sites leading to delays with consequent losses in follow up. Failure of the contraceptive clinics to meet the needs of male clients, absence of opportunistic screening, failure in implementation of STI screening or antibiotic cover in clients requesting TOP. These problems were obviated in Group A due to comprehensive work up and holistic care offered by the multidisciplinary team. This small cohort study suggest that holistic care provision yielded a better patient satisfaction, improved risk awareness, increased uptake of screening, earlier diagnosis and treatment, better contraceptive compliance and concordance and decreased sexual morbidity.
Conclusion: Our results show that holistic sexual care offered by a multidisciplinary team of clinicians interfacing between the primary, secondary and tertiary care setting can improve the efficacy of reproductive and sexual health care of young adults in London.

P154

The patient–service provider interface

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The aim of this paper is to identify the apparently minor deficiencies which, cumulated, are the cause of an important number of unfinished or failed examinations.
Tools and method: From patients with undesired pregnancies between 2002–2003, we selected a sample of 215 women that had received correct contraceptive information, were aware of its benefits, as well as the location and method of obtaining family planning services, and who trusted the quality of these services but which nevertheless had experienced a failed contraceptive examination. Our survey aimed at identifying the reasons for this failure.
The results were as follows: lack of the possibility to make an appointment (22%), long waiting period (23%), limited waiting period (26%), lack of facilities (14%), deficient verbal and eye contact (10%), lack of intimacy (5%).
Conclusions: All these apparently minor elements that explain the failure of a contraceptive examination, create a whole that plays the role of a synapse between the educated beneficiary and the efficient service provider. By modelling this interface one can bring important corrections to the contraceptive result and the value of the service provider can thus be increased.

P155

Educated teenager – educated mother – educated grandmother

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Aim: Medical information proves useful not only during women's sexually active period, but also at menopause. The present paper analyses the existing correlations between the level of medical information and the tendency to address a menopause service.
Tools and method: The questionnaire we used had two parts: the former was a quantitative approach to the person's medical education at various stages of her life (adolescence, sexual activity, menopause) while the latter covered the person's tendency to address specialised menopause services. Among the patients who accepted to take the survey we selected 196 females aged 45 to 57. We noticed that those with a high level of medical information at menopause and an increased tendency to address specialised services had received some kind of contraceptive education as teenagers (17.34%). 18.36 % never addressed a menopause service; this category includes those with insufficient education both during their sexually active period and at menopause and no education whatsoever as teenagers.48.46 % did not address a specialised menopause service although they disposed of a satisfactory level of medical information; this education however dates from the sexual activity period. These women had been provided with no information during their adolescence.
Conclusion: The results of our survey prove that raising contraceptive awareness among women at the early stages of their sexual life (that is at adolescence) will have favourable repercussions on the later stages of their life. Informed teenagers thus tend to become informed menopause women, that regularly address their specialised menopause service.

P156

Assessment of contraceptive services in a maternity unit of a district general hospital in the UK

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Introduction: Contraception should ideally be discussed during antenatal period and after delivery sufficient time should be given to enable women to make informed decisions regarding future contraception. The professional delivering the advice should have adequate training in Family Planning.
Objective:To assess contraceptive services provided to women delivering in a district general hospital in UK
Design & Methodology: A Questionnaire study was undertaken to assess the quality of contraceptive services received by women delivering in Arrowe Park Hospital between July 99 to October 99. During the same period, a second Questionnaire was given to 67 midwifes to find their views on their contraceptive training and services.
Results: 87 women returned the questionnaire. 28% reported having some discussion on contraception during antenatal period. All 87 (100%) received contraceptive advises during the postpartum period. 74(81%) of women felt that sufficient information and enough time was given to discuss contraception. However analysis of questionnaires indicated that most received information only on barrier method and pills. Contraceptive leaflets were given to 45 (51.7%) women and 61(70.11%) women received the information on where to obtain contraceptive services after leaving the hospital.
Out of 64 midwives surveyed, 52 (81.2%)had attended a family planning course.
However 37 (57.4%) of them had attended the course at least 3 years earlier. 38 (59.3%) midwives felt that they have adequate knowledge to give advice but all of them reported that they should receive further training/update in family planning.
Conclusion:There should be provision for comprehensive discussion regarding contraceptive options during both antenatal and postpartum periods. Midwives require regular training in family planning.

P157

A nurse-led clinic for the insertion of intrauterine devices: a template for training

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Introduction: The role of nurses in the provision of contraceptive services in the UK and elsewhere is under constant review. Nurse specialists are being trained to take a lead in a number of clinical tasks that previously were predominantly the responsibility of their medically qualified colleagues. The acceptability and high clinical standard associated with nurse-led provision of intrauterine devices (IUD) has been demonstrated previously. In 2003 the Royal College of Nursing (RCN) produced training guidance for nurses wanting to fit IUDs. Encouraged by our own experience with this we initiated training, which follows RCN guidelines
Aims and Methods: To show how the RCN guidance for training can be implemented in UK practice to ensure that nurses are appropriately trained to offer a quality IUD service.
Results: At the Margaret Pyke, of 448 devices inserted by nurses, 292 (65 percent) were copper IUDs and 146 (32.6 percent) were Mirena® intrauterine systems. We will present details of our theoretical and practical training programme, which is based on the RCN guidance, and how this and a nurse led service were implemented.
Conclusions: A nurse-led IUD clinic proves a useful development in the provision of contraceptive services. Our experience shows that it is clinically safe and meets with a high degree of patient satisfaction.

P158

Hormonal contraceptive methods using or not using in Iran

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Objectives: Over the last four decades, using of contraceptives has increased in worldwide, particularly in developing countries. Traditional method is one of the most common contraceptive methods among couples. The hormonal methods side effects are the reasons of most couple for not using them. It was a community based, cross – sectioned analytic study, which has done in 4 provinces of Iran (Golestan, Bushehr, Kordestan and Tehran). By using systematic randomized sampling method, 200 clusters including 20 families (100 urban & 100 rural clusters), has been chosen.5900, 10–49 y/o married women participated and interviewed. Data by SPSS software was analyzed. Using tests were such as chi-square, spearman & so on.
Results: About 38% of eligible women used one of hormonal methods (Norplant, Minipill, OCPs and DMPA). The highest rate of using method was related to OCPs (94%). The most common side effect along OCPs in 1/3 of participants was emotional changing such as depression, nervousness that has been reported. The other most common ones were menstrual irregularities such as spotting, or amenorrhea. In spite of mentioned side effects, their reason for hormonal method using among users were reliability and curious intendancy to having another child. About 12% of women discontinued their hormonal methods for misconception factor.
Discussion: The most common hormonal method of contraceptive in our country (Iran) is OCPs, but there is not enough variety of them. It seems the existing of different kind of pills could increase the using rate. Since 12% of were interrupted their methods for misconceptions, so giving information to couples specially women and improving the quality of family planning counseling services could promote the hormonal usage and indirectly reduce the rate of unwanted pregnancy.

SESSION 9: MEDICAL ISSUES ASSOCIATED WITH CONTRACEPTION

P159

Intrauterine devices and severe pelvic inflammatory disease require hospitalization

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Introduction: The intrauterine device (IUD) is a highly effective method of contraception but the concern about the connection with the risk of upper genital tract infection often limits the use of the IUD. Lately many studies have suggested that the risk of pelvic inflammatory disease (PID) and infertility associated with IUD use is slightly increased only in the first days following IUD insertion, that the PID risk does not increase with long-term use of IUD and even that the risk of PID in women with symptomless sexually transmitted diseases (STD) having an IUD inserted, is similar to the risk not having an IUD inserted.
Aim and methods: Twenty five IUD users were hospitalized in 2001 and twenty four in 2002 because of severe PID. The aim of our study was to analyse some clinical characteristics of IUD users with severe PID. The different value of variables were compared using t-test.
Results: In 2001 the mean age of patients was 41,9 ± 6,37 (29–51) years, mean time of using IUD was 12,65 ± 7,32 (2-–25) years, 40% of patients were older than forty five, 44% of patients were using IUD more than ten years. In 2002 the mean age of patients was 42,20 ± 6,68 (21–53) years, mean time of using IUD was 11,5 ± 7,78 (1–22) years, 37,5 % of patients were older than forty five years, 37,5% were using IUD more than 10 years. In 2001 36 % and in 2002 20,8 % of patients were treated with surgery. There were no statistical significant differences in mean age and in mean number of years using IUD between patients treated with surgery and without surgery. There were no severe PID appearing in the first days after insertion of IUD.
Conclusion: According to our analysis the prolonged use of IUD is an important risk factor for PID. The high percent of patients older than forty five shows that perimenopausal state with hormonal changes could be also important in etiopathogenesis of PID. We cannot confirm that age and time of using IUD influence the degree of clinical picture.

P160

Pelvic actinomycosis. A comparison of three recent cases with the literature

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Introduction: I report the clinical features of three cases of pelvic actinomycosis and compare them with Fiorino's series, probably the most recent authoritative review.
Report: In 1973 Henderson first reported pelvic actinomycosis with newer generations of intrauterine device (IUD). In a systematic review, Fiorino (1996) identified 92 cases of actinomycotic abscess associated with IUD use. The average patient was 37 years of age, had been using an IUD for 8 years and presented with abdominal pain, weight loss, vaginal discharge and fever. Laboratory studies commonly revealed anaemia, leucocytosis and an elevated ESR. Pelvic actinomycosis classically presents with tubo-ovarian abscesses formation and is well known to mimic pelvic malignancy or inflammatory bowel disease. For this reason, the diagnosis is usually made after extensive and unnecessary surgery. Imaging is not always helpful here and Fiorino found the diagnosis had only been made pre-operatively in 17% cases. If suspected at presentation it can be successfully treated with a prolonged course of penicillin with or without minimally invasive surgery, an important consideration in young females. Despite its alleged rarity, 3 cases of pelvic actinomycosis presented within 3 months to an English teaching hospital of 800 beds. Compared with Fiorino's series they showed many similar features, yet in no case was the diagnosis considered pre operatively. An anaerobic bacterium of low virulence, actinomyces does not cross intact mucous membranes, and invasive disease can take several years to develop. Two of our three patients had undergone recent excision of cervical tissue: it is interesting to speculate an association.
Conclusion: With the change in the January 2004 advice from the Clinical Effectiveness Unit of the Faculty of Family Planning and Reproductive Health Care, regarding the management of actinomyces-like organisms found on a cervical smear in an IUD user, clinical disease may be recognised even less frequently. The aim of this presentation is to highlight the almost classical presentation of pelvic actinomycosis.

P161

Hormonal contraception in women with diabetes mellitus: a review of the literature

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Introduction: Contraception is an important issue for women with diabetes as unplanned pregnancy can present major maternal and peri-natal complications. The rising incidence of diabetes worldwide means increasing thought needs to be given to contraceptive options for these women. Professionals need to consider potential metabolic effects of hormonal methods in relation to an individual's diabetic profile and their need for effective contraception. There has been concern that use of hormonal contraception may increase the risk of developing diabetes for certain populations. Significant differences in prescribing practice have been identified.
Objective: To review current evidence and recommend best practice in prescribing hormonal contraception to women with diabetes.
Methods: A systematic review of the literature was carried out using specified search terms. Medline, Embase, CINAHL, Cochrane and other databases were searched, as were secondary references and the Internet.
Results: Vascular disease is the major concern, and for women with diabetes who have macrovascular or microvascular complications, non hormonal methods are recommended. Studies of young women with diabetes showed no evidence of adverse outcomes for those taking low dose combined oral contraceptives (COC). There is little evidence that any changes in glycaemic control caused by hormonal contraception is of clinical relevance. Serum lipid profiles appear minimally changed by most COC use, however, third generation products have been shown to decrease LDL and increase HDL's and therefore might be preferred in women with diabetes. Studies concerning progestogen only methods highlight possible negative effects on lipid metabolism for users of progestogen only pills (POPs) and injectable contraception but not implants. The low dose COC does not appear to increase the risk of developing Type 1 or Type 2 diabetes for women without diabetes. However in populations at higher risk of developing Type 2 diabetes, studies have found increased risks in Latina women taking POPs when breast feeding and with Depot Medroxyprogesterone.
Conclusions: Research in this area has mainly been carried out in healthy populations and there is a need for longer term and larger studies in women with diabetes. The WHO has established medical eligibility criteria to assist in assessing risks and it is now recognised that low dose COCs are a safe and effective option for younger women with uncomplicated well-controlled diabetes. Progestogen only methods are often prescribed for women with diabetes but are only recommended for low risk women due to possible negative changes in lipid profiles.

P162

Effects of the continuous use of a combination of ethinyl-estradiol/gestodene in the control of symptoms reported during the hormone-free interval

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Objectives: The objective of this study was to determine the prevalence of symptoms experienced during the hormone-free interval by users of combined oral contraceptive pills and to evaluate the impact of the continuous use of the association of ethinyl-estradiol/gestodene for fifty-six days on these symptoms.
Design & Methods: A total of 476 women with a mean age of 28.8 years were enrolled in this open, prospective, non-comparative study. Patients used the contraceptive combination of ethinyl-estradiol 30 mcg /gestodene 75 mcg continuously for 56 days. Evaluations were carried out after 28 and 56 days on symptoms reported during the use of the oral contraceptive. Student's t-test for paired samples was used in the statistical analysis to compare the symptoms reported at the beginning and at the end of the study by the users of this contraceptive method.
Results: Of the 476 patients initially evaluated, 334 were current users of combined oral contraceptives. A total of 219 women (65%) reported symptoms during the hormone-free interval of contraceptive pill use. Headache, mastalgia, dysmenorrhea, edema, menorrhagia and emotional lability were the most common complaints that decreased significantly ($p < 0.05$) after 56 days of continuous contraceptive use. No significant decrease was observed in the presence of nausea, depression, weight gain or reduction in libido during the hormone-free interval after continuous use of the pill.
Conclusions: A high incidence of symptoms was observed during the hormone-free interval in women using the pill in the standard oral contraceptive regimen with a 7-day pill-free interval. Continuous use of the oral contraceptive pill containing ethinyl-estradiol and gestodene for 56 days resulted in effective relief of most of the symptoms reported during the hormone-free interval.

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Metabolic effects of the continuous use of an oral contraceptive containing ethinyl-estradiol and gestodene

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Objective: The objective of this study was to evaluate the impact of the continuous use of a contraceptive association containing ethinyl-estradiol and gestodene on lipid profiles, carbohydrates and coagulation.
Methods: A total of 32 patients with a mean age of 25.0 ± 3.7 years were evaluated in a prospective, open, non-comparative study. Patients received the contraceptive combination of ethinyl-estradiol 30 mcg and gestodene 75 mcg continuously for six consecutive months. Plasma measurements of total cholesterol, HDL, LDL, triglycerides, insulin, glucose, antithrombin-III, fibrinogen, PAI-1, protein C and protein S were carried out before and after treatment. Results were expressed as means and standard deviations of the biochemical parameters evaluated at the beginning and at the end of the study. Student's t-test for paired samples was used in the statistical analysis, and significance level was established at 5%.
Results: After six consecutive months of use of the contraceptive pill, HDL levels showed a significant increase ($p=0.001$). No significant changes were seen in the levels of total cholesterol, LDL or triglycerides. There was a slight increase in plasma levels of insulin ($p=0.059$) and glucose measurements remained practically unaltered. With respect to coagulation and fibrinolysis parameters, a significant increase was registered in the levels of fibrinogen and PAI-1 ($p=0.042$ and $p=0.003$, respectively), an increase, although not significant, in antithrombin-III and a reduction, also not significant, in protein C and protein S.
Conclusions: The continuous use of the combination of ethinyl-estradiol/gestodene was associated with beneficial changes to the lipid profile, as well as a slight increase in insulin levels, fibrinogen and PAI-1. These results are comparable to those found with the use of the regular standard oral contraceptive pill regimen with a 7-day pill-free interval.

P164

Bleeding patterns in users of a continuous contraceptive combination containing ethinyl-estradiol and gestodene

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Objective: The objective of this study was to evaluate bleeding patterns during continuous use of a combined oral contraceptive pill containing ethinyl-estradiol and gestodene.
Methods: Thirty-two patients with mean age of 25.0 ± 3.7 years were evaluated in an open, prospective, non-comparative study. Patients used the contraceptive combination of ethinyl-estradiol 30 mcg and gestodene 75 mcg continuously for six consecutive months. Any occasional bleeding was classified as spotting, light, moderate or heavy bleeding. Spotting was defined as very light bleeding when a change of sanitary protection was not required. The occurrence of any bleeding outside the patient's usual bleeding pattern was defined as light, moderate or heavy bleeding based for comparison on the parameters presented by the patient from previous menstrual cycles. For data analysis, the 6-month duration of the study was divided into six periods of 28 days of continuous contraceptive use, referred to as Cycle 1 – Cycle 6. The mean number of days of any kind of bleeding was calculated for each cycle. Analysis of variance (ANOVA) was used in the statistical analysis to compare the mean number of bleeding days in the six cycles studied.
Results: The majority of patients presented no bleeding during the evaluation period. At the end of the sixth cycle of continuous use, 82% of patients reported no bleeding. The most common type of bleeding was spotting, reported by 41% of patients, most frequently during the third cycle of use. The mean duration of spotting was 3.1 ± 6.3 days ($p=0.002$ when compared to Cycles 1, 4, 5 and 6). Overall bleeding rate was also greater in the third cycle with a mean of 5.8 ± 9 days ($p=0.001$ compared to Cycles 1, 5 and 6). After the fourth cycle of use, there was a reduction in the overall bleeding rate and an increase in the rate of amenorrhea.
Conclusion: The continuous use of an oral contraceptive containing ethinyl-estradiol and gestodene was associated with an acceptable bleeding pattern consisting principally of spotting. The rates of amenorrhea were high after the fourth month of use.

P165

Effect of contraception on depression: comparison of Edinburgh and Beck depression scales

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Objective: To evaluate the satisfaction from contraceptive method use and depression of women with undesired pregnancies together with comparison of Edinburgh and Beck depression scales.
Material and Methods: Cases applied to our family planning clinic in between 15.12.2003 and 15.01.2004 were divided into four groups and enrolled into the study. Cases using none of the contraceptive methods and who applied for a contraceptive method formed the first group. Cases using intrauterine device (IUD) and who were satisfied with the method and under routine control formed the second group. The third group was consisting of cases who were not satisfied with IUD use. The fourth group was consisting of cases who had applied for uterine evacuation. Cases using hormonal contraceptive methods were excluded from the study. In order to evaluate the psychological status' of all applicants in the last one week, Edinburgh depression scale with 10 questions and Beck depression scale with 21 questions were applied to all of the applicants under accompaniment of a counselor nurse. The cut-off value calculated for Edinburgh depression scale was 12/13. Points in between 0–13 represented no depression, points in between 14–24 represented medium depression and points equal and over 25 represented serious depression in Beck depression scale. Statistical data were evaluated with Pearson Chi-square test.
Results: Group 1 consisted of 40 cases and each of Group 2, Group 3 and Group 4 were consisted of 50 cases. Mean age of the cases was 32 years. 48% of the cases had 2 children. 83% of the cases were primary school graduates and 74% of the cases had no desire for more children, and only 11.6% of the cases were in premenstrual period. According to Edinburgh depression scale, 47.4% of all cases were depressive, whereas according to Beck depression scale, 27.4% of the cases were under medium depression and 12.6% of the cases were under serious depression. Depression was observed more frequently in women with undesired pregnancies with a rate of 76% after evaluation of the both scales. As an unexpected result, the minimum depression rate observed with unsatisfied IUD users was, 28% in Edinburgh scale and 30% in Beck scale. The depression rates observed with applicants for new contraceptive method were 40% in Edinburgh scale and 32.5% in Beck scale. The depression rates of the cases satisfied with IUD use were 44% in Edinburgh scale and 30% in Beck scale.
Conclusions: Depression observed in applicants for undesired pregnancies shows the importance of contraception in women. Edinburgh and Beck depression scales pointed out correlation only in between two groups. Whereas correlation was not observed with Beck scale in other two groups when cut-off value of Edinburgh scale was set as 12.

P166

Effect of subdermal contraceptive implant (Implanon®) on biochemical serum parameters

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To evaluate the biochemical serum parameter changes in subdermal contraceptive implant (Implanon®) users at the end of one year. Seventy women who accepted subdermal contraceptive implant application for contraception were enrolled into the study. Selected biochemical serum parameters before implant insertion and at 12 months after implant insertion were tested. The biochemical serum parameters evaluated were: Fasting blood glucose, blood urea nitrogen (BUN), creatinine, SGOT, SGPT, low-density lipoprotein (LDL), high-density lipoprotein (HDL), cholesterol, triglyceride. The statistical data were evaluated by t-test. The mean age of the cases was 28.5 years. The mean number of gravida was 2.5, mean number of parity was 1.6, mean number of abortions was 0.3, mean number of living children was 1.5. No statistical difference was observed in between the initial and 12-months' levels of fasting blood glucose, BUN, SGOT, SGPT, LDL, HDL ($p > 0.05$), but the increase in cholesterol and triglyceride and the decrease in creatinine levels at the end of one year was found to be statistically significant ($p < 0.05$).

P167

Effect of subdermal contraceptive implant (Implanon®) on hormonal parameters

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Objective: To evaluate the hormonal changes in subdermal contraceptive implant (Implanon®) users at the end of one year.
Material and Methods: Seventy women who accepted subdermal contraceptive implant application for contraception were enrolled into the study. Selected hormonal parameters before implant insertion and at 12 months after implant insertion were tested. The hormonal parameters evaluated were: estradiol (E2), Follicle-stimulating hormone (FSH), Luteinizing hormone (LH), Prolactin (PRL), thyroid stimulating hormone (TSH), free thyroxine (fT4) and free triiodothyronine (fT3). The menstrual patterns and adverse effects of cases were recorded. The statistical data were evaluated by t-test.
Results: The mean age of the cases was 28.5 years. The mean number of gravida was 2.5, mean number of parity was 1.6, mean number of abortions was 0.3, mean number of living children was 1.5. No statistical difference was observed in between the initial and 12-months' levels of E2, FSH, LH, fT3, fT4 and TSH ($p > 0.05$), but the change in PRL at the end of one year was found to be statistically significant ($p < 0.05$). 57.1% (40 women) of the cases were amenorrheic, throughout one year, 40% (28 women) of the cases had regular menstrual patterns after three months of insertion, but 2.8% (2 women) of the cases experienced with severe bleeding irregularities leading to removal of the implant in these two cases at the end nine months. Over 95% of women with dysmenorrhea at baseline noted an improvement at the of one year. Besides acne present at enrolment in 28 cases improved or disappeared at the end of one year in 92.8% (26 cases) of these 28 cases. No pregnancies was observed in any of the cases.
Conclusion: Subdermal implant with etonogestrel do not have important changes on hormonal parameters of implant users, even if the the women are amenorrheic. The varying effects of implanon on bleeding patterns must be evaluated with larger series and comparative studies.

P168

The research of the gonadotropic hormones and prolactin levels in young women while using low-dosed combined oral contraceptives

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Aims and methods: For the research of the gonadotropic hormones and prolactin concentrations while using low-dosed combined oral contraceptives 156 healthy women of young reproductive age (21.6 ± 3.1 years old) , who asked to select a method of contraception and who had been selected casually, were examined. The levels of LH, FSH and prolactin were defined by radioimmunological method in all women before using contraceptives and during contraception.
Results: While defining basal concentrations of the researched hormones it was stated, that the middle levels of LH in women, who begin contraception, do not come over the age norms, while this in 58 women (24 %) the LH level was moderately raised with $LH/FSH > 2$, and in 3 patients (1.9 %) the reduce of LH concentration was defined. In 1–3 months during contraception there were not defined any in the whole statistically significant differences of LH concentrations in the group, but the tendency to reduce of LH/FSH level while its initial increasing was marked. The middle basal concentrations of FSH were 3.4 ± 2.1 mUI/l. In 6 women (3.8 %) the FSH level came over the upper norm line (11.7 ± 0.2 mUI/l), in 36 (23 %) it was decreased (1.2 ± 0.8 mUI/l). During contraception in the middle any statistically significant differences of FSH concentrations were not defined, but while initial reduction of the FSH level the same as its normalization and reduction were marked. Among women beginning using hormone contraceptives in 10 % cases (in 16 patients) hyperprolactenemy was defined (the middle level of prolactin was 1035 ± 200 mUI/l), but in one month after beginning of contraception the increased level of prolactin were marked only in 2 % women, that let in the majority of cases to observe the initial increase of prolactin as casual, not demanding correction or abolition of COC.
Conclusion: The given results of the research of gonadotropines and prolactin levels in young women taking low-dosed hormone contraceptives during 1–3 months, say about the absence of limitations of continuing using COC in the majority of tested women. (The further dynamic research in 6 and 12 months is planned).

P169

A non-contraceptive use of the levonorgestrel-releasing intrauterine system: management of endometrial hyperplasia

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Introduction: The levonorgestrel- releasing intrauterine system (LNG-IUS) has been developed as a long-acting reversible method of contraception but it offers not only contraceptive efficacy but also potential therapy for a number of gynaecological disorders. The direct action of the daily dose of 20 μg LNG on the endometrium achieves uniform suppression of endometrial proliferation that becomes unresponsive to estrogens.
Material and Methods: It is a prospective study that enrolled 2 groups of 30 women aged 33 to 40. The study was designed in order to evaluate the impact of LNG on the management of endometrial hyperplasia. In the study group the IUS was inserted in the first decade of the menstrual cycle meanwhile the control group received didrogesterone 20 mg daily starting with day 14. The preliminary investigations were: Pap test, colposcopy, transvaginal ultrasound, hysteroscopy and hystopathological endometrial sampling. The considered variables were: blood loss, endometrial thickness and histological diagnosis. The results were analyzed with t-student test and chi-square test.
Results: The blood loss was significantly reduced in the period following the treatment in the study group compared to control group (82% vs. 57%, p=0,02). The transvaginal ultrasound evaluation of the endometrial thickness confirmed this data and was, furthermore, confirmed histologically.
Conclusion: The strong anti-proliferative action on the endometrium explains the potential use of LNG-IUS in the treatment of the menorrhagia, reduction of dysmenorrhea, management of symptomatic endometriosis and adenomyosis, the endometrial protection during estrogen replacement therapy and the management of endometrial hyperplasia.

P170

Management of contraception in women post organ transplant on tacrolimus – case report and literature review

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Introduction: An increasing number of women of reproductive age now undergo successful organ transplants. They are advised to use effective contraception post organ transplant but they are usually also taking a number of other potent prescribed medications. Tacrolimus is one such drug commonly used post organ transplant because it acts as an immunosuppressant. It is contraindicated in pregnancy but the pharmaceutical company gives conflicting advice about its concomitant with any form of hormonal contraception.
Aims and methods: We present a case report of a 36 year old woman with multiple health problems and on many drugs including tacrolimus post kidney transplant. She also had numerous fibroids, two premature classical Caesarean sections and had been advised to use effective contraception. Her partner did not wish a vasectomy. To investigate the feasibility of concomitant use of hormonal contraception and tacrolimus we contacted the pharmacy department of our local hospital and undertook a subsequent extensive literature search.
Results: There is only limited information about tacrolimus and the concomitant use of hormonal contraception in the literature. Tacrolimus is metabolised by cytochrome P-450 3A4 in the liver, the same cytochrome that metabolises ethinyloestradiol and progesterone. Some of the studies presented give conflicting results about the potential interactions between tacrolimus and steroid hormones. Overall, however, it would appear that, at therapeutic levels, tacrolimus does not interfere with the efficacy of hormonal contraception. In the light of this evidence and following full discussion of all options, the woman in our case report opted for a subdermal implant. Her physician has been contacted to ensure regular monitoring of her tacrolimus levels.
Conclusion: Women post organ transplant on tacrolimus need effective contraception. There appears to be no evidence to date to suggest that hormonal contraception is any less effective in these women therefore they may use this form of contraception. It is important to check the tacrolimus levels regularly.

P171

Evaluation of the SHT470 FA (30 mcg of ethinylestradiol and 3 mg of drospirenone) on contraceptive efficacy, tolerance, cycle control and effects on general well being and fluid-related symptoms in women seeking contraception and with premenstrual disorders

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Introduction: Combined low-dose oral contraceptives provide a reliable reversible contraception with a low incidence of adverse events. Despite this advantages, compliance and pill discontinuation remain an issue. Cycle control and the abscence of weigth gain are some determining factors with regard to oral contraceptive continuation. Drospirenone is a new progestogen derived from 17 spirolactone, similar to natural progesterone, with antimineralocorticoid and antiandrogenic properties.
Objectives: the aim of this study was to assess contraceptive efficacy, tolerance, cycle control and effects on well being and fluid related symptoms of a new contraceptive containing 30 mcg ethinylestradiol and 3 mg drospirenone, in women seeking oral contraception with premenstrual disorder.
Materials and Methods: This study was a multicenter, open-label 6-cycle study from 6 centers in Brazil and it was approved by ethics committees. The data analysed were obtained from 130 volunteers seeking oral contraception and with premenstrual disorders who fulfilled all the inclusion criteria and none of the exclusion criteria were observed. Informed consent was signed by all subjects .Contraceptive efficacy and adverse events were assessed during 6 cycles of oral contraceptive use. Cycle control was obtained with a menstrual calendar, recorded in all visits. The impact on well-being was assessed with the Psychological General Well Being Index (PGWBI).
Results: The positive impact on well being was statisticaly significant during the oral contraceptive use ($p < 0{,}000001$). The PGWBI increased from the baseline visit (82,9) to cycle 6 visit (102,7). Adverse events reported were typical of those associated with oral contraceptive use, and was responsible for 11,3% of patients drop-out. The preparation was found to have a favorable effect on breast tenderness throughout the treatment. The incidence of intermenstrual bleeding was low and ocurred more often at the beginnig of the study. No pregnancy was reported.
Conclusions: The combination of 30 mcg ethinylestradiol and 3 mg drospirenone provided effective oral contraception, cycle control, good tolerability and a significant impact on well being, which improved compliance in women with premenstrual disorder.
Acknowledgement: This study was sponsored by a grant of Schering do Brasil, Química e Farmacêutica Ltda.

P172

A survey of postnatal contraception in opiate-using women

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This work was undertaken because of the increasing number of unplanned pregnancy in opiate-using women, as contraception has very low priority in opiate-using women. Drug dependency is a serious health problem. In addition to the large direct health costs (psychiatric and physical), there are massive costs in terms of crime, loss of earnings and productivity, as well social damage (NUTT 1997). At Hull Maternity Hospital, all pregnant opiate-using women booked for antenatal care, it became apparent that all of them were unplanned and no contraception was used before pregnancy. Contraception has a low priority in opiate-using women.
Objective: To determine the spectrum of use of postpartum contraception in opiate-using women. To document the continuation of the use of contraception when the chosen method was provided during the postnatal period. To identify any method of contraception which appear to be suitable for this category of patient by the study of the side effects and discontinuation rates.
Method and Result: All 40 women were given methadone in the antenatal period. Post delivery 10 women were taking methadone, 9 went back to using heroin and stopped methadone, 11 women were using both heroin and methadone and 10 had stopped opiate use completely. 14 women had Depo Provera intramuscularly for contraception, which was initiated from day 4 to 21 weeks postpartum, with the mean of 13 days. The mean duration of use was 3.5 months. All 14 women had 1–3 injections and then stopped use. 19 women had implants (9 had Norplant and 10 had Implanon) which was sited from day 7 to 28 postpartum, the mean was 22.7 days and this method was ongoing for months (pattern.)
Conclusion: This study demonstrates the effectiveness of initiation of postpartum contraception in a group of opiate-using women who are counselled antenatally. Continuation rates were good with implants, but poor with Depo Provera. Contraception should be discussed and provided in clinic where methadone is prescribed which will improve the reliability of contraception being offered, accepted and provided to the women who are substance users.

P173

Treatment of endometriosis with Implanon versus GnRH agonists: effect on insulin sensitivity

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Objectives: Medical therapy is usually performed after surgical laparoscopic treatment for moderate-to-severe endometriosis. GnRH agonists, are usually administered for the short-term, and oral contraceptives for the long-term treatment of endometriosis. Oral contraceptives may induce metabolic modifications among which a reduction of insulin sensitivity (SI). Beside the progestin, the estrogenic component of the oral contraceptive may impair SI. In this study we wanted to evaluate the effect of a progestin only administration on SI of women with endometriosis, in comparison to GnRH analog-treatment.
Design & Methods: The study was performed in 26 women with endometriosis that after laparoscopic surgery were randomised to receive a GnRH analogue at the dose 3.75/28 days for 6 cycles (leuprorelin; Enantone, Takeda) or a subcutaneous single rod progestin implant (etonogestrel; Implanon, Akzo Nobel). In each woman SI was evaluated prior to treatment in the early follicular phase of the first menstrual cycle and after 5 months of treatment. SI or insulin-independent glucose utilisation (Sg) was investigated by the minimal model method applied to a frequently sampled i.v. glucose tolerance test.
Results: SI was not significantly modified by the GnRH-analog (5.29 ± 1.29 vs. 3.99 ± 0.8) and was significantly decreased by the progestin implant (5.73 ± 1.12 vs. 3.95 ± 0.77; $p < 0.05$). Sg, fasting glucose, insulin, C-peptide and C-peptide/insulin were not modified by either treatment.
Conclusions: As previously reported for oral contraceptives, the administration of a progestin only contraceptive by subcutaneous implant is associated with a slight deterioration of SI, with no modification of fasting glucose control.

P174

Type of progestogen in combined oral contraceptives and risk of myocardial infarction

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Objectives: In 1980s and 1990s new progestogens were introduced to combine oral contraceptives (COC) that induce a lipid profile suggesting possible reduction in arterial diseases. We systematically review the data on acute myocardial infarction.
Design and Methods: Medline was searched for case-control and cohort studies that provide results comparing the newer progestogens desogestrel, gestodene, norgestimate or drosperinone with levonorgestrel or norethisterone, combined with ethinyl estradiol 35 mcg or less. Odds ratios (OR) were taken directly from the reports or calculated from the available data. Studies were pooled, using the general variance based method and fixed effect model. We quantified characteristics of studies that might have affected results and explored heterogeneity through stratification. A test of asymmetry of funnel plot was performed for publication bias.
Results: Seven studies were identified, all case-controlled, one in abstract only, involving 1932 women with acute myocardial infarction and 10,753 controls. One study found a statistically lower risk with the later progestogens. The combined OR comparing newer to older progestogens was 0.76 (95% confidence limits 0.50 to 1.14; p=0.16; test for heterogeneity p=0.22). The OR for community and hospital controls did not differ (test for heterogeneity p=0.7). Stratifying by region, the OR for newer versus older progestogens was 0.62 (0.37 to 1.06) for studies conducted in Continental Europe, and 1.29 (0.65 to 2.59) for studies in U.K. (test for heterogeneity between regions p=0.1). The source of funding did not influence the result (test for heterogeneity p=0.3). There was no evidence of publication bias (p=0.6). A meta-analysis of the crude ORs (OR 0.74, 6 studies) was a little higher than the combined adjusted OR (0.64, same 6 studies), which suggests slight prescribing bias of newer OCs to women at greater risk of myocardial infarction. The adjusted unbiased estimates were used in this review.
Conclusion: While there was a tendency towards lower risk of myocardial infarction with newer progestogens, in this large dataset the difference was not statistically significant. When taken together the absence of effect of past use and the apparent lack of benefit on risk of stroke, the combined evidence suggests the lipid changes induced by the newer progestogens have at most minimal clinical benefits for arterial diseases.

P175

Experience with Tri-Merci used for combined therapy of cervical intraepithelial neoplasia in patients with hyperandrogenia

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Objective: to study Tri-Merci efficacy in the combined therapy in women with cervical intraepithelial neoplasia (CIN) and evaluated testosterone level.
Design & Methods: The study group included 32 women (mean age 25 ± 3) with CIN, elevated testosterone level and menstrual disorders. The degree of gravity of CIN was specified cytological and morphologically. Combined therapy of CIN I-II included Tri-Merci (Organon, the Netherlands) administration (6 months minimum) for normalization of the menstrual cycle and cryolysis as local therapy of CIN later on after the normalization of cycle. Testosterone level was estimated at a baseline, after 3 and 6 cycles of Tri-Merci treatment.
Results: Were evaluated in 1, 2 and 6 months after cryolysis based on the colposcopy and cytology. The complete adhesion was observed at 26 patients (81,3%) in 1 month after cryolysis. After 2 and 6 months in all patients the laminated flat epithelium was found at a colposcopy, and the type 1 of Pap-smear test was defined at a cytology. Complication after cryolysis and relapses of disease were not observed.
In all patients (100%) against a background of Tri-Merci intake the cycle became regular. After 3 months of Tri-Merci administration the normal level of testosterone was noted in 22 patients (68,75%), after 6 months – in 30 (93,75%). In two patients (6,25%) testosterone level decreased, but did not reach the normal level. All patients experienced positive effect on skin during Tri-Merci treatment.
Conclusions: The low dose oral contraceptive Tri-Merci is recommended to be used in combined therapy of cervical intraepithelial neoplasia (CIN) in patients with hyperandrogenia to correct cycle disorders and differentiation, maturation of basal layer cells in order to form a highly-differential laminated flat cervical epithelium, and also to prevent relapses of disease.

P176

The breast tenderness during using transdermal contraception with evening primrose oil and vitamin E

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Objective: The aim of study was to investigate the effect of the evening primrose oil with vitamin E on the breast tenderness during the first three months of using transdermal contraception EVRA ® (Jansen Cilag).
Patients and methods: A total 38 patients, aged betwen 19 and 25 years, received a transdermal contraception (EVRA®, Jansen Cilag) containing norelgestromium 150 mcg and ethinyl estradiol 20μg per day. All patients was split in two groups: group A : 19 patients were using EVRA patchs with one pill per day containing 500 mg evening oil primrose and 40mg vitamin E. Group B: 19 patients were using just EVRA patchs. We compare breast tenderness between that two groups for three month.
Results: Data were evaluated from all 38 patients (114 cycles), from group A firsth month had breast tenderness 3 (15,7%) and third month nobody, in groupe B firsth month had tenderness 10 (52,6%) and third month 1 (5,2%).
Conclusion: Using evening primrose oil with vitamin E can decrease breast tenderness during using in firsth months of receiving contraceptive patchs, usually tenderness disappeared at the latest after third months.

P177

Tuboovarian abscess associated with an intrauterine device: report on three cases

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Objective: As a CCR WHO we have conducted many multicentre studies. In most IUD studies we have find this contraceptive favourable for multiparas .
However. We claim IUD so harmful, that the opinion was established on its longevity. We left Cupper IUD in place for years-by menopause.
Perhaps this policy should be changed, as at our clinic we have been admitting long term IUD users with severe pelvic inflammatory disease (often ending in hysterectomy) for years, approximately one case per month.
Design: We present three – in our opinion – typical cases which were admitted to the Hospital in the same month. Similarities between them was in the length of IUD usage, their age and severity of infection. As conservative treatment was ineffective the women had to undergo hysterectomy,.
Results: All three women showed the same information as we found in other similar cases: they were in late 40th years of age, and had IUD in place for more than 5 years.
We can not prove changing of partners or STD, not even so often reported actynomyces infection.
Conclusions: We still find IUD very suitable contraception for many women. However, we should bear in mind that every IUD has a lifespan, and should be removed according to the manufacterer's recommendations for each type separately. In literature numerous cases have been reported on with a history, similar to that found in our reported cases: pelvic abscesses at aged women with long IUD use. What is the thruth reason for such serious complicatin we can only speculate. Is this STD or impairment of immunty or IUD as reservoir for bacteria? But never the less. For older women we had to find better solution for contraceptive method, which will not put them in such hazard.

P178

Effects of a monthly injectable contraceptive (Cyclofem) on menstrual pattern and lipoprotein profile

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Objectives: The objective of this study was to determine the effects of a combine once- a -month inject able contraceptive on menstrual pattern and lipoprotein profile.
35 women aged 20–39 who would like to use inject able contraception without any previous history of abnormal uterine bleeding or hyperlipidemia were included. In the follicular phase of pre injection cycle the lipoprotein parameters were determined, also asked them to complete menstrual cards for identification of their pre injection status.
Results: The same serum lipid measurements were repeated after 3, 6 and 9-month injections and their monthly menstrual cards were collected for determination of their menstrual pattern. At the end of 9 months about 2/3 of subjects has normal menses but 5 women discontinued earlier. Serum cholesterol, LDL, and Triglyceride did not have significant change, but HDL and VLDL decreased significantly at 3 month with maintenance through the other months.
Conclusion: Cyclofem was well acceptable with a few side effects and without any clinically significant changes on lipoprotein parameters. It is suggested to introduce in our family planning program.

P179

Endometrial morphology and bleeding patterns in Mirena® users

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Introduction: Mirena® is a levonorgestrel releasing intrauterine system of widespread use. Although highly effective in reducing uterine bleeding, intermenstrual or irregular bleeding is still present in some women. The underlying mechanism are poorly understood. This study aims to evaluate endometrial morphology changes associated with this device and its relation, if any, with the bleeding pattern among Mirena® users for contraceptive purposes.
Methods: Mirena® users for contraceptive purposes for longer than 6 months, that kept a menstrual calendar, were ask to agree to endometrial biopsy.
Results: Forty nine endometrial biopsies were performed. Mean age of women was 38.16 ± 5.78 years. Mean duration of Mirena® use was 14.5 ± 10.5 months
According to bleeding pattern, 16 (32.7%) women showed amenorrea, 6 (12%) infrequent bleeding, 13 (26.5%) regular bleeding, 8 (18.4%) prolonged bleeding, and 5 (10.2%) irregular bleeding/spotting. In four cases the biopsy was failed in the other 45 cases, histological features were stromal decidualization in 43 (95.6%), endometrial atrophy in 37 (82.2%), Inflammatory cell infiltrate in 17 (34.7%), fibrin deposits in 19 (41.3%) and gland dilatation in 9 (20%). No correlation was observed when histological features or duration of treatment were compared with bleeding pattern. When duration of treatment was compared with histological features, only statistically significant differences were found in glandular dilatation, those patients with longer use showed more frequently glandular dilatation.
Conclusions: Since no correlation has been found between bleeding pattern and hidtological features, other mechanisms may be involved in bleeding during Mirena® use.

P180

The case of the missing implant: the importance of adhering to insertion guidelines

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Introduction: Implanon, a single-rod subdermal contraceptive, releases 68 mg etonogestrel over three years. It was introduced in Germany in June 2000. This case report describes the incorrect insertion of Implanon, by a gynecologist trained in the procedure, in Germany in October 2002.
Case description: A 39-year old woman visited her gynecologist for insertion of Implanon. The insertion was performed whilst the patient was in a sitting position with the arm hanging downwards. The insertion was made in the lower third of the upper arm right on the ventrolateral side of the biceps muscle and not in the recommended area: subdermally in the middle third of the upper arm in the medial groove between biceps and triceps muscles. Blood flow at the insertion site was copious during the procedure, especially when the needle was removed. Following insertion, the implant was not palpable. Attempts made to localize the implant firstly by ultrasound and then with magnetic resonance imaging (MRI) were not successful. Additional investigations, performed on the assumption that the implant might have been inserted intravasally, also failed to localize the implant. These included MRI of the vessels of the right upper arm and the right shoulder/clavicle region, the heart and nearby vessels, echocardiography of the atria and ventricula of the heart, pulmonary artery angiography, phlebography of the lung veins and the vena cava superior. In addition to the attempts to locate the implant's physical presence, detection of etonogestrel (ENG) was carried out to establish whether the implant was in the body or not. ENG detection was positive, at a level of 308 pg/ml, which is in the normal range of an implant in situ. An expert in the field of heart and lung surgery was consulted as to the possible consequences of an implant circulating in the thoracic vessel system. He concluded that if the implant had been carried along with the blood flow, it could eventually become jammed in a branch of the pulmonary artery, possibly up to a peripheral branch of a lung segment, where it is unlikely to cause serious damage.
Discussion: This is the first case where the location of a non-palpable Implanon rod after insertion and positive ENG detection could not be clarified. Whilst so far there is no direct proof that the implant is in the vessel system, the procedures followed during this insertion, which deviate from the official insertion instructions for Implanon, lead to the hypothesis that the implant was inserted intravasally. This case could and should have been prevented by the careful following of the guidelines of the package leaflet. The importance of adhering to those recommendations therefore cannot be stressed enough.

SESSION 10: NEW DEVELOPMENTS IN CONTRACEPTION, SEXUAL AND REPRODUCTIVE HEALTH

P181

Enhancement of the specific advantages of the drospirenone-containing pill by long-cycle contraception

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Objectives: Due to its specific antimineralocorticoid and antiandrogenic properties drospirenone has already been shown to ameliorate cycle-dependent disorders like symptoms of water retention, premenstrual syndrome (PMS) and skin problems. Using Yasmin®, Schering AG, Germany (i.e. 30 µg ethinylestradiol + 3 mg drospirenone), the aim of this study was to investigate if long cycle contraception (42–126 days) compared to conventional 21-day cycle administration (short cycle) could further improve the tolerability and the non-contraceptive efficacy of this novel pill.
Methods: 1433 women were observed for 6 months in an open prospective observational study, using an online questionnaire. Descriptive comparisons were made using Fisher's exact test and t-test as applicable.
Results: On long cycle treatment (n=175), withdrawal bleedings were similar in duration and intensity compared to short cycle treatment (n=1221). Spottings were observed in 15% on long cycle versus 6% on short cycle. The number of women with breast tenderness at 0/3/6 months of treatment was 37/3/2% of women on long cycle and 25/6/3% of women on short cycle ($p<0.05$, long versus short cycle). The number of women with abdominal bloating was 24/3/2% of women on long cycle and 18/4/4% of women on short cycle (difference between groups not significant). The number of women with edema was 21/0/1% of women on long cycle and 14/2/1% of women on short cycle ($p<0.001$). Weight was reduced by 0.57 kg on long cycle ($p<0.005$) and 0.61 kg on short cycle ($p<0.0001$). Body mass index was reduced by 0.21kg/m^2 on long cycle ($p<0.005$) and 0.22 kg/m^2 on short cycle ($p<0.0001$). General well-being was improved in 85% on long cycle versus 66% on short cycle ($p<0.0001$). 97% of long cycle users and 91% of short cycle users recommend this preparation for further application.
Conclusions: These results in a large group of women not only confirm previous observations that the drospirenone-containing oral contraceptive reduces premenstrual symptoms and improves general well-being but also demonstrate that these effects were increased through long cycle application. Provided by the antimineralocorticoid activity of drospirenone, therapeutic effects can be further enhanced improving breast tenderness, edema and bloating, and its antiandrogenic activity can lead to stronger reduction of skin problems. In addition particularly further improvement of dysmenorrhea and less frequent bleedings are regarded as very positive by most women.

P182

Is Evra, a transdermal, once-weekly, combined contraceptive patch cost-effective compared to combined oral contraceptives?

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Introduction: Observational studies have demonstrated that real world failure rates with COCs are considerably higher than observed in clinical trials because of inappropriate use and poor compliance. New methods that improve convenience and compliance are needed to reduce unwanted pregnancies. In clinical trials Evra, a once-weekly, transdermal, combined contraceptive patch was as effective as COCs with perfect use. Studies also showed that Evra users had better compliance than COC users. In order to predict unplanned pregnancies expected with Evra compared to COCs and to evaluate the cost-effectiveness of these two methods with typical use, a cost-effectiveness model was developed.
Design & Methods: The Contraceptive Choice Model (CCM) was developed to evaluate the net costs and outcomes associated with contraceptive methods. Costs associated with method acquisition and pregnancy (to delivery or termination) are costed from a UK NHS perspective. The model calculated the number of unintended pregnancies expected with typical use of each method. It is assumed that Evra and COCs have the same efficacy with perfect use, but that real world effectiveness of Evra would be better than with COCs due to improved compliance. The model uses the pooled phase III clinical trial results, which showed that older women were more compliant with COCs than younger women. Perfect cycles varied from 76% in <20s to 90% in the 40+ age group. With Evra, compliance was consistently high varying by only 2% from 90% in the <20s to 92% in the 40+ group. The annual probability of pregnancy with Evra was calculated as the annual probability of pregnancy with OCs (adapted from Jones & Forrest, Family Planning Perspectives 1989; 21:103–109) multiplied by the ratio of imperfect cycles for Evra versus OCs. To calculate cost-effectiveness, we ran a simulation of 100,000 women for each method, based on the demographic characteristics of the UK.
Results: The model shows that Evra prevents more unplanned pregnancy in all age groups than OCs. Evra has the greatest cost-effectiveness advantage in the <20 age group with a 50% reduction in unplanned pregnancies, at a lower cost to the NHS. In the 20–24 year age group, the model shows that Evra reduces unwanted pregnancies by 40% at an additional NHS cost of 26 per women per year. Evra's cost-effectiveness was less favourable in older women who were more compliant with COCs.
Conclusions: Evra is a cost-effective method in women who are likely to be poorly compliant with COCs. In the phase III clinical trials, women aged <20 were more likely to be non-compliant and in this age group, Evra prevented more unplanned pregnancies at a lower NHS cost compared to COCs. Other risk factors for poor compliance include prior OC failure and lack of a daily routine.

P183

Effect of oral contraceptives on endogenous estradiol metabolism

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Introduction: Recent clinical studies indicate that an increase of D-ring estradiol metabolites over A-ring metabolites may be a risk factor for breast cancer. The present work was aimed to investigate the effect of oral contraceptives (OC) on the endogenous estradiol metabolism in premenopausal women.
Aims and Methods: Two studies were conducted, firstly comparing two different progestins i.e norethisterone and dienogest each in combination with a constant ethinylestradiol dosage (study A) and secondly comparing a single progestin, i.e. levonorgestrel in two ethinylestradiol/progestin dosage combinations (study B). The main A- and D-ring metabolites, i.e. 2-OHE1 and 16-OHE1, were measured by enzyme immunoassay in 8h night-urine collected before and after 3 cycles' OC administration.
Results: In study A, i.e. ethinylestradiol plus dienogest or norethisterone acetate, the ratios of 16-OHE1 to 2-OHE1 before administration were 0.62 and 0.68, and after 3 months 0.31 and 0.54 respectively. The ratio after ethinylestradiol and dienogest was significantly lower after treatment. In study B, i.e. ethinylestradiol plus levonorgestrel (0.03 mg/0.15 mg and 0.02 mg/0.1mg), the ratios before treatment were 0.71 and 0.75 for the higher and the lower dosages, respectively, which changed not significantly to 0.73 and 0.71 after 3 cycles.
Conclusion: OCs containing norethisterone acetate, dienogest or levonorgestrel did not have a negative effect on estradiol metabolism, i.e. they did not elicit a higher D-ring metabolism, which is believed to increase breast cancer risk.

P184

New FDA approved latex-free contraceptive device: FemCap

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Objectives: A) To develop a woman-controlled barrier contraceptive. B) Easy to use and latex-free. C) To deliver spermicide or any future Microbicide on the vaginal side of the FemCap.
Materials and Methods: The FemCap is made of non-allergenic material and is designed to cover the cervix completely–the site of co-receptors for the HIV virus (CCR-5 and CXCR-4) and the portal of entry for sperm, bacteria and viruses-mechanically and chemically. The FemCap is designed with a unique groove facing the vaginal opening to store and deliver spermicide or any Microbicide. The FemCap comes in three sizes that fits almost every woman, without the laborious fitting and measurement.
Results: Safety: None of the participants had any significant side effects and the risk of UTI was found to be significantly less than the diaphragm users. Effectiveness: The first- generation FemCap was successful in preventing pregnancy in 86.5% of the participants in the typical use during the six-month clinical trial. One pregnancy occurred among the 85 women who completed eight weeks to test the second-generation FemCap. Acceptability: 75% of women who had prior experience with the diaphragm preferred the FemCap.
Conclusion: The FemCap's unique groove traps the invading sperm, bacteria, and viruses as soon as they are deposited into the vagina and expose them to spermicide or Microbicide. The videotape provided with the FemCap enforces learning and saves on the clinician time
The FemCap clinical trial were funded by (USAID), sponsored by (CONRAD), and monitored and analyzed by (FHI). We acknowledge the genourous support received.

P185

New combined oral contraceptive containing drospirenone and changes in body weight during six usage cycles

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Introduction: One of the most frequent reasons for discontinuing oral contraception (OC) from the side of patients is weight gain. Drospirenone (DRSP) is the only progestin whose mild antimeneralocorticoid effect makes it more similar to the endogenous progesterone than any other syntetic gestogen currently available. DRSP is able to eliminate the weight-increasing effect of estrogens. Its acceptability comes from the unique progesterone-like pharmacological profile of the progestin component derived from 17-spirolactone.
Objectives: The purpose of this study was to observe the changes in body weight during 6 usage cycles of the new OC containing 30 μg of ethinylestradiol and 3000 μg of drospirenone in one tablet (Yadine).
Design & Methods: From June 2003 untill January 2004, in 110 women between 15 and 46, changes in body weight, BMI and girt measurement were observed. Side effects and reasons for discontinuation were analysed.
Results: One patient (0,9 %) stopped using Yadine in the first month of usage because of pains in the calves and a feeling of languor, the other 109 patients (99,1 %) finished 6 cycles. The contraceptive's reliability was absolute. During 6 usage cycles of Yadine, the mean body weight dropped from 60,5 to 59,6 kg, the BMI decreased very slightly from 21,9 to 21,6 kg/m^2 and girt circumference decreased from 61,5 to 60,2 cm. Breakthrough bleeding occured in only 2 cases (1,8 %) in the first 3 months.
Conclusions: According to the results of this prospective study, in 654 cycles the OC containing 30 μg of EE and 3000 μg of DRPS is tolerated very well. Body weight, BMI and girt circumference remain stable or are slightly, non-significantly decreased. There were no serious life threatening adverse events, in one patient pains in calves indicated the risk of possible of thrombosis and using of OC was stopped.

P186

First pill teach

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Introduction: There are a number of widespread misconceptions around the use of the contraceptive pill prompting the need to communicate a series of messages, and assist in the delivery of the first pill teach.
Aims: To develop an initiative that will address the above issues, by communicating information in a clear, unambiguous, 'non-medical' way, which will be meaningful to users, parents and professionals.
Method: The messages broadly break down into two categories: Information communication at the point of initial prescribing; How and why the pill works; safe use of the pill; addressing common misconceptions, for example increase in weight. Information communicated for ongoing use of the pill such as: What to do if you miss a pill; side effects; the effect of antibiotics; the difference between the contraceptive pill and Emergency Contraception; awareness of impact on pill of sickness or diarrhoea; need to protect further against STI's.
How the Initiative Will Operate: Pill Wallet: a purpose designed wallet, large enough to contain a strip of pills, and a mirror, which is designed to appeal to young women. The Wallet will also contain a new leaflet. Leaflet: a concertina folded leaflet, which fits the wallet. Content is simple graphics and text to illustrate how the Pill works.
Information CD: 'Get the Facts': a supporting CD which will feature two characters who talk through the Do's and Don'ts of Pill Taking, interspersing music, allowing the listener to move backwards and forward through the CD.
The above products will be used as a 'set', to be given to young women under the age of twenty years during first pill teach by the professional. These products can also be used as 'stand alone' products for use in family planning/teen clinics and by young people's workers for further clarification. The initiative is approaching the final stage of development, and will be launched in April and rolled out to family planning/teen clinics in Hull and the East Riding.

P187

An assessment of the use of Implanon® in Luton

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Introduction: Implanon® has several advantages over other methods of contraception including high efficacy, minimal required maintenance, and absence of oestrogen and rapid return of fertility after discontinuation. We present here our experience with first 106 implanon® insertions, which we performed between January 2000 to July 2001.
Objectives: The aims of the study were to (a) study the clinical and demographic profile of implanon® *users, (b)* assess the continuation rates of implanon® in the local population, and (c) identify the reasons for removal.
Design and Methods This was a case note based study where the data was transferred to a standardised pretested proforma and was analysed by simple tabulation
Results: The age range of the 106 implanon® users was15–43years (mean 25.2yrs) and 36. 8% were nulliparous. The preinsertion weight was over 70 kg in 41% cases. Sixty seven percent clients were white Caucasian women, 17%being Asian and 16% belonged to other ethnic groups. Thirty-three clients were either lost to follow up or are still continuing to use implanon®. Seventy-three of these clients had their implanon® removed. Out of these 73 cases 17 cases have completed full 3 years period; therefore the continuation rate at 3 years was 23.2%. The continuation rate at the end of 1 year was 64.4% and at 2 years was 37%. Out of 56 cases who had removal of implanon® before recommended 3 years period the commonest reason was for bleeding irregularity in 22(39 %) cases, and to plan pregnancy in 9 (16%)cases. No failure of the method was found.
Conclusions: Implanon® is a highly effective method of contraception, which is relatively free of serious side effects. However, in our experience, continuation rate at 3-year was only 23.2%, with irregular bleeding being the main reason for discontinuation. Resolution of this difficulty is likely to lead to enhanced compliance.

P188

Can there be a genetic background of the primary idiopathic infertility? The leukemia-inhibitory factor gene mutations in the population of infertile women

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Objective: Since the first successful In Vitro Fertilization (IVF) in human and birth of Louise Joy Brown, the world's first test-tube baby (in 1978), the number of patients using Assisted Reproductive Technologies (ART) has increased tremendously. But ART are still not efficient enough - approximately half of the women who seek medical treatment for infertility never give birth to a child. During the past decade only one in six cycles of assisted conception has resulted successfully in a live birth. As it was shown previously, leukemia inhibitory factor (LIF) is one of the essential cytokines in molecular crosstalk that influences the embryo implantation. 'Errors' in the embryo-endometrium communication leading to difficulties with the embryo implantation are supposed to be one of the causes of the relatively low pregnancy rates of ART and also one of the causes of the primary idiopathic infertility (PII). We designed a LIF gene mutation screening method that is based on the temperature-gradient gel electrophoresis (TGGE) and subsequent sequencing.
Design & Methods: The population to screen consists of 105 clinically characterised group of women with diagnosed infertility including a subgroup of 40 women with idiopathic primary infertility. The control population comprises of 55 healthy control subjects that conceived spontaneously and delivered successfully.
Results: Four LIF gene mutations were detected. In all cases the G to A transition at the position 3400 of the human LIF gene was identified. This position corresponds to region of the lif protein (AB loop) that is supposed to be highly important for the LIF and LIF-receptor interaction. All positive women were infertile. Three of them were diagnosed with primary idiopathic infertility and had history of at least one unsuccessful in vitro fertilisation (IVF) cycle. One of them got pregnant once (spontaneously) but suffered by spontaneus abortion at the 6th week of her pregnancy. No positive TGGE samples were identified in the control group.
Conclusions: Our results suggest that LIF gene mutations can lead to embryo implantation failure and that way to infertility and decreased pregnancy rates in assisted reproduction techniques. We believe that better understanding of the genetic background of infertility belongs to the holistic approach to reproductive health.
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P189

Using menstrual data to time the administration of mifepristone as once-a-month contraceptive pill

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Introduction: Many women find the idea of a once-a-month contraceptive pill attractive. Mifepristone has been shown to be an effective once-a-month contraceptive if administered orally in the early luteal phase of the cycle. However unless mifepristone is given within 3 days of ovulation there is widespread disruption in the pattern of menstrual bleeding.
Aims and Methods: In this study we tested the feasibility of timing the administration of mifepristone on the 12th day before next menses as calculated from the length of the three previous menstrual cycles. 399 women in 5 centres (Edinburgh, Capetown, Sagamu, Hon Kong, Shanghai) were randomised to receive 10, 25 or 200 mg of mifepristone or placebo.
Results: The menstrual period came within 5 days of the predicted date in 88% of women receiving placebo, 84% of women receiving 10 mg, 72% of women receiving 25 mg and only 48% of women treated with 200 mg of mifepristone. Increasing dose of mifepristone was associated with an increasing chance of having a detailed period $p < 0.001$ with 3, 10, 18 and 26% of women in the placebo, 10, 25 and 200 mg groups respectively having a delay in onset of menses of more than 5 days. Only 45% of women were in the peri-ovulatory phase of the cycle according to LH and progesterone measurements on the day of drug administration. Women treated before ovulation were more likely to have delayed menses with all three doses of mifepristone. Only women treated with 200 mg of mifepristone were likely to have an early period if treated after ovulation.
Conclusions: It seems unlikely that mifepristone administered once a month at a time based on the calendar would provide a reliable method of contraception.

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Determinants of use of the monthly contraceptive ring – a study of the Basque Society of Contraception

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Introduction: Whether or not a woman starts using a new contraceptive method depends on many variables, which may not only be related to the woman, but also to her doctor. Investigating these determinants of use may help prescribers in their daily practice.
Aim and Methods: To investigate the rate of acceptance of the contraceptive ring (NuvaRing) when offered as their new contraceptive method to Basque women and to investigate the determinants of use or non-use. We offered the contraceptive ring to a total of 1241 Basque women who came to their usual centre – family planning centre, hospital or private practice – for contraceptive counselling or their annual check-up. The ring was presented conform normal practice. Demographic details were collected of both the investigator and the woman. Women were asked their actual form of contraception, and whether or not they wished to use the ring. Reasons for non-acceptance were registered. Descriptive analysis are presented.
Results: Data of 1241 women (mean age 26,9 years) were analysed. Most women used the condom a their actual form of contraception (49,7%), while 41,2% used the Pill. Tampon use, including both occasional and normal use was 88,4%, which is higher than that reported previously. The acceptance rate of the ring was substantially higher than anticipated; 56,9 % of the women accepted the ring as their new method. The reasons for non-acceptance were mainly related to the unfamiliarity of the anatomy of the vagina. The gender or the speciality of the prescriber (gynaecologist, midwife, educator or family planning doctor) did not seem to influence the acceptance rate of the ring. Of the 4 determinants investigated, 3 seem to be interrelated, while 1 was not. Women using a Pill are more likely to accept using the ring (61,5%) than women using condoms (54,6%). Teenagers were less likely to accept the ring than women of 20 years and older, although this may be related to the current contraceptive method; over 70% of the teenagers uses condoms, and only 16,3 % the Pill. Women with a university degree are more likely to opt for the ring than women with a lower education, but they are also more likely to use the Pill. The use of tampons was related to the acceptance of the ring: 61% of the women using tampons chose to use the ring, while of the women not using tampons 25,5 % accepted the ring. Whether or not tampon use is a discriminator for ring use, or that it is related to the type of women who first start using a new method (innovators) cannot be disentangled form these data.
Conclusion: Among Basque women the acceptance of monthly contraceptive ring is high, over 50%. Determinants of acceptance are tampon use and the current type of contraceptive, and interrelated with the latter age of the women and the degree of education. Non-acceptance is mainly related to the unfamiliarity of the anatomy of the vagina.

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NuvaRing does not interact with oral antibiotics

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Introduction: Oral antibiotics are commonly thought to lower the contraceptive efficacy of combined oral contraceptives, though recent literature suggests a lack of interaction. NuvaRing is a monthly contraceptive vaginal ring that continuously releases 15 μg ethinylestradiol (EE) and 120 μg etonogestrel (ENG) daily. The hormones are absorbed through the vaginal mucosa into the bloodstream, thereby avoiding hepatic first-pass effect. Two trials were conducted to investigate whether serum concentrations of EE and ENG released from NuvaRing are affected by concomitant treatment with the oral antibiotics amoxicillin or doxycycline.
Design and Methods: Two randomized, open-label, crossover trials were performed at a single centre in Germany. In one study, 16 healthy female volunteers (age 18–40 years) were randomized to 21 days of NuvaRing treatment either alone or concomitantly with amoxicillin (875 mg twice daily on days 1–10) followed by a 7-day, ring-free washout, before being crossed over to the alternate treatment. The other study was identical except that doxycycline (100 mg once daily on days 1–10) replaced amoxicillin. Concentrations of circulating EE and ENG were measured over various periods up to and including days 1–22.
Results: Fifteen subjects completed each study. During the relevant treatment periods in both studies, the patterns of circulating EE and ENG concentrations with NuvaRing alone were comparable with those for NuvaRing plus the relevant antibiotic. Analysis of area under the curve (AUC) values (day 1, day 10, days 1–11 and days 1–22) confirmed the absence of pharmacokinetic interactions with both antibiotics. The AUC (mean ± SD in ng h/ml) for EE over days 1–22 was similar for NuvaRing with amoxicillin (11.3 ± 3.6) or doxycycline (10.9 ± 3.9) compared with NuvaRing alone (11.7 ± 3.9 and 11.2 ± 3.1, respectively). The AUC (mean ± SD in ng h/ml) for ENG over days 1–22 was also comparable for NuvaRing with amoxicillin (992 ± 241) or doxycycline (853 ± 202) and NuvaRing alone (973 ± 193 and 824 ± 149, respectively). NuvaRing was well tolerated in both studies.
Conclusions: The studies show that there is no interaction between EE and ENG administered vaginally with NuvaRing and oral amoxicillin or doxycycline when used concomitantly. Pharmacodynamic and large efficacy studies have previously shown NuvaRing to be a reliable and robust contraceptive method. The present data further support NuvaRing's reliability since NuvaRing can be used concomitantly with amoxicillin and doxycycline and possibly other broad spectrum oral antibiotics.

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NuvaRing does not affect bone mineral density in pre-menopausal women

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Introduction: In pre-menopausal women, hormonal contraceptives have been associated with positive, neutral and even negative effects on bone mineral density (BMD), differences that may be dose-dependent and/or age related in nature. NuvaRing is a monthly combined contraceptive vaginal ring that releases 15 μg ethinylestradiol and 120 μg etonogestrel daily and has been shown to be effective, well tolerated, convenient and highly acceptable to users. The objective of this trial was to compare the effects of NuvaRing and non-hormonal methods or no contraception on BMD in pre-menopausal women.
Design and methods: This was an open-label, multicentre trial in healthy women (n=144; 18–35 years). Subjects were assigned 3:1 to NuvaRing (n=105) and control groups (n=39). The control group consisted of women who did not use a contraceptive method, those who chose to use or were already using a non-hormonal intrauterine device (IUD), and those who wished to use a non-hormonal contraceptive method other than the IUD. The NuvaRing group was treated for 26 cycles, each of 4 weeks' duration (3 weeks' ring use, 1 week ring-free), and the control group was treated for 24 months. Assessments of BMD of the lumbar spine and proximal femur were made using dual-energy X-ray after cycles 13 (month 12) and 26 (month 24).
Results: Of the 142 treated subjects, 27 in the NuvaRing group (26.2%) and eight in the control group (20.5%) discontinued. The reasons for discontinuation in the NuvaRing group were adverse events (15.5%) and 'other reasons' (10.7%), such as a desire to become pregnant. In the control group, two women using IUDs discontinued due to pregnancy (5.1%), two due to adverse events (5.1%) and four for 'other reasons' (10.3%). No change in BMD was observed in NuvaRing users (n=93) in the lumbar spine (Z-score change: −0.058 and −0.098) or femoral neck (−0.057 and −0.061) from baseline to cycle 13 or 26, respectively. In the control group (n=34), BMD increased slightly in both the lumbar spine (0.212 and 0.257) and the femoral neck (0.085 and 0.223). The between-group differences were statistically significant for the lumbar spine at cycle 13/month 12 ($p=0.003$) and for both the lumbar spine and femoral neck at cycle 26/month 24 (both $p<0.0001$). These differences were not considered clinically relevant. NuvaRing was generally well tolerated and no notable treatment differences in body weight were observed between the two groups.
Conclusions: Two years of NuvaRing use in healthy adult women had no effect on BMD.

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Holistic sexual health care in recipients of high dose chemotherapy or chemo-radiotherapy and bone marrow transplantation for haematological malignancy presenting with sexual dysfunction

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Introduction: The long term survival of recipients of high dose chemotherapy (HDC) with or without total body irradiation (TBI) and bone marrow transplantation (BMT) for haematological and other cancers have improved in the last decade. Thus sexual morbidity has become apparent affecting 70–80% of survivors.
Aims of study: To test the hypothesis that holistic sexual health care implemented by a multidisciplinary team (MDT) of specialists using polytherapy with sex hormones, counselling and erectogenic drugs can improve the quality of life of cancer patients.
Design and Methods: We studied 110 patients aged 26–62 (median 41) years presenting over a l0 year period with features of hypogonadism and sexual dysfunction, who had HDC and allogeneic with TBI or autologous BMT for a variety of haematological malignancies. Sexual response was assessed before and at 6 and 12 months of polytherapy by using clinical (IIEF scoring and NIH criteria) and endocrine parameters. A MDT of specialists (oncologists, reproductive endocrine and sexual health specialist, counsellors) was involved to offer holistic sexual health care to the cancer patients. Patients presenting hypogonadism with diminished libido were treated with Testosterone replacement therapy (TRT) (4 weekly intramuscular injections of testosterone propionate), ED and low libido were treated sildenafil (50–100 mg twice weekly) and TRT and others had counselling and support only.
Results: At the onset of study, 49 (44%) patients presented with diminished libido, 88 (80%) had diminished libido and ED, and 25 (23%) had ejaculatory and orgasmic problems. All patients with diminished libido were treated with TRT and only 40 (82%) had correction of libido both clinically and biochemically. Of the 88 patients with diminished libido and ED who were treated with TRT and sildenafil, only 50 (57%) had a good response as evident from IIEF score and NIH criteria. Psychological support and counselling offered to 80/110 (73%) patients and 60/80 (75%) showed good results.
Conclusion: Our data suggest that a holistic approach to cancer care provided by a multidisciplinary team of specialists using polytherapy may improve the sexual morbidity of the cancer survivors.

P194

Office hysteroscopic sterilization using the Essure micro-insert device

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Objective: The Essure permanent birth control (pbc) device is a minimally invasive transcervically placed micro-insert that occludes the Fallopian tubes, resulting in permanent female sterilization. This device is, as far as we know, the first medical device to obtain the FDA approval, for hysteroscopic sterilization. The author's report their experience using this device in an office setting and present data about the safety, effectiveness and tolerance of the procedure.
Methods: The method was presented to women seeking permanent birth control that met the patient selection criteria recommended. Associated pathologies increasing operative risk were a taken in consideration and favoured the choice of this method. After an exhaustive explanation of the procedure, women gave their written informed consent and the procedure was scheduled. Essure pbc micro-inserts were inserted in the proximal portion of the Fallopian tubes under hysteroscopic visualisation with paracervical block or no local anaesthesia, in an office setting. The procedure was performed preferentially in the follicular phase of the cycle and women were advised to use an effective contraception method. The patients were evaluated 1 month after the procedure and a hysterosalpingogram scheduled at 3 months. We analysed retrospectively all clinical files and evaluated, the safety of the procedure, the tolerance and recovery from the procedure, tubal occlusion and device placement.
Results: From May 2002 to January 2004, 37 women aged 26- 47 (38,75) were submitted to the procedure; 20 (54,05%) had associated pathology increasing the operative risk. Bilateral device placement was achieved in 33 (89,19%) women. In 2 (5,40%) women a second procedure was required to accomplish bilateral placement. In 1 (2,70%) only unilateral placement was possible. In 1 case (2,70%) expulsion of one device occurred. 32 (86,49%) women found the procedure to be highly acceptable. 31 (83,78%) women received diazepam, 5mg, orally prior placement and N butil bromide of hioscine i.v. during procedure; 14 (37,84 %) patients had paracervical block and 21 (56,76%) needed analgesic medication during or immediately after the procedure but no patient complaint from post-procedure pain at the moment of discharge. No major complications occurred. All patients but two had a correct device location and bilateral tubal occlusion 3 month after procedure as confirmed by HSG. These two women achieved it at 6th months post-procedure. 26 women were able to rely on Essure for permanent birth control and no pregnancies occurred until now.
Conclusion: According to our experience this method can be performed safely and with minimal patient's discomfort in an office setting. It was associated with a rapid recovery, high patient satisfaction and low rate of complications. Data presented are similar to those in the literature and suggest that this procedure may be an effective alternative to women seeking sterilization without requirement of incisions and general anaesthesia and especially to women with increased operative risk.

P195

Low-dose mifepristone inhibits endometrial proliferation and up-regulates androgen and glucocorticoid receptor

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Introduction: Progesterone receptor (PR) antagonists have many potential uses including treatment of endometriosis, fibroids, breast cancer and meningiomas. Mifepristone in daily low doses has contraceptive potential by inhibiting ovulation. Follicular development is maintained and although the endometrium is exposed to unopposed estrogen, there are no signs of hyperplasia or atypia. The mechanism of this 'anti-estrogenic' action is unknown.
Objectives & Methods: We have investigated the effect of daily low-dose mifepristone on proliferation markers and steroid receptors in surface epithelium, glands and stroma of the endometrium. Endometrial biopsies were collected from 16 women before (late proliferative), 60 and 120 days after taking 2 or 5 mg mifepristone daily for 120 days. Endometrial proliferation (H3 mitosis marker) and steroid (estrogen, progesterone, androgen and glucocorticoid) receptor content were studied using standard immunocyotchemistry techniques. Stromal density was measured using image analysis.
Results: There was a significant decrease in expression of H3 mitosis marker ($p \leq 0.001$) and progesterone receptor (PR) ($p < 0.05$) in endometrial glands and stroma by day 60 of treatment. In contrast the expression of androgen receptor (AR) and glucocorticoid receptor (GR) increased ($p < 0.01$) in glands, surface epithelium and stroma as compared to the pre-treatment sample. There was an 18 % increase in stromal density by day 60 of treatment ($p=0.002$). These changes were maintained at 120 days of treatment. Expression of estrogen (ER) was unchanged in stroma and surface epithelium, however there was a significant decrease in expression after 120 days of treatment ($p=0.34$).
Conclusions: Since androgens can antagonize estrogen action, enhanced glandular AR expression induced by mifepristone could play a role in its anti-proliferative effects.

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Does use of the combined oral contraceptive pills cause changes in nasal physiology in young women?

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Introduction: Previous work in this area demonstrated changes in nasal physiology during pregnancy 1 and at ovulation 2. The effect of combined oral contraceptive pills on nasal physiology, to our knowledge, has not been investigated.
Objective: To demonstrate whether the use of combined oral contraceptive pill influences nasal physiology.
Design & Methods: Female volunteers seeking to commence combined oral contraceptive pills (cocp) were recruited from a community family planning clinic. Measurements of the nasal airways were made at day 1 and at mid-cycle of their periods prior to the commencement of the cocp and then repeated at the same timings once on the pills. These measurements included anterior rhinoscopy, peak inspiratory nasal flow, acoustic rhinometry and anterior rhinomanometry. Symptomatic measurements were by saccharin tests and rhinitis questionnaire scores. Results were analysed using paired t-tests.
Results: The research is in progress but the preliminary analysis of the results suggests that there are no significant differences in the measurements before and after commencing cocp. However, there are differences between the day 1 and mid-cycle readings before commencing cocp (anterior rhinoscopy and rhinitis questionnaires were nearest to statistical significance), which is in agreement with the work previously conducted by Philpott et al 2.
Conclusions: An influence of endogenous hormones in a cyclical manner is evident, but the continuous pulse delivery of hormones provided by the cocp does not appear to influence nasal physiology significantly. This may provide complexities with the pharmacological antagonism of oestrogens in managing rhinitis.

1. Philpott C., Conboy P., Al-Azawi F., Murty G. Nasal physiological changes during pregnancy. Clinical Ortorlaryngology and Allied Sciences, 2004. In progress.
2. Philpott C.,El-Alami F., Murty G. The effect of the steroid sex hormones on the nasal airways during the normal menstrual cycle. Clinical Ortorlaryngology and Allied Sciences, 2004. In progress.

P197

Uterine manipulation with plastic suction curette at combined abortion and sterilization

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Objective: To determine the efficacy and safety of a plastic suction curette as uterine manipulator during combined surgical abortion and laparoscopic sterilization.
Design: A six- year prospective observational study in a university hospital & a district hospital, fertility control and reproductive health unit.
Method: Plastic suction curettes of sizes between 7mm and 12mm(Synevac vacuum Curette, Berkeley Mdevices, Inc; California or Curette rigid straight, Luneau Gynecologie; France) were used for surgical abortion up to 13 weeks in the day care surgical unit. The curette was also used to manipulate the uterus and demonstrate the tubes for laparoscopic sterilization. Thereafter, routine inspection of the pelvic organs was undertaken to exclude any pathology or iatrogenic damage. Further suction was performed to ensure that the uterus was empty. Following this a bimanual examination confirmed it to be firm and haemostasis secured.
Results: Between 1st January 1996 and 31st December 2002, a total of 510 laparoscopic sterilizations were performed together with surgical abortion. No uterine perforation occurred in this series. Adequate visualization of pelvic structures was achieved. Minimal intra-operative uterine bleeding was noted as continued low suction maintained uterine tonicity. No patient required hospitalization or re-admission for complications of the operation.
Conclusion: This is the first report of the use of plastic suction curette as Uterine manipulator for laparoscopic sterilisation following surgical abortion. This study shows that it is a safe, efficient and technically satisfactory manipulator of a gravid uterus during the first trimester abortion. Maintenance of suction avoids uterine atony and minimizes intra-operative blood loss. The curette is disposable, therefore reduces any risk of hospital cross-infection and also it is cost saving as no additional instrumentation is required.

P198

Prevention of errors when using oral contraceptives

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Accurate use of oral hormonal contraception (OHC) is the basic precondition for the satisfaction of women who use it. One approach to reduce the percentage of user errors is the use of a compliance card – called Mercilonka in the Czech Republic. In 1998–2003, all women using low-dose OHC (15–20 μg ethinylestradiol with various progestins) were interviewed to ascertain the number of errors and occurrence rate of atypical bleeding. The results for women using compliance card were compared with those of other women who were not using the card. Patients using compliance card reported less errors (5.2% versus 8.9% in the control group) as well as atypical bleedings (4.0% versus 6.8 %). The pregnancy rate (Pearl index) was lower in the group of compliance card users (0.02 versus 0.034). Compliance card is appropriate as an aid to reducing the number of errors and improving the comfort of contraception.

P199

Cycle control with NuvaRing is superior to a 30 μg ethinylestradiol oral contraceptive

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Introduction: Decreasing the dose of ethinylestradiol (EE) to 20 μg or lower in combined oral contraceptives (OCs) may produce poor cycle control. NuvaRing, a monthly contraceptive vaginal ring releasing 15 μg EE and 120 μg etonogestrel, has been shown in large efficacy and safety trials to provide excellent cycle control. This is the first large comparative trial conducted to demonstrate that cycle control with NuvaRing is superior to that with an OC containing 30 μg EE and 150 μg levonorgestrel.
Design and methods: This was an open-label, randomized, comparative, multi-centre, 1-year trial carried out in 11 countries, involving healthy women (aged ⩾18 years) seeking contraception. Subjects received either NuvaRing (n=512) or the OC (n=518) for 13 cycles. Each cycle comprised 3 weeks of NuvaRing or pill use, followed by a 1-week ring- or pill-free period. Diary cards were used to record daily bleeding patterns, including spotting (requiring one pad or less) and breakthrough bleeding (two pads or more). The primary parameter, the incidence of breakthrough bleeding-spotting, was calculated for cycles 2–13 (cycle 1 data were excluded due to differences in starting procedures). Secondary parameters included the absence of withdrawal bleeding, the incidence of early and continued withdrawal bleeding and intended bleeding (absence of breakthrough bleeding-spotting during ring or pill use and presence of withdrawal bleeding in the ring- or pill-free period). Efficacy and tolerability data are presented separately at this meeting.
Results: A total of 363 women in the NuvaRing group (70.9%) and 369 women in the OC group (71.2%) completed the trial. The incidence of breakthrough bleeding-spotting was lower with NuvaRing (range 2.0–6.4%) than with the OC (range 3.5–12.6%) for all cycles (2–13), the difference being statistically significant in cycles 2 (p=0.003) and 9 (p=0.002). The incidence of intended bleeding was statistically significantly higher for NuvaRing (58.8–72.8%) than for the OC (43.4–57.9%) for all cycles (1–12). Absence of withdrawal bleeding ranged from 0.3–3.5% for NuvaRing and 1.6–3.6% for the OC (p=0.01; cycle 6). Occurrence of early withdrawal bleeding ranged from 2.5–6.2% for NuvaRing and 2.0–8.7% for the OC. Continued bleeding after ring or pill withdrawal was more frequent with the OC (33.8–39.0%) than with NuvaRing (21.7%–27.3%) and this was statistically significant for all cycles.
Conclusions: Cycle control with NuvaRing, with a daily dose of 15 μg EE, was excellent and superior to that with an OC containing 30 μg EE and 150 μg levonorgestrel.

SESSION 11: NON-CONTRACEPTIVE USE OF CONTRACEPTIVES

P200

Breakthrough bleeding (BTB) with contraceptive pill use in deployed female military personnel – a deployment health issue?

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Introduction and Aims: A significant number of female troops use a contraceptive pill for cycle control, which is popular due to the difficulties of maintaining hygiene in an austere environment. BTB rates may increase with stress and illness, common causes being: missed pills, cervical disease, infection, smoking and decreased absorption secondary to diarrhoea and vomiting. This study was carried out to determine cycle control practices, to evaluate the issue of BTB and its effects on the personal hygiene, health and quality of life in deployed military women.
Methods: A questionnaire was undertaken of 100 females deployed to the Persian Gulf with a British Field Hospital in May 2003. Methods of contraception/cycle control, BTB patterns, obstetric and gynaecological history, incidence of diarrhoea and vomiting, and the subjective effects of BTB on lifestyle and work were explored.
Results: 52.7% of women on hormonal contraception reported BTB. Of these, most were using a standard-dose, second-generation pill. 17.6% of pill users discontinued their pill due to BTB. De novo menstrual irregularities were also reported in personnel not using contraception. Pre-deployment menstrual frequency was regular in 85% of women with new BTB. 25% of subjects with BTB had previously returned abnormal cervical smears. 42.9% of women questioned reported difficulties with personal hygiene, affecting quality of life and work.
Conclusion: BTB is a significant health issue for deployed women. Further research is required to examine and improve: 1) Training of military doctors and General Practitioners in screening, counselling and care of deployable females; 2) Access to gynaecological investigations; 3) Management of BTB on deployment, and; 4) Access to adequate hygiene facilities in the field.

P201

The influence of ethinylestradiol/dienogest combination on the reduction of acne vulgaris in young females

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Introduction: The influence of combined oral contraceptives (COC) in suppressing sebaceous gland activity is well known. The preparation consisted of 30 g ethinylestradiol and 2 mg dienogest was found to have more prominent effect on sebaceous gland production than the other COCs.
Objective: To assess a hypothesis that COC containing 30 g ethinylestradiol and 2 mg dienogest could efficiently reduce acne vulgaris (AV) in young females.
Design & Methods: This investigation included 107 young female patients of the Department of pediatric and adolescent gynecology, Mother and Child Health Care Institute of Serbia, Belgrade. The study enrolled all patients with AV problem, who had attended this Department during the first two months of the study period. The severity of AV was evaluated according to type, intensity and lesions spreading, ranked afterwards as mild, moderate or severe. Menstrual irregularities were used as the indicator for possible engagement of ovarian hyperandrogenism in the presence of AV. The study group passed 6 cycles of COC, containing 30 μg ethinylestradiol and 2 mg dienogest each. The assessment of the therapeutic outcome on this preparation was made after 3 and 6 cycles. Changes in the severity of acne were ranked on a five-degree scale (from excellent to deleterious effect). The significance of the observed differences was statistically analyzed by means of descriptive statistics. The study was conducted from February 27th 2003 to October 21st 2003.
Results: The participants of the study were aged 15–19 (60 or 56.1%) and 20–24 (47 or 43.9%). All of them had papulopustular and nodular skin lesions on the face, chest and back ranked as moderate in 62 (57.9%) and severe in 45 (42.1%) females. Menstrual disturbances, oligomenorrhoea (89 or 83.2%) and dysfunctional uterine bleeding (9 or 8.4%), were present in all but 9 (8.4%) subjects. After 3 cycles of treatment, excellent effect was observed in 11 (10.3%) females with moderate acne, very good effect in 72 (67.3%), mildly good effect in 9 (8.4%), no effect in 14 (13.1%), and deterioration in 1 (0.9%). The improvement of AV was more evident after 6 cycles, when excellent effect was registered in 60 (56.1%) cases, very good effect in 35 (32.7%), mildly good in 7 (6.5%), no effect in 4 (3.7%). Precipitated withdrawal of one participant after 3 cycles was caused by deterioration of her acne.
Conclusion: COC containing 30 μg ethinylestradiol and 2 mg dienogest showed very good results in AV reduction. As a low-dose preparation, it could be, therefore, used in young females exclusively for the AV treatment.

P202

Prevention of endometriotic cyst recurrence with continuous oral contraceptives after laparoscopic surgery

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Objectives: Endometriotic cysts recur following laparoscopic surgery in 5 – 35% of cases due to the reestablishment of monthly menstrual bleeding, which carries viable endometrial cells into the peritoneal cavity. The objective of this study was therefore to evaluate the effects of suppressing ovulation and menstrual bleeding on the recurrence of endometriotic cysts through the continuous use of oral contraceptives following laparoscopic surgery.
Material & Methods: In this study, the efficacy of the continuous administration of an oral contraceptive combination was evaluated in an open study carried out over a two-year period. The treated arm of the study consisted of 20 patients with the diagnosis of endometriotic cyst, who were submitted to video-laparoscopic surgery and who were not planning pregnancy. These patients had either bilateral (n=8), left side (n=8) or right side (n=4) endometriomas. Transvaginal sonography with color Doppler was carried out in all cases prior to surgery and every six months thereafter. Treatment regimen consisted of the continuous administration of 30 mcg of ethinyl-estradiol and 75 mcg of gestodene (Gestinol, Libbs, Brazil) for two years. Eighteen patients with ovarian endometriomas submitted to laparoscopic surgery, who did not wish to become pregnant and who were using barrier methods as their sole form of contraception, comprised a control group. All control patients had transvaginal sonograms before surgery and at six-month intervals for two years following surgery. The criteria for diagnosing a recurrence of endometriosis were the resumption of symptoms and sonographic detection of endometriotic cysts.
Results: In the control group, 4/18 (22%) patients had a recurrence of endometriotic cysts and the return of dysmenorrhea by the end of the first year. In the second year, three more patients developed endometriotic cysts as detected by transvaginal sonography, giving a cumulative failure rate of 38%. In contrast, in patients using continuous oral contraceptives, there were no recurrences of ovarian endometriotic cysts or symptomatology in the 18 patients that completed the treatment period. No patients abandoned the study because of side effects of the treatment. The only two subjects who stopped the medication in the second year did so because they wished to become pregnant.
Conclusion: These results indicate the necessity to suppress ovulation and menstrual bleeding following surgery in patients with endometriotic cysts in order to prevent their recurrence.

P203

Principles of pathogenetic correction of the hormonal disorders in reproductive women with adenomyosis

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Introduction: The multiple researches have revealed the role of cycle secretion and the correlation of steroid and gonadotropins in adenomyosis development. In the past years there is a question under discussion whether the illness could arise in the result of steroid interaction disorders with the receptors of endometrium cells.
Objective: Correction of hormonal disorders in women of reproductive age with adenomyosis depending on endometrium and myometrium receptors condition.
Methods: The profile of gonadotropins and sex hormones as well as the condition of the endometrium and myometrium receptor in 50 women with adenomyosis was investigated.
Results: The basic estradiol level in the tested women was high (520,29+65,6 pmol/l) and remained on the high level in dynamics during the menstrual cycle. There was a high level of LH to be observed in the early follicular phase. The correlation of LH/FSH was equal 0.43–0.47. In this connection the insufficiency of progesterone in the periovulatory and luteal phase was ascertained. Adenomyosis in its 1st stage was morphologically revealed in 30 tested women (invasion of endometrium into the depth of one visual field). Immunohistological investigation of estrogens and progesterones receptors in the dynamics during the menstrual cycle showed the conservation of the receptor apparatus of endo- and myometrium in this contingent of patients. Therefore these patients were prescribed monophasic combination of dienogest and ethynilestradiol (dienogest 2 mg + ethynilestradiol 0.03 mg) for the 6–12 months period. The clinical effect of the conducted therapy was confirmed in 29 patients (96.6%). The pregnancy was diagnosed in 12 out of 20 women within 2 years of observation. Normal deliveries have already came in 8 patients.
Conclusions: Modern oral contraceptives are effective for the hormonal correction in reproductive women with mild adenomiosis.

P204

The impact of oral contraceptive use on bone mineral density

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Objectives: The aim of this pilot, cross-sectional study was to determine the influence of oral contraceptives (OC) on bone mineral density (BMD) in pre-menopausal women, to evaluate the relation between BMD and body mass index, and to analyze the role of potential risk factors of osteoporosis in women with normal and decreased BMD.
Design and Methods: Fifty healthy young pre-menopausal women enrolled into the study were divided in two groups according to the use of OC pills. Group A (N=30) had used OC formulations containing 30 μg ethinylestradiol for more then two years. Group B (N=20) had never used OC pills. To be eligible women have had no personal history of chronic diseases potentially affecting bone metabolism. All subjects underwent BMD evaluation at lumbar spine (L1-L4) and total femur using dual x-ray absorptiometry (Hologic, Delphi). Potential risk factors of decreased BMD were determined by a detailed questionnaire and an interview. Statistical evaluation employed Kruskal-Wallis analysis.
Results: There were no significant differences in age, weight, body mass index, parity, smoking status, current calcium intake, personal and family history of fractures, and the regular use of drugs influencing bone metabolisms in both investigated groups. The mean age of women when they started using OC was 20.6 (range 17–25) years and the mean duration of OC use ranged between 2–7 years. No significant differences in mean lumbar spine BMD and mean total femur BMD were determined between women who never used OC and current users of OC pills. The mean lumbar spine and total femur BMD values significantly paralleled body mass index in both investigated groups (*P .05*). Although patients with decreased BMD values did not differ with respect to use of OC pills, they were less likely to be involved in regular physical activity in leisure time (*P= .04*).
Conclusion: Use of OC pills containing 30 μg ethinylestradiol in healthy young women did not influence BMD at lumbar spine and total femur. There was a significant association between body mass index and BMD in both investigated groups. A significant correlation was found between normal and decreased BMD values and regular physical activity in leisure time irrespective of the use of OC.

P205

Our experience with Diane-35 in the treatment of acne

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Introduction: Because sex steroids, produced both from the ovaries and from the adrenals, are involved in the development of acne, suggesting increased androgen activity/sensitivity as an aetiological factor, antiandrogenic drugs have been used for the treatment of acne. The most potent antiandrogen is estrogen, with increasing sex hormon binding globulin (SHBG) levels. Other antiandrogen is cyproterone acetate (CPA). CPA is a derivative of hydroxyprogesterone and acts as a progestogen and as an antiandrogen. CPA has been used in combination with different doses of EE for the treatment of acne and androgenic disorders.
Objective: The aim of this study was to evaluate the effect of combined oral contraceptive Diane 35 (0.035mg EE/2 mg CPA) in women with mild and moderate acnae vulgaris and seborrhoea (n=50) against placebo group (n=30) for period of six months.
Materials and methods: We investigated 50 patients with mild and moderate acne vulgaris treated on our Clinic for Gynecology and Obstetrics during the 2003. All of them received Diane 35 for the treatment of acne after complete investigations. They were controled after 3 and 6 months of treatment. Patients were assessed for the severity of symptoms of acne by grading, lesion comit and photography. Also hormon and lipid levels were measured.
Results: The mean age of users ($\pm$SD) was 22,5$\pm$5,1 years of the women aged between 15 and 25years. After six months of treatment with Diane 35, we have found clinical improvement in the treatment group with reduction in the number and severity of lesions. We have found decrease in dehydroepiandrosterone sulphate levels (DHEA-S) in 60%, whereas total testosterone did not decrease. Seborrhea decreased in 25%. We have found increase in triglyceride levels with decrease in the levels of LDL-c.
Conclusion: Good improvement of acne vulgaris follows treatment with Diane 35. Therefore, although acne is not the primary indication for combined OCPs, it seems reasonable to use this preparations to women suffering from acne, particularly if they also require a contraceptive method.

P206

Clinical and pathologic study of abnormal uterine bleeding in premenopausal women to evaluate the prognostic variables of endometrial hyperplasia

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Objective: We performed this study to understand correlation between clinical aspects and pathological findings of abnormal uterine bleeding (AUB) and to evaluate the prognostic variables of endometrial hyperplasia.
Method: We reviewed 500 premenopausal women with abnormal uterine bleeding who underwent endometrial biopsy from January 1996 to February 2003, retrospectively. Pregnants, women who had hematologic disease, or those who used iatrogenic hormones were excluded. The age of women with AUB was mostly in the 5th decade (41.3$\pm$6.8). Body mass index (BMI) in most of women (69.6%) was between 18.6 and 24.9 (22.7$\pm$3.5).
Results: Among AUB menorrhagia (51.0%) was the most common bleeding pattern, and the next one was intermenstrual bleeding (38.0%). Histologic findings of endometrium were proliferative phase (34.0%), hyperplasia (26.4%), and seceretory phase (22.6%), in order of frequency. 79.0% (104 cases) of endometrial hyperplasia were simple hyperplasia, 16.0% (21 cases) were complex hyperplasia, and 5.0% (7 cases) were atypical hyperplasia. The associated diseases were myoma uteri, hypertension, and diabetes mellitus, in order of frequency. The endometrial hyperplasia was diagnosed in 46.4% of patients whose BMI was between 27.0–29.9, in 40% of patients between 30.0–34.9, and in 100% of patients whose BMI was 35.0 or more. The endometrial hyperplasia was diagnosed in 40.6% of patients with an endometrial thickness measured 15.1mm to 20.0mm, in 57.1% of patients with 20.1mm to 25.0mm, and in 100% of patients with 25.1mm or higher.
Conclusion: In premenopausal woman with AUB, the endometrial hyperplasia was highly associated with women whose BMI was 27.0 or higher, or with endometrial thickness measured more than 15.0mm. Therefore endometrial biopsy should be taken in women with AUB whose BMI is high, or endometrial thickness is thick to exclude the endometrial hyperplasia.

P207

Insertion of the levonorgestrel intrauterine system (LNG-IUS) in post-menopausal women

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Objective: There is growing evidence to support intrauterine progestagen delivery in HRT and this can be achieved with the LNG-IUS (Mirena® - Schering). However, clinicians may be concerned that insertion of the LNG-IUS in the post-menopausal state might be difficult. We present information on the insertion procedures of a cohort of post-menopausal women who had an LNG-IUS fitted.
Design & Methods: One hundred and ten women aged between 45 and 60 years with confirmed post-menopausal status had an attempted fitting of the LNG-IUS within an open randomized comparative trial of the LNG-IUS plus oral oestrogen versus a combined oral sequential preparation. These insertion data were secondary outcome measures within the study, which took place at a research unit in central London.
Intervention: Those with no previous HRT use (n=72) used estriol cream 0.1% vaginally for one week prior to the insertion. There was no wash-out period for current HRT users (n=38). The procedure was performed on a flat examination couch by one of four experienced clinicians. Pre-insertion oral analgesia and paracervical block (with 10ml 1% lidocaine) was used, unless the woman declined either. The IUS inserter used was the old 2-handed version. The clinician assessed the insertion as 'easy' or 'difficult' and the woman assessed the pain of insertion as 'none', 'mild', 'moderate' or 'severe'.
Results: In only one woman was insertion not achieved (the procedure was abandoned because the uterine cavity felt abnormally small on sounding). The clinician rated the insertion procedure as 'easy' in 66 (60%) and 'difficult' in 43 (40%). Ninety three women (85%) had a paracervical block and 43 (39%) had cervical dilatation. 17 (16%), 66 (61%), 21 (19%) and 5 (5%) described no, mild, moderate or severe pain, respectively. In five women the LNG-IUS was inadvertently removed during removal of the applicator (n= 3), speculum (n= 1) or whilst cutting the threads (n= 1). All immediately had a subsequent straightforward reinsertion. In one case ultrasound assessment was required to establish uterine position prior to insertion.
Conclusions: There was a low level of problems during insertion of the IUS within this group of postmenopausal women. Clinicians experienced in IUS insertion and familiar with local anaesthetic techniques and cervical dilation are unlikely to encounter excessive problems during IUS insertion for post-menopausal women.

P208

A modern scheme for preserving treatment of uterine leiomyoma

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Considering (1) the results of our previous research which demonstrated inhibitory effect of oral contraceptives Novynette on further growth of fibroids less than 2 cm in size as well as (2) existing data on reduction of risk of leiomyoma development due to prolonged oral contraceptives administration and (3) effectiveness of uterine arteries embolization we have developed a preserving treatment scheme for patients with leiomyoma. Fibroids 10 to 20 mm in size – prolonged oral contraceptives administration. Fibroids 10 to 20 mm in size – 2-stage treatment: GnRH agonists for 12–24 weeks followed by prolonged oral contraceptives administration. Fibroids over 45 mm in size – uterine arteries embolization (myomectomy in case of a single fibroid in a nonparous woman). Subserosal pedunculated fibroids – laparoscopy. Submycosal fibroids – hysteroresectoscopy for sizes up to 30 mm, uterine arteries embolization for larger sizes. 3560 patients have been treated using the scheme in the course of 3 years and only 12 of them have had to undergo hysterectomy which makes just 0,3%. Therefore we can maintain our scheme lets treat leiomyoma preserving organs and reducing need for surgery considerably.

P209

The levonorgestrel intrauterine system with a transdermal estrogen for climacteric complaints: clinical and endometrial responses

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The aim of this research was to study clinical efficiency and acceptability of transdermal estrogen (Klimara) in combination with levonorgestrel intrauterine system (LNG-IUS) for the treatment of climacteric complaints of premenopause women as well as to determine the influence of LNG-IUD on the condition of endometrium.
Material and method: We had twenty five premenopause women. The average age of the subjects was ranging from 45 to 52 years.We dealt with patients seeking treatment for climacteric symptoms. Major complaints were hot flushes, sweating, sleep disturbances and irritability or depression. These climacteric symptoms appeared against delay periods.
Methods of investigation: We used Kupperman index to describe climacteric symptoms; serum concentration of estradiol was thoroughly observed within the period of a 1-year treatment. The efficiency of the progestin therapy was controlled by transvaginal ultrasonography and by the examination of biopsy samples obtained. The duration of follow-up was 12 months. The intervals of follow-up were 6 months.
Results: Curing effect on climacteric symptoms was observed in decrease or disappearance of hot flushes and hypergedroses in 3 months' time (45%). After 6 months Kupperman index became noticeably lower ($p < 0.01$). During the follow-up year, serum estradiol concentration got significantly higher ($p < 0.0001$) and the average concentration was 182 ± 17 pg/ml after 6 months and 260 ± 19 pg/ml after 12 months. During the first half of the follow-up year, 32% of the women had amenorrhea and one year after the beginning of the study their number rose up to 84%. Histological examination showed that the typical finding in the endometrium was without any indications of functional activity with 90% of women. Intrauterine levonorgestrel-releasing system induces the transformation of the endometrium characterised by extensive decidualisation of the stroma, cells associated with leukocyte infiltrate, atrophy of the glandular, glandular epithelium of the indifferent type. After 12 months' therapy, all women had atrophic epithelium with pronounced decidual reaction in the stroma. No signs of proliferation were observed in any of the endometrial samples.
Conclusion: Thus, levonorgestrel intrauterine system with estrogen in HRT is an effective and acceptable method of treating climacteric symptoms. It is extraordinarily important that the progesterone released from the IUD prevents the endometrial proliferation induced by estrogen.

SESSION 12: PROFESSIONAL EDUCATION – SKILL MIX

P210

European resuscitation council guidelines in a community contraceptive and sexual health setting

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Introduction: Although acute anaphylaxis or cardiac arrests are uncommon in a primary care setting it is important that all members of the clinical staff are up to date with the management guidelines for cardio-pulmonary resuscitation (CPR) and anaphylaxis management. In response to the updated European Resuscitation Council (ERC) guidelines published in 2000 and the subsequent local guidelines, a brief, focused educational session was arranged for multi-disciplinary clinical staff from our contraception and sexual health service.
Aim: To carry out an evaluation of a brief focused educational session on anaphylaxis management and basic CPR.
Method: Evaluation of the training was carried out using pre- and post- course questionnaires. In the week prior to the course and then again one month later 45 multiple-choice questions (MCQ's) were given to all the delegates. The questions assessed knowledge regarding the updated guidelines on both basic CPR and anaphylaxis. The responses were then entered into an Access database, which was then analysed using the SSPS statistical package.
Key findings:

	Correct Responses	
Question	Pre-course	Post-course
Kinins are involved in anaphylaxis?	33%	66%
High or normal BP occurs in panic attacks?	73%	100%
Wheeze is not associated with panic attacks?	23.3%	47%
The ERC updated their guidelines in 2000?	20%	80%
To assess response, victim should be shaken gently?	87.7%	80%
The correct number to phone an ambulance is 999?	80%	87.7%
A finger sweep prior to basic CPR is not necessary?	44.4%	93.3%
Basic CPR involves: 2 effective breaths followed by 15 compressions?	80%	100%

Conclusion: A brief focused educational session to multidisciplinary clinical staff can produce a substantial increase in knowledge of ERC guidelines and local guidelines in anaphylaxis management and basic CPR.

P211

The development of a Clinical Nurse Specialist training programme

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Introduction: Nurse-led clinics are routine within our busy contraception and reproductive health service, involving the initial and repeat issue of hormonal contraception according to Patient Group Directions and cytology screening. Nationally there is a move to encourage nurses to continue professional development within their area of expertise. A need for the development of a Clinical Nurse Specialist was identified within our service both as a result of the ongoing professional development of some experienced nurses and the local and national shortage of appropriately trained medical staff. The next step in the development of the nurse is to become competent to insert uncomplicated IUD/IUS and contraceptive implants. On investigation it was discovered that there was not a suitable training programme available to assist with the achievement of the required competencies.
Objective: To design a training programme to develop a Clinical Nurse Specialist in Contraception and Reproductive Health Care to meet the needs of the service.
Design and Methods: The tasks and roles the nurse would be required to undertake were identified together with the training and development needs for her to achieve the competencies to undertake them.
Results: A training programme to develop a Clinical Nurse Specialist has been designed to accommodate the needs of both the service and the nurse, which can be adapted to accommodate any changing needs in the future. Part of the programme has been designed utilising in-house availability of Faculty of Family Planning Instructing doctors with an appropriate letter of competence for insertion of IUD/IUS and Contraceptive implants. Also academic development and support has been obtained from a regional University in the form of a Sexual Health degree pathway.
Conclusions: With imagination and planning, training programmes can be designed to suit and achieve individual service needs leading to a more flexible service and improving the development opportunities for staff.

P212

Helicobacter pylori seropositivity and stool antigen in patients with hyperemesis gravidarum

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Objective: To investigate whether Helicobacter pylori is an etiologic factor in hiperemesis gravidarum.(HG)
Design and Methods: Thirty-one patients with HG and twenty-nine pregnant controls without HG were included in this prospective study. Helicobacter pylori serum Immunoglobulin G Antibody (HpIgG Ab) and Helicobacter pylori stool antigen (HpSA) are investigated which show chronic infection and active gastrointestinal colonization, respectively. Chi-square and Student t-test were used accordingly for statistical analysis.
Results: Helicobacter pylori seropositivity was 67.7% in the patients with HG, and 79.3% in the control group ($c2=1.02$, $p=0.31$). HpSA was detected in 22.6% of patients with HG whereas 6.9% of patients in the control group. The difference was not statistically significant ($c2=2.89$, $p=0.08$).
Conclusions: In this study, no relation was found between Helicobacter pylori and hyperemesis gravidarum. If the clinical index of suspicion from a helicobacter pylori infection in a pregnant women is high, we recommend that HpSA detection will be a more reliable diagnostic method since it shows an active infection rather than a chronic one detected by HpIgG Ab.

P213

Fertility awareness training; an evidence-based course for health professionals

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Introduction: Fertility Awareness Methods include all family planning methods based on the identification of the fertile time. This knowledge can be used to plan or avoid pregnancy. Fertility awareness methods depend on two key variables - the accurate identification of the fertile days of a woman's menstrual cycle and the modification of sexual behaviour either to target intercourse to plan a pregnancy or to abstain from intercourse during the fertile time to avoid a pregnancy. The effectiveness of fertility awareness methods to avoid pregnancy depends on: the ability of couples to abstain from intercourse during the fertile time); or to use a barrier method consistently during the fertile time.
Aim: To develop an evidence-based fertility awareness course that addresses the training requirements of the average reproductive or family planning health professional
Design: Questionnaire evaluation and focus group
Subjects: GPs practice nurses, midwives, family planning nurses undertaking a fertility awareness course.
Methods: A six -day evidence based fertility awareness- training course has been established by fertility UK. The course is credit-rated 30 points at level 3 by the University of Greenwich. It is designed for health professionals to achieve competence as providers of education in fertility awareness and natural family planning for women/ couples at all stages of reproductive life. More recently there has been a demand for a shorter course that offers an overview of fertility awareness methods. A two-day course was therefore designed to cover the essential fertility awareness information health professionals require to support a client requesting a fertility awareness method of family planning. The participants experienced the two-day course as the initial two days of the six- day course. Their views are therefore valuable because they are aware of the content that was not covered during the first two days.
Evaluation: The course was evaluated using a questionnaire and a participatory focus group
Results: The results will describe the content of the two-day course and the views of the participants about what is essential information
Conclusion: Training costs are increasing and it is important to reduce the length of training courses if possible. To do this it is important to clarify what is the essential information about fertility awareness methods of family planning required by the average family planning professional and separate it this training from the information required by health professionals who wish to have a specialist interest in the subject.

P214

Contraception in a community of immigrants of Maresme

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Introduction: Maresme is a traditional receptor of immigrants coming from Senegal and Morocco and our Service is the major provider of Health for women.
Aims and Methods: To compare contraceptive trends in pregnant women's before and after the pregnancy. The data are taken from all women, from Senegal and Morocco, visited in our centre from the 1st of January of 2003 to the 31st December 2003.
Results: A total number of 115 women from Marocco and 40 from Senegal where studied. When arriving to our centre 28.71% referred to be past users of a contraceptive method (hormonal, IUD o condom) and after delivery and posterior counselling, realized by a midwife, the rate of use has been 69.33% in women from Morocco and 27.5% and 67.5% respectively for Senegal women.
Conclusions: When counselling about contraception by midwifes is included in the postpartum visit, the acceptability and rate of use is very well accepted for women and most myths can be effectively counteracted.

P215

Is a CD-ROM computer assisted learning package (CAL) a viable and acceptable method of providing a training package in a community setting?

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Introduction: E-learning is increasingly becoming adopted as an essential part of training and education for healthcare professionals. E-learning can take many forms including CD-ROM, the internet, intranets, interactive computer/TV etc. The use of a CD-ROM overcomes current limitations in intranet delivered package and offers increased flexibility for the user. They have been proved to be an acceptable and valuable method of providing undergraduate medical education but there is less evidence from postgraduate education and in particular multidisciplinary training. This training package was developed for doctors and nurses working in a community contraception and sexual health service.
Methodology: A CD ROM CAL package was developed for nurses and doctors who were going to provide chlamydia screening in a community setting. The package included background information, rationale for screening programme, practicalities of providing screening, self assessment quiz, mock video consultations and useful documents and website links. It was developed and then piloted by experts in GUM, C&SH and existing staff to examine usability, accuracy etc. Amendments were made and it was distributed to 42 doctors and nurses. It was then evaluated using a semi-structured questionnaire. This examined 4 main areas. Baseline information about individuals including previous GUM training and knowledge in relative to chlamydia screening, computer use, use of package and finally whether they would like further packages.
Results: 26 out of 42 returned evaluation forms. There was a lower reply from nurses and those who worked the least hours in the department.
There was a variable level of existing knowledge and confidence in dealing with chlamydia screening in the community. Computer usage and skills were generally moderate to low with 19 never training used a CAL package previously. Despite this, the majority (21) had no problem using the package and rated it very high in relation to ease of use and use as an educational resource. After using the package there was general trend for users to rate their knowledge and confidence of chlamydia screening higher than prior to users of the package. And finally, all users stated they would recommend to a colleague and would use further packages.
Conclusion: Community based doctors and nurses in our setting had little experience of using CAL packages. Despite this they found it a high acceptable way of receiving a training package wanted further training packages. The small pilot has led to the development of IUD/IUS training and updating package which be distributed and evaluated to 16,000 nurses and doctors working in the community and Primary care.

P216

The use of a formative OSCE for developing clinical skills necessary for undertaking cervical cytology

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Introduction: The teaching and assessment of clinical competence has always been a key feature of medical and nursing education. Historically, 'on the job' learning and assessment was prominent. Concerns about the robustness of this approach, lack of clinical opportunities has led to more formalised and standardized approaches. National guidelines are in place for the content and quality of cervical cytology screening training but implementation is variable and many training programmes fail to address the fundamental issue of developing and assessing clinical competencies. Within this context, it seemed appropriate to develop, implement and evaluate an alternative way of developing and assessing competence in clinical cytology screening through the use of a formative OSCE.
The study examines 3 key questions: Can an OSCE (Objective Structured Clinical Examination) be developed that assesses the competencies and skills necessary for undertaking cervical cytology screening. Can the use of appropriate and timely feedback make the OSCE an acceptable and useful form of formative assessment? Is a formative OSCE an acceptable means of developing and assessing clinical competency in cervical cytology screening for doctors and nurses working in the community. 6 interactive stations were developed using a matrix of components of competency and related skills and tasks. The OSCE was run on 3 occasions and 15 participants and 4 facilitators and 2 role players took part. The OSCE was evaluated by qualitative methods including a participant questionnaire, facilitators and role player questionnaire, group feedback, lead facilitator comments and analysis of scores.
Results: The semi-structured questionnaire completed by participants and facilitators showed high rating in relation to usefulness for learning, interesting, challenging/thought provoking. An open question about 'thoughts and feelings about OSCE' revealed 70% of comments to be positive. The number of participants meant statistical analysis of the marks was inappropriate. Overall, observational analysis revealed scores above 70% for all stations.
Conclusions: In response to the 3 main questions. The findings showed that an OCSE is very suitable for assessing competencies in clinical skills necessary for cervical cytology. The feedback from all individuals involved in the OSCE was very positive with the only negative area being performance anxiety.

P217

An audit of practice nurses' current practice and training needs analysis in relation to nursing skills identified in level 1 and 2 elements of the National Strategy for Sexual Health and HIV

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Introduction: The National Strategy for Sexual Health and HIV was published for consultation in July 2001. A key priority is to deliver public services that are of a high quality and are efficient. Nurses are highlighted as being pivotal to the successful delivery of the strategy in primary care. Training and support will be needed for implementation to go ahead effectively.
Aims and Method: To establish current competency and training needs of practice nurses in relation to skills identified in level 1 and 2 elements of the National Strategy for Sexual Health and HIV. 105 practice nurses in 4 primary care trusts in central Nottingham returned a postal questionnaire. They were asked to assess their current competency and training needs in identified clinical skills.
Results: There is a need for training for practice nurses to support them in the successful delivery of the strategy. The greatest need is in relation to skills historically carried out by clinics specialising in genitourinary medicine. Some practice nurses are practicing skills that they have had no formal training in and do not feel confident to undertake.
Conclusion: Practice nurses will need support from specialist services to enable them to work towards a competency based service in sexual and reproductive health.

SESSION 13: PSYCHOSEXUAL ISSUES

P218

Sexual confusion and psychological impotence

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Sexual happiness (well being) plays an important role in the life of men, which determines importance of different aspects of sexual (frustration, confusion, upset) and dyshormonisation. Different psychological disturbance not only the basics cause of sexual confusion but also not in frequently complicate their course. In 50,8% men were marked psychological confusion. We frequently found men with anxious disturbance of neurotic and personality nature. Anxious disturbance complicate course of many sexual confusion of physical nature serves the sexual disturbance and rarely leads to severe attack of anxious (panic) or anxious attack. Panic attack, which is a bright and dramatic appearance of panic disturbance. It is a psycho-vegetative paroxysm and characterized by radical paroxismality (acuteness), vegetative symptoms and emotional effectiveness. State of panic attack may be due to disturbance of auto regulation, personal factors and external problems (family and sexual problems). It was marked the dependence in frequency of complaints on working condition i.e. physical and emotional overload conflicts with colleagues. It makes difficult to help such patients and they need complex therapy, in which medical and psychotherapeutic treatment is different in every concrete patient. It was confirmed the relation of panic attacks of sexual problems (in rare cases from reducing to complete refusal). This reduced sexual interest of men was noted due to the tear of heart attack, death or appearance of attacks. In panic attacks with sexual problem of men are related to psychological impotence or anxious expectations in sexual failure. It may be appearance of more deep and complex psychological problems, which suggest and accentuate in their treatment.

P219

Cybermedicine: a step onto the future

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General Concept: We aim to measure the improvement rate of the degree of anxiety and depression (A&D) of the foreign patients who require a Termination of Pregnancy (TOP) in their second trimester advanced. The survey is carried out on 100 European patients, on whom it is observed and measured the rate of diminution of the most frequent symptoms on such cases. We also aim to improve the social and health assistance through: The Action Line (a 24-hour main switchboard with multilingual operators) The internet and webcams (cyber-communication with webcams and audio).
Survey Stages:
Initial survey: it measures the psychological profile of foreign patients who require a TOP (particular cases of second trimester advanced) welcomed at Barnamedic clinics.
Clínica Ginemedex, C/ Dalmases 61, Barcelona (Spain)
Clínica TCB, C/ Dalmases 34, Barcelona (Spain).
Advanced survey: it measures the diminution of the degree of anxiety and depression of foreign patients, result of the cyber-data transmission (the Action Line and the webcams).
Cybermedicine, Medical assistance (social and health) through cybernetic IT support: Webcam (virtual chats and visits to the clinics between countries). The Action Line (24-hour switchboard with multilingual operators) E-mail (relevant information and links about the city). Multilingual conversations in Spanish, Italian, French, German and English).
Conclusions: The diminution of A&D rates is due to the incorporation of new IT technology, which also aids to decrease the lack of understanding, information, coordination, uneasiness and restlessness, worries and the fear of not having taken the right decision.
The aforementioned incorporation of new IT technology aids the increase of responsibility, the commitment, the reliability and credibility as well as the empathy (humane customer care) and cordiality between people.

P220

Endometritis may cause spotting in women after being prescribed oral contraceptives

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Introduction: Women starting using oral contraceptives may experience irregular bleeding, i.e. spotting, which is generally contributed to hormonal imbalance.
Aims and Methods: To investigate the presence of chlamydial infection and vaginal flora changes in women taking combined oral contraceptives with and without spotting, we investigated ninety-two women, aged 18–20 years, prescribed low-dose oral contraceptives, of whom 45 bad spotting and 47 bad no such an irregularity. Endometrial aspirates were made from the women with spotting, which were cultured on cycloheximide-treated McCoy cells. Cervical samples of all women were tested for Ch/amydia trachomatis and Neisseria gonorrhoeae. The vaginal samples were studied for bacterial vaginosis and other flora changes, i.e. cages with lack of dominance of lactobacilli in the vagina. Women with spotting were given 300 mg of lymecycline twice daily for 10 dars and 400 mg of metronidazole three times daily for 7 days.
Results: A chlamydial infection occurred in 22.2% of those with spotting and in 10.6% without spotting ($p < 0.05$). The corresponding percentages for flora changes were 40.0% and 12.8%, respectively ($p < 0.01$). BV was found in 53.3% in those with bleeding irregularities and in 23.4% in the comparison group ($p < 0.01$). No bad gonorrhoea. In three women, only the endometrial aspirate were culture-positive for C.trachomatis The mean number of episodes of spotting during the next pill chart, decreased from 5.3 to 1.7 in those given antibiotic therapy and from 7.3 to 3.9 in those not given such drugs.
Conclusion: Women using low-dose combined oral contraceptives developing spotting should be carefully examined for infections and vaginal flora changes before prescribed a new brand of pill or a pill with higher hormonal content.

SECTION 14: RISK COMMUNICATION

P221

Reducing risk and improving client care

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Objective: To establish a reporting framework for adverse events within a community sexual and reproductive health clinic setting as part of the risk management plan.
Method: The Sandyford Initiative adverse event framework was redeveloped in 2002 to accommodate the requirements of an integrated contraceptive, reproductive and sexual health service. This involved encouraging the reporting of all events involving clients or staff, the data gathered being used as a learning set to encourage root cause analysis and so minimise the risk of incident recurrence. The structure and process to be followed was clearly laid out in training and an algorithm developed to facilitate the integration of the new framework.
Results: Individual events are evaluated and responded to by a senior clinical team. Adverse events have been categorised into 15 significant event types including clinical events, confidentiality breaches, difficulties in access to appropriate services, treatment delays and health and safety issues. An action grid for organisational changes is formulated and a designated individual nominated to ensure that remedial action is completed.
Interim reports are available for all staff and published annually in the clinical governance report. Regular teaching sessions are formulated around issues that have compromised client care.
Conclusions: The process may seem complicated and time consuming, but the experience of its use suggests that focusing on key issues and bringing out the system factors behind an incident can save time. A formal systematic approach can benefit staff by moving away from a culture of blame to one of openness.

P222

Risky behavior among youth in Iran

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Objectives: 1/7 miliard of Population world are 10–24 youth. Half of all new HIV infections occur among 15–24 years old and one out of two young people start smoking. These health problems could be prevented or significantly reduced through effective school health and youth health programme. We considered a survey for finding the attitude and practice of youth regardly high-risk behaviours.
Materials and methods: Our study was a descriptive cross-sectional one which was conducted in 3 cities of Iran, Islamshahr city, Saravan city and Astara port. Sample was chosen among 15–25 y.o unmarried boys and girls which choosed through systematic random sampling and data collection was performed by self-questionnaire.
Results: AIDs was the most common known STDs. About 1/3 of subjects didn't know any signs and symptoms of STDs. About 10–30% of subjects didn't know any kind of AIDs trasmission ways. About 2/3 of subjects knew about HIV transmission through sexual contact with infected person or injection by a used needle. About 1/3 of subject didn't know that a healthy looking person could be infected with HIV. About 1/4 of subjects have misconception about AIDs transmission pattern. Burning on urination was the most common known symptoms of STDs among subjects. Almost all of the subjects was agree with community orientation about STDs/AIDs and their prevention methods. About 80% of subjects knew the condom. 40% of subject knew the preventive effect of condom in STDs/AIDs transmission. The main reason for not using the condom was losing sexual pleasure. 50–80% of subjects were agreed with making friendly relationship between girls and boys, 10–30% subjects were about agreed with having sometimes sexual relationship with their opposite sex friends.
Conclusion: 37% of the population in Iran (26 million) are 10–24 youths. In regard to high risk behaviour in youth and incomplete information about STDs/AIDs, it is priority to consider appropriate reproductive health programme for them.

SESSION 15: SCREENING IN SEXUAL HEALTH

P224

Chlamydia testing within a Sexual Health Clinic

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Objective: To determine the most effective way of making testing for chlamydia available in Caledonia Youth (CY), a sexual health clinic for <25 year olds.
Method: A short pilot study carried out among young women attending CY in 2001 showed that the prevalence of Chlamydia was 11.4%. We then decided to compare uptake of testing by 2 systems. The first system used Chlamydia postal testing kits (PTK) developed by the project, that were offered to clients who attended the clinic. The second system was 'in-house testing', where urine specimens were sent to the laboratory from clients who were already providing a specimen within their consultation, e.g. a pregnancy test. A treatment clinic for positive cases was set up on a drop-in basis at CY every Wednesday afternoon, and was nurse-led using Patient Group Directions (PGD). The study was commenced in December 2002 and will run until March 2004.
Results: Up to December 2003, 1602 women had been tested, 95% of whom were aged 13–25. 2,300 PTKs were distributed during this time, of which 594 (26%) were returned. The Chlamydia prevalence by this system was 10.3%. From the 'in-house' testing there were 908 young people tested, with a prevalence of 10.5%.
Discussion: Both of these systems were successful in improving access to Chlamydia testing for young sexually active women at significant risk of infection. This study has shown that Chlamydia testing is an important component of this holistic sexual health service.

P225

The Sandyford Health Screen – enhancing service provision within the community sexual health service in Glasgow

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The Sandyford Initiative, Glasgow, UK

Objectives: To ascertain the needs of the attending population in order to better assign resources and improve services.
Design & Methods: The Sandyford Initiative is a joint sexual health service which combines family planning (FP) and genitourinary medical services (GUM) in Glasgow. The Sandyford Health Screen (SaHS) is a voluntary questionnaire completed by clinical staff on behalf of consenting patients. Its aims are to document significant social and emotional issues over and above the primary reason for presentation to Sandyford. Giving an opportunity to highlight, and improve access to, a wide range of services within Sandyford and locally in Glasgow. In addition it expects to increase Chlamydia screening, and to provide information to further develop services. This is an ongoing initiative and is continuously being evaluated and developed. We will present some of the data we have elicited over a six month period, April 2003 to September 2003.
Results: 3710 Sandyford health screens were performed between 01/04/03 and 30/09/03, 74% of whom were female.

Attending Service	FP %	GUM %
Women with 2 or more partners in the previous year	24	40
Men with 2 or more partners in the previous year	64	60
Male respondents admitted to never using a condom	34	30
Respondents admitted to having been forced to have sex at some time	5	1.5
Women expressed concern regarding their menses	14	4
Women expressed concern regarding urinary incontinence	3	3
Women wished to discuss a previous miscarriage, stillbirth or termination	5	2

2% of men wished for further information regarding testicular examination. 2975 Chlamydia screens were performed in the family planning service, as compared to 1764 for the same time period in 2002. 5.9% of patients screened in FP were Chlamydia positive, as compared with 4.8% for the same time period for 2002.
Conclusions: The Sandyford health screen has increased the identification of cases of chlamydia particularly in the family planning setting and therefore allowed an increase in treatment, counselling, and partner participation. This gives us the opportunity for education and to reduce the infective pool within the community. Knowledge of sexual partners and safe sex also allows targeted health promotion. Numerous issues of concern to clients have been raised by the Sandyford health screen, and this information is helping to inform the strategic development of services, in order to provide an increasingly holistic model of sexual health care.

P226

Audit of chlamydia testing in a female sex worker population in Glasgow, Scotland

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Objective: To assess the prevalence of chlamydia in female sex workers in a Scottish industrial city. Set in Base 75, (a drop-in service for female sex workers in Glasgow), which is part of the Sandyford Initiative for sexual health in the city.
Method: Retrospective audit of chlamydia testing over a seventh month period was undertaken. All swabs and urinary tests taken over a seven month period were included. Note was taken of sociodemographic and drug using details, chlamydia test result, whether or not symptomatic, and any antibiotic use over the previous three months. Results were collated and analysed.
Results: Preliminary results show that 317 women used the service during that period. 156 tests were done, 14 were positive (8.9%) and 3 inconclusive (1.9%). Of the first batch of 73 results analysed, 40 (54%) were injecting drug users and 3 (4.1%) were non injecting users, all of whom were street workers. 17 (23%) had had antibiotics in the last 3 months.
Conclusion: Chlamydia prevalence was lower than some reported rates in other GUM and FP settings in the UK. One possible explanation could be that high condom use is generally reported in this group. About 25% of the women however had antibiotics in the previous three months for unrelated conditions which could have opportunistically treated undetected chlamydia infection in these women. These findings show it is vital that continued accessible service provision for this high risk group with multiple sexual contacts must be maintained.

P227

Is lipid profile determination necessary in women wishing to use oral contraceptives?

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Introduction: Although coronary heart disease in users of oral contraceptives is rare, one of the principal risk factors for its occurrence is dyslipidemia. The use of contraceptive pills, depending on the kind of hormone and the dose used, may be associated with deterioration in the lipid profile and a consequent increase in cardiovascular risk.
Objective: The aim of this study was to evaluate the prevalence of dyslipidemia in women wishing to use oral contraceptives, and its association with known clinical risk factors in order to evaluate the need to routinely determine the lipid profile in this population.
Design & Methods: A total of 514 women aged 18–40 years (mean 28 ± 6.2 years), who desired to use oral contraceptives, were evaluated in a prospective, cross-sectional study. Prior to prescribing oral contraceptives, the following clinical (age, body mass index, blood pressure, personal and family medical history) and laboratory parameters (total cholesterol, HDL, LDL, triglycerides and fasting glucose) were evaluated. Dyslipidemia was defined when isolated cholesterol levels above 240 mg/dl were found, or when raised cholesterol levels were associated with an increase in triglycerides, a reduction in HDL (<40 mg/dl) or when isolated triglyceride levels exceeded 200 mg/dl. Tabagism, hypertension, obesity (BMI $\geqslant 27.3$), diabetes mellitus, and family history of coronary heart disease and/or dyslipidemia were considered clinical risk factors. To evaluate the association between dyslipidemia and clinical risk factors, a 2 x 2 table was used, the odds ratio was calculated and the Chi-square test was applied in the analysis.
Results: Some form of dyslipidemia was diagnosed in 111 patients (21.6%). The presence of two or more risk factors was significantly associated with the majority of diagnoses of dyslipidemia (OR=2.22; 95% CI, 1.31–3.75). No significant association was observed between the presence of dyslipidemia and patients with one risk factor (OR=1.44; 95% CI, 0.80–2.57). The absence of risk factors was associated with a normal lipid profile (OR=0.54; 95% CI, 0.34–0.84).
Conclusion: Routine evaluation of the lipid profile in women wishing to use oral contraceptives is not justified because of the low prevalence of dyslipidemia in young people and its association with clinically identifiable risk factors. Our results suggest that lipid profile determination should be reserved for patients with two or more clinical risk factors.

P228

Sexual health and youth

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Introduction: Sexuality is undoubtly an integral part of the human existence. From times to times, a lot have been said about sexuality and the biases that surrounds it. What do young people believe? Which are their own opinions about sexuality, sex, and sexual behavior? A lot of researches, qualitative (focus group discussions, in-depth interviews) and quantitative (in form of questionnaires) have dealt with this serious subject.
Below, specific answers of a research are reported which the main subject was 'Sexual health and Youth' and it realised by the Division of Family Planning of the 2nd Departure of Ob/Gyn. University of Athens 'Aretaieion Hospital' in collaboration with the Hellenic Family Planning Association.
Method: The questionnaires were answered by 200 individuals aged 16–25 years old. The 53% was answered by women, while the 47% by men. The 40% were between 19–22 years old, in rate the 37% were between 16–18 years old and the final age team was between 23–25 years old. The 76% were students of middle school and universities, while the 24% where from samples.
Results: The answers in the question 'From where do young people take information about sex' were given as follows: 81% answered that they take information from their friends, 44% from the media, a 47%, never answered that rarely take information about sex from their families and 69% answered that that they never take advice by church.
In the question 'Which are the most important subjects that concern sexual and reproductive health' the 87% consider the Sexual Transmitted Diseases (STDs)/AIDS, the 64% the unwanted pregnancy and the 65% believe in the importance of contraception.
In another question which was 'Acording to your opinion which from the services below are more important', the 86% answered that great deal of importance is to be tested for AIDS, the 79% considered important the method of contraception, the 77% the examination and the treatment of STDs, and finally the 75% emphasize the importance of the pregnancy test.
Conclusion: The existence and maintenance of sexual health in young people is not so easy to deal with. However, the achievement of this aim has essential importance if we want them to have a healthy life and afterwards as time goes by a healthy and happy family.

P229

Introduction of chlamydia screening to a busy, inner city contraception and reproductive health clinic

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Introduction: Our city is recognised as a clubbing capital attracting many young visitors nationally and internationally. It also has three universities and a number of colleges of higher education, attracting many young people. Between 1996 and 2002 the overall rates of uncomplicated chlamydia diagnoses among 16 to 19 year olds more than doubled, from 7,324 cases to 21,027.
Objectives: To evaluate whether it was possible to reproduce results of a successful chlamydia screening service from a previous small study. To evaluate how quickly and easily the staff assimilated the screening process. To confirm acceptability of urine testing and community based management. To improve the sexual health of the local young population.
Design & methods: From May 02 to March 03, testing was offered in the large city centre sexual health clinic. All staff received written and oral training, reiterated on various occasions, enabling them to offer enough information to make an informed choice. All clients under the age of 25, who were asymptomatic, were offered urinary screening for chlamydia during their contraceptive and reproductive health discussion. All urine samples, which tested positive for chlamydia, were also tested for gonorrhoea. Clients with a negative result were contacted via a letter. Those clients who tested positive were contacted by telephone, with postal contact as back up. They were seen by appointment for discussion, treatment and partner notification. Regular audit of case notes was performed to determine whether staff offered the test appropriately.
Results: 80% of eligible clients had documented evidence that the test had been discussed. Most clients offered testing accepted screening at the initial contact. Of 2337 clients tested, 304 were positive. 4 also had gonorrhoea. All clients with a positive result were contacted and all but 4 definitely received treatment. 94% chose to receive treatment at the testing site, others chose to attend local GUM services. 69% of named contacts were seen and treated.
Conclusions: It is possible to introduce acceptable chlamydia screening service into a large, busy city centre clinic. There is a high incidence of asymptomatic chlamydia infection in the population targeted for screening. The management of uncomplicated genital chlamydia infection in this setting was acceptable to both clients and staff. Follow up of positive clients by a designated team with links into genitourinary medicine clinic worked well.

P230

Are high vaginal swabs in asymptomatic women necessary?

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Introduction: In many clinics high vaginal swabs (HVS) are routinely taken in women prior to Intrauterine Device (IUD) insertion. It is an expensive test and may add little to patient management.
Aim: To assess whether results of HVS taken in asymptomatic women affect the management of patients.
Material and Method: We included all women who had an HVS done at the Palatine Centre from 1st September'03 to 30th November'03. A retrospective analysis of case sheets was done to confirm if the woman had been symptomatic and if not, whether the result affected our management in any way.
Results: 455 (70%) of the 650 HVS taken in this period were in asymptomatic women. Only 15% of these swabs gave any result, none of which had any effect on our management.
Conclusions: HVS is not a useful test for asymptomatic women. Each swab costs 7.42. The tests cost our service over 8,000 every year, a resource that could be better spent. Hence, we will stop this practice. Recent Faculty of Family Planning guidelines published support this.

P231

Patient acceptability and satisfaction of sexual health service provision in primary care

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Introduction: Airthrey Park Medical Centre is a practice within the University of Stirling providing healthcare services to primarily a student population of 7037. In April 2002, as part of a Personal Medical Services Pilot, an in-house Sexual Health Service was introduced. Its purpose was to provide comprehensive sexual health services at a primary care level. Over the last year, the clinic has been attended by 574 students (317 females, 257 males).
Objective: One aspect of the evaluation of the clinic involved examining the acceptability and user satisfaction rates of the service. In particular, the acceptability of waiting and clinic times, access to chaperones and condom provision. An indication of effectiveness was also measured by establishing the extent to which the patients needs had been met.
Design and Methods: Questionnaires were given to all attending the clinic between April - December 2003 (190). To assure anonymity and encourage response, completed questionnaires were returned by Freepost to the Clinical Effectiveness Support Service (CESS) of Forth Valley Primary Care Trust. A response rate of 78% (147) was achieved. The questionnaires were analysed by CESS using PinPoint Software (Longtron, 1997).
Results: The overall results indicated that the service was highly regarded. 86.5% of patients were satisfied with when the clinics were held and 95% finding the waiting time for appointments acceptable. Virtually all respondents stated that condoms should be made freely available at the clinic, within both treatment room and toilets. All respondents reported being seen by a doctor of the same sex as themselves with no one reporting that would have preferred having a chaperone present. 71.5% of respondents reported that their needs had been met completely, 14.9% nearly and 11.5% to some extent. Only 2% of the respondents stated that their needs had not been met at all.
Conclusions: The study shows that not only are Sexual Health Services in Primary Care acceptable but they would appear to be effective in meeting the perceived sexual health needs of patients. This is an important issue. The workload associated with Sexual Health Services in the United Kingdom is increasing. The results of this study would appear to support the recently published Draft Sexual Health Strategy in Scotland, which encourages Primary Care providers to offer a service for sexual health. Based on the results above, it could be suggested that this strategy would be acceptable within other similar client groups.

P232

Reproductive health care of teenagers

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For the first time in Russia a city consultative and diagnostic center of reproductive health of teenager 'Juventa' was opened in St. Petersburg in 1993 on the basis of functioning from 1991 gynecological department. The working schedule of specialists of the center ensures that consultations tests and treatment are provided to the patients any time at their convenience. In conformity with the regulation all patients in need of help get it the day they come to the center. All services provided by the Center are free for children and teenagers under 18 living in St.Petersburg. The total number of visits has grown three times: from 76924 in 1994 to 266764 in 2003 10 doctors – gynecologists, 3 dermatologists-venerologists, 2 andrologists, 2 therapists, a cosmetology, an endocrinologists, a mammologist, an oculist, a dentist, an otorhinolaryngologist, a neurologist, a room of functional diagnostics and ultrasonic tests, laboratories and a medical physical culture department are at the disposal of young patients.
Early sexual life, spread of sexually transmissible infections among teenagers, undesired pregnancy and venereal diseases are powerful factors which prompt a strong need in the opening of a psychotherapeutical room in the specialized Center. Alongside with the treatment of out-patients, round the clock counseling of teenagers in need of help is provided by the center 'Juventa' as well as there is a 'hot line'. Quite often the 'Hot line' conversation is the first link with doctors and teenagers. They are not so afraid to talk to the doctor and can get qualified advice. Such conversation without seeing the person you talk to sometimes is followed by visits to doctors and becomes one of important factors in prevention of various diseases as well as abortions including criminal, late and sexual violence. The work experience of doctors of 'Juventa' on early diagnostics and treatment of reproductive system diseases of children and teenagers show that many problems can be solved in out patient clinics. In the course of implementation of the Russian-Swedish project '13' started in 1997 youth counseling centers were founded in conformity with the European standards and principles of clinics amicable to youth in six districts of the city. Six more youth clinics will be opened in the city with the support of UNICEF in 2002 since 1999 jointly with UNICEF. Youth center 'Juventa' and Petrograd district youth center have given training to more than 300 teenagers – leaders which actively participate in popularization of healthy way of life, protection of reproductive health, prevention of sexually transmissible diseases, HIV and drugs. The work is carried out in summer camp and youth clubs in the city.

SESSION 16: SEXUALLY TRANSMITTED INFECTIONS (STIs) – DIAGNOSIS, TESTING AND SEQUELAE

P233

Hepatitis B screening amongst men who have sex with men within a sexual health clinic

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Objective: The Steve Retson Project within the Sandyford Initiative, Glasgow offers sexual health screening to men who have sex with men. All new and re-book clients attending the Steve Retson Project (SRP) should be offered hepatitis core anti-body (Hep BcAb) testing. Clients who test HepBcAb negative should be offered and receive 3 vaccines within the appropriate timescale. Previously the timescale for vaccination was 6 months, where the completion rate for eligible clients was 45%. The timescale has now been reduced to 3 weeks. The aim of the study was to demonstrate that our completion rate has improved since the timescale has been reduced.
Method: A retrospective audit of all men attending SRP presenting with new issues over a 3 month period. This included clients accessing services for the first time (new) and clients returning to the service with a new problem (re-book). Notes were reviewed and the hepatitis status and vaccine history extracted.
Results: A total of 91 case notes were reviewed. 59 clients did not require HepBcAb testing due to previous vaccinations or acquired immunity. 1 client declined testing and 2 clients were not tested. 29 new and re-book clients were HepBcAb tested. 2 clients had positive results, leaving a total of 27 eligible for vaccination. 23 clients completed vaccination schedule, 2 clients had 2 vaccines, 1 client had 1 vaccine and 1 client had no vaccine. This represents a 79% completion rate for eligible clients.
Conclusion: A reduced timescale for vaccination schedule has improved the completion rate of vaccination amongst men who have sex with men within our clinic.

P234

Identifying challenges and advantages of peer education in STIs and HIV prevention education with youth at risk in Pakistan

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Objective: One percent of the newly diagnosed STIs and HIV cases in Balochistan, Pakistan are individuals/youth at risk 8–17 years of age. Our epidemiologists indicate that STIs and HIV cases among youth increased between 1998 and 2003. While clearly an at-risk demographic, youth are rarely targeted with STIs and HIV prevention education. To empower youth the pilot project at the Youth Empowerment Skills fills that gap by utilizing youth at risk/street children as peer educators administering STIs and HIV prevention programming.
Methodology: In thirty-minute Life Skills education sessions, peer educators provide out of school going youth sound, reality-based information that increases their awareness about STDs/HIV and the spread of the virus. Sessions encourage vulnerable youth to recognize how the virus impacts their lives and gives them a forum to discuss the issue with people of their own age.
Findings: Launching a Peer Education program, which includes awareness of self and body protection focusing on child sexual abuse and STDs/HIV, life skills, gender and human rights/children rights awareness, preventive health measure, and care at work. Opening care- and counseling center for these working and street children and handling these centers over to local communities. During awareness sessions, youth are informed about the nutrition, physical and psychological changes, masturbation, menstrual cycle, family planning and STDs/HIV. It was determined relationships among HIV related knowledge, beliefs and sexual behavior of young adults and found that reason for unsafe sex included, misconception about disease etiology, conflicting cultural values, risk denial partner pressures, trust and partner significance, accusation of promiscuity, lack of community endorsement of protective measures, and barrier to condom access. In addition socio economic pressure, physiological issues, poor community participation and attitudes, and low education level limited the effectiveness of existing HIV prevention education.
Conclusion: Presentations at centers by peer educators have demonstrated that audiences over 12 years of age typically have only basic information about STIs and HIV. Confusion regarding the difference between HIV and STIs and the specifics of risk related behaviors generated interest in the presentations. Additional conclusions will be drawn as the pilot progresses and administrators tabulate survey results and conduct focus groups with peer educators and participants.

P235

Human papilloma virus infection screening in teenagers shortly after coitarche

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Introduction: Different types of sexually transmitted diseases are a serious health problem all over Europe. It is well known that high-risk Human Papilloma Virus infection can be detected at a relatively high percentage in adolescents, even shortly after coitarche. In our study we wanted to determine the prevalence of the infection in teenagers right after the start of sexual activity, and to analyze its correlation with other factors, such as age, duration of sexual activity, smoking, cytologic or colposcopic abnormality.
Materials and methods: Cervical swabs were collected for HPV testing by polymerase chain reaction in 72 asymptomatic female patients (age 14–19 years), attending our adolescent gynecology consultation for contraceptive counseling. All were sexually active, having only one sexual partner and were 1 week to 8 months after their first sexual intercourse.
Results and conclusions: We have found a high prevalence (33%) of high-risk HPV infection in teenagers right after the start of their sexual activity. Our results indicate that HPV is a common sexually transmitted infection shortly after coitarche. The correlation of HPV infection with cytologic abnormality, colposcopic atypia, age, and smoking is also analyzed.

P236

The frequency of *Chlamydia trachomatis* infection and bacterial vaginosis in adolescents attending for early termination of pregnancy and for contraception advice in family planning clinic

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Objectives: The aim of this study was to determine the frequency of Chlamydia trachomatis (CT) infection, the most common cause of the sexually transmitted infections in adolescents. We also wanted to know if pregnancy has any effect on the development of bacterial vaginosis (BV) in adolescents in the first trimester.
Design and methods: Two hundred women aged 15–19 years were included in this prospective study at the Dept of Ob/Gyn at the University Medical Center in Ljubljana, Slovenia. In the first group (the study group) 100 consecutive adolescents who came for early termination of pregnancy were enrolled, and in the second group (the control group) another 100 consecutive adolescents who came for a contraception advice in family planning clinic were enrolled. In all women cervical smears were taken for CT determination by using polymerase chain reaction. At the same time BV from vaginal discharge was confirmed if the presence of following findings was found: thin and homogeneous vaginal discharge, pH > 4.5, positive amine test with addition of potassium hydroxyde to vaginal fluid and the presence of clue cells in wet-mount preparation.
Results: The prevalence of CT in both groups was the same: 11.8% in the study group vs. 10.0% in the control group (p=NS). The prevalence of BV was the same, 8.0%, in both groups (p=NS).
Conclusions: The prevalence of CT in our adolescent population is comparable to the CT prevalence in other European countries and justify providing systematic yearly CT screening and antibiotic treatment before early termination of pregnancy. In the first trimester, pregnancy has no effect on the frequency of BV in adolescents.

P237

A 3 month pilot scheme offering sexually transmitted infection screening to under 16's who access services in a voluntary agency

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Introduction: An audit was carried out on female clients under the age of 16 presenting for emergency contraception between 1st March and 31st March 2003 at a City Centre Voluntary Agency for sexual health and contraception. The clients had had unprotected sexual intercourse within the preceding 72 hours. An invitation was given for them to attend the local Gum clinic and a referral letter was given to every client. After 6 weeks GUM systems were checked for attendance and none of these clients had attended.
Objectives: To discuss the process of setting up a fully integrated GUM and contraceptive service in a voluntary setting. To evaluate whether under 16's would access STI screening in a setting more familiar to them.
Design and methods: In September 2003 a family planning trained Nurse Practitioner from GUM was appointed. She worked together with the Lead Nurse from the Voluntary Organisation and the Management Teams to set up the GUM service in the Voluntary Agency. Two family planning trained nurses from the Voluntary Agency were appointed to work one session a week as Nurse Practitioners. They both spent a period of time working in the local GUM clinic training to Nurse Practitioner level. A training programme was followed. There were briefing sessions organised to discuss the process with all members of the Voluntary Agency teams. Policies were agreed around Health and Safety child protection. Fraiser Guidelines were used to assess client's competencies. The lead Nurse Practitioner was a Extended Formulary Nurse Prescriber and Patient Group Directions were drawn up to enable the other Nurse Practitioners to issue treatments. All documentation was kept as part of Voluntary agency notes.
Results: In January 2004 a nurse led STI screening service, for two sessions a week, was offered. Clients attending the Voluntary Agency were offered an appointment for full sexual health screening. In the first four weeks 9 clients who were 16 and under made an appointment of these clients 7 attended. 5 of these clients were diagnosed with at least one thing. We will have full results to show at Conference.
Conclusions: Although the uptake of the service by the 16 and under age group was better than the attendance in a hospital setting the appointment system still seemed to be a barrier to access. Young people in crisis need to be seen quickly otherwise opportunities are missed. Under 16's are now triaged and seen at the next available clinic.

P238

An efficacy study on probiotic vaginal treatment in sexually active women

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Introduction: Sexually active women are at increased risk for vaginitis because the presence of semen in the vagina may raise the pH. 'Vaginitis must cause more unhappiness on earth than any other gynecologic disease. In addition to the many physical and emotional problems associated with vaginitis, the economic loss involved is of astronomic proportions' (Herman Gartner).
Aims and Methods: Authors performed a prospective in outpatient clinics of two Hungarian towns to assess the efficacy of a local probiotic tablet preparation and the recovery rate after applying the ecotherapy consisting of Gynoflor vaginal tablets (Medinoava, Zurich). For statistical analysis SPSS 11.0 was used.
Results: The diagnoses of 155 patients were as follows: bacterial vaginosis in 73, mycotic vaginitis (candidiasis) in 45 and atrophic colpitis in 7 patients. 30 patients received preventive therapy because of long-term antibiosis. The mean initial vaginal pH was 4.88. By the end of medication pH had significantly lowered (pH 4.21). After the six days' treatment the degree of cleanness was unchanged or became level 1 (only Döderleins) in 95 out of 155 patients. The success rate was also significant. The presence or absence of cervicitis did not influence the success of therapy. The patients' and the physicians' opinion about the effects was mainly (121 out of 155) the same. In 25 cases the patient's opinion on efficacy was better than that of the physician, in 8 cases the discrepance was converse.
Conclusion: Probiotic local vaginal treatment with living organisms in sufficiently large quantities is called ecotherapy. This is a highly effective alternative therapy of bacterial vaginosis, candidiasis and atrophic colpitis, and is also a reliable and safe tool to prevent dysbacteriosis, an alternative therapeutic approach to the wide-spread antibacterial treatment used for vaginal inflammation.

P239

Sexual transmission diseases and AIDS awareness of community in Iran

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Objectives: STDs/HIV/AIDS infections affect health conditions of community. Therefore, this study aimed to determine STDs/AIDS related knowledge, beliefs and behavior of married men regarding STDs/AIDS.
Design & Methods: 5540 men from 4 provinces (Golestan, Bushehr, Kordestan and Tehran) were interviewed through a standard questionnaire based on health beliefs model and using statistical tests like as chi-square, t-.test, Mann-Whitney the results were analyzed.
Results: 47% of men heard about STDs before, and about 43/2% of them had awareness about HIV/AIDS. Only 1/3 of men knew its transmission ways correctly. 1/3 of subjects had mentioned abstain from having sexual contact with the suspected partner as a preventing way. 65% of men knew that use of condom could prevent STDs/AIDS transmission. But only 1/3 of men knew some healthy looking person could be infected with HIV/AIDS, and 25% of subjects had misconception regarding this method.
Conclusion: Efficient STDs/AIDS awareness program is necessary and it is better to consider this service as an integrated of sex education at premarriage counseling could promote having safer sex and protecting from STDs/AIDS.

SESSION 17: SPECIAL GROUPS, E.G. ADOLESCENTS, DISABILITIES

P240

Practice and attitudes towards contraception among adolescents

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Objective: To study and analyze the attitudes and behavior of high-school adolescents in the domain of contraception and sexuality, to get an insight into the situation and guidelines for the state improvement.
Study design: High-school adolescents (682, 353 girls and 329 boys, aged 14–19) from Novi Sad (Serbia & Montenegro) were subjected to an anonymous poll using a questionnaire specially designed for this study.
Results: Sexual relations have had 36.6% of adolescents, more boys (43.2%) than girls (30.6%). In average, first intercourse boys had at 16.0 and girls at 16.5. Girls have had 1.7 sexual partners and boys 2.2 partners. Of the sexually active 23.0% never used contraception, the others did it irregularly, and condom was almost the only method. Undesired pregnancy and abortion have had 2.8% girls and sexually transmitted disease 3.2%. Almost all the polled adolescents (93.0%) consider condom as most appropriate contraceptive means for their age and only 4.0% girls and 2.5% boys prefer contraceptive pills. Girls are more interested to know more about contraception, they think they know more about it than boys do, their knowledge is objectively better, and they would like to get additional knowledge in this domain. Adolescents of both sexes consider that both sides should care of protection and say they feel uneasy to carry contraceptive means with them, girls being more embarrassed when procuring contraceptive means. The youngsters of both sexes are not certain whether the methods of rhythm and withdrawal are reliable means of contraception. Knowledge about sex are obtained from inappropriate sources (media, persons of the same age, etc.) and there exist desire to get additional information from experts.
Conclusion: Sexually active adolescents do not practice sufficiently contraception, and there exists prejudice towards oral contraception. It is necessary to provide better education and organize more widely counseling 'youth-friendly' services.

P241

Learning about contraception: teenagers talk about the utility of school sex education and other information sources

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Introduction: The correct use of contraceptives is key to preventing unwanted pregnancies amongst young women. In recent years school sex education has improved, partly in response to this. Notably, skills-based sessions focusing on condom use have become more commonplace. *SHARE* commenced in 1996 and is an ongoing multi-method study investigating the sexual behaviour of young people. A wealth of data has been collected, including information that can shed light on where young people learn about contraception and whether, and how, this impacts on their contraceptive use.
Aims and methods: This paper analyses data collected during in-depth interviews (n=65) and group discussions (n=16) with male and female pupils from six schools in the east of Scotland. Framework analysis has been employed in order to summarise the data and provide explanations.
Results: Information on contraceptives was one of the most commonly cited highlights of school sex education for both the young men and young women. A high number of those who had received condom skills instruction valued this, though more young men than young women talked about having changed, or intending to change, their behaviour based on what they had learnt. Many of the young women criticised school for failing to provide details regarding contraceptive use (for example saying that lessons were effective in providing information on what emergency contraception was and how it could be used, but not on where in the local area it could be obtained and how, precisely, one could get it). Non-school sources that young women cited as important in influencing their contraceptive behaviour included information from female relatives or older peers, and discovering that a friend was pregnant. While parents were generally a much less important source of information on sex for the young men than for the young women, a significant minority of young men had received advice from their mother and/or father about using a condom to avoid pregnancy in a partner. Several described how a parent had offered to get condoms for them, or had passed condoms to them. This often proved influential in getting young men to always use a condom.
Conclusions: The utility of school sex education for imparting knowledge and, perhaps more importantly, skills should not be dismissed or underestimated. The potential for parents to influence their son's condom use should be explored further.

P242

The effect of peer group education in reproductive health among university students (in Iran)

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Objective(s): This study aimed to evaluate effectiveness of peer group education in improvement of Reproductive health status of youth.
Design & methods: In this operational research, at first we assessed reproductive health status and needs of Gazvin Medical University students through recruiting of 1117 students by using quota-sampling method with self-completed questionnaire contained 43 close questions respecting to reproductive health. Then based on the results and students preference 'peer group program' considered as an interventional program for improvement of students' reproductive health status. For this purpose Peer promoters selectively recruited among university students and then selected promoters were adequately trained. The contents of this training course contained of these topics: Sexual behavior, Sexual difficulties, Consequence of unprotected sex, Sexual transmitted infections/AIDS, Family planning. After this course they introduced to the other students through holding seminar, newsletter and so on. They were counseling with other students and educated them about sexual/Reproductive health. Scientific committee supervised and supported them during their works.
Results: Based on the pre interventional survey, students have a middle level of knowledge and positive attitude about reproductive health. Health belief model of students shows that majority of them perceive the risk of STDs/ AIDs and they believe the risk is middle and youth ability to practice health behavior is low or middle.Most of them presume the services are not adequate and the main barriers of youth reproductive health promotion are non-advocating environment and low awareness of youth. After intervention, we preformed focus group discussion (FGD) with students and scientific/executive committee and also with peer promoters.
Lessons learned from peer group education: The advantage of this program based on qualitative assessment is: Young people related well to people similar to them in age, background, and interests. The cultural similarity of peer promoters helped ensure that the language and messages used are relevant and appropriate. This program has positive effect in reduction of high-risk behavior. Peer programs allowed for the direct involvement of young people in their own programs. It was a cost benefit programs.
Conclusions: Health education interventions are widely seen as the most appropriate strategy for promoting young people's sexual/Reproductive health.

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Young people's use of the Internet to find health information. A systematic review of the literature

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Introduction: Having access to good quality health information can play a role in promoting health and well being of young people. Emerging data is showing that young people are pursuing unhealthy lifestyles in increasing numbers. Internet access is becoming widely available, and as interactive technologies appeal to young people, the Internet has the potential to improve access to health information for young people.
Objectives: This systematic review looked at what research has been conducted concerning young people's use of the Internet as a health information source. Furthermore, what factors facilitate or enhance, or hinder or inhibit young people's use of the Internet as a health information source, and finally, what health or other outcomes resulted for young people as a result of accessing health information on the Internet.
Method: A systematic literature review examining the Internet's role in providing / enabling access to health information for young people aged 12 to 24 years.
Results: Ten relevant studies were identified from the literature review. The studies were all of poor quality. Two studies were unobtainable. Most studies found that some young people use the Internet to access health information, although girls tend to access it more often than boys do. The most popular health topics accessed by young people were 'sex', 'fitness and exercise', 'diet and nutrition', 'specific diseases', 'drugs' and 'alcohol'. Some young people found Internet health information useful and worthwhile, however others found it untrustworthy and unreliable, and furthermore frustrating. Blocking devices and supervision frequently inhibited access. Only two studies investigated behaviour change following the access of health information. Conversely one study found that girls and African Americans were more likely to adapt, and the other study indicated that most young people did not change their behaviour. All of the studies only measured the young peoples self reported answers, and did not measure actual Internet use, or where appropriate, behaviour change.
Conclusions: From the findings of this study, it has been identified that further rigorous research is required to investigate these issues further, especially in the UK, and also a review of the layout of health information websites is recommended.

P245

Audit of sexual and reproductive health care provided to HIV positive women within an integrated sexual health service

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Introduction: In the United Kingdom since 1999, the number of new HIV diagnoses among heterosexual men and women has exceeded that among homosexual men. There has been a six-fold increase in the cohort of HIV positive men and women attending The Garden Clinic, Slough since 1997. HIV positive women have sexual and reproductive health care (SRHC) needs in addition to management of their HIV infection.
Aims: To audit the provision of SRHC against locally agreed standards, which are in keeping with DoH guidelines (MedFASH, 2003). To describe changes implemented in SRHC provision following this audit.
Methods: A retrospective case note review of all female HIV positive patients diagnosed in 2002 (n=30). Details regarding screening for sexually transmitted infections (STIs), cervical cytology, contraception, and pre-conceptual care within the six months following diagnosis were collected using a standard proforma.
Results: Of the 30 women, 27 (90%) were Black African, including 18 from Zimbabwe. Partner's HIV status was recorded in 27/30 (90%), 7/30 (23%) were HIV-positive, 3/30 (10%) HIV-negative, and 11/30 (37%) of unknown status. Six women (20%) had no partner. Use of a barrier was recorded in 15/30 (50%), however of those with known or potentially discordant HIV status only 6/14 (42.9%) reported using condoms. STI screening had been done in 21/30 (70%) in the previous year and cervical cytology history was documented in 22/30 (73.3%) women. 19/22 (86%) had had cytology taken in the previous year; 2/22 (9%) were overdue, 1/22 (5%) was pregnant and therefore cytology deferred. Contraceptive method was recorded in 23/28 (82%). Two women were postmenopausal. Only six patients were using long-term methods; three an injectable, one an implant, one an IUD, and one woman had been sterilised. Nine were using condoms, two the COC and six had no partner. EC was discussed in six patients and supplied in advance to two. Preconception advice was documented in only two individuals.
Conclusions: For most, screening for STIs and cervical cytology was undertaken and contraceptive method documented. This was only the case in a minority regarding preconceptual advice and EC. A specialist clinic for SRHC has now been established and a new HIV proforma with prompts regarding STIs, cytology and contraception has been introduced. Further data is currently being collected following these interventions.

P246

Promotion of adolescent reproductive health in Serbia

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In Serbia, reproductive health (RH) among adolescents is marked by high rates of pregnancy, abortion (50 per 1000 females under 20) and sexually transmissible infections (STIs). To lower these numbers, the Mother and Child Health Care Institute of Serbia, its department known as the Republic Centre for Family Planning (RCFP), initiated the Promotion of Adolescent Reproductive Health Project in February 1999. Despite the highly unfavourable conditions for any health initiative then, RCFP managed to introduce a new youth-friendly approach that features counselling services for young people in a variety of community settings. Its mission is to improve adolescent reproductive health and the community services that support it. Specifically, the project aims to: increase adolescent knowledge of sexuality, RH and safe-sex practices; improve young people's attitudes toward sexuality and RH, and their skills in dealing with related issues; improve detection and treatment of RH problems; consolidate health partnerships among different areas of society and government; encourage participation of local teachers, health workers and peer educators and develop community awareness of adolescent needs and support for youth-friendly RH services. Counselling Service for Young People covers current preventive and curative health measures, as well as up-to-date educational and promotional activities. RH counselling service should include: adolescent health education; individual counselling from a psychologist, a specialist in preventive medicine, a paediatrician and a gynaecologist, and diagnosis and treatment of RH disorders in both sexes. Up to now we have been establishing 36 RH counselling centres in primary health care.

P247

Contraceptive methods used by sexually active adolescents attending Department of Obstetrics and Gynaecology of the Institute of Mother and Child in Warsaw, Poland

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Objectives: To evaluate frequency of different contraceptive methods' used by sexually active adolescents in Warsaw.
Materials and Methods: We analyzed data collected form 390 sexually active teenagers who accepted to fill a questionnaire regarding contraception. The first group included 182 already pregnant teenagers between 15 and 19 years old who were hospitalized in the Department of Obstetrics and Gynecology of the Institute of Mother and Child between years 2000–2003. The second group included 208 sexually active adolescents, 15 – 19 years old who attended the outpatient clinic of the Institute of Mother and Child in the same period.
Results: The mean age of the teenagers in the first group was 18,1 years versus 17,3 years in the second group. 114 (62,7%) pregnant patients did not use any method of contraception before pregnancy, 16 (8,8%) used oral contraceptives, 25 (13,8%) condoms, 7(3,8%)- condoms together with oral contraceptives, 14(7,7%) used condoms with spermicides, 1 (0,5%) intrauterine contraceptive device and 5 (2,7%) natural family planning methods. In the non-pregnant sexually active teenagers' group the following methods of contraception were used: no contraception- 29 (13,9%), oral contraceptives - 66 (31,7%), condoms – 71 (34,3%), condoms together with oral contraceptives – 24(11,5%), condoms with spermicides – 10 (4,8%), intrauterine contraceptive device – 0, natural family planning methods - 8 (3,8%). Emergency contraception was occasionally used by 8 (4,4%) girls in the first group versus 40 (22%) in the second one.
Conclusions: The lack of contraception use was more frequent in the group of pregnant adolescents (62,7% vs. 13,9%). Most of these pregnancies were unplanned. There is a necessity to increase knowledge about reproductive health to protect teenagers form unwanted pregnancies and sexuality transmitted diseases.

P249

Consistency, complexity or chaos: a qualitative study of young women's patterns of contraceptive use

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Objectives: Research has identified linear patterns of contraceptive use in young women, progressing from non-use to condom use to oral contraceptive use, but more recent studies have found more variable patterns, with young women making many changes to their contraceptive use and giving diverse explanations for this. The aim of this qualitative study is to investigate young women's patterns of contraceptive use during their early years of sexual activity and develop a typology of contraceptive careers.
Design & Methods: A qualitative study using in-depth interviews with 20-year-old young women from the East Coast of Scotland. Purposive sampling, based on sex experience, area of residence, father's social class, and educational attainment was used to recruit a wide range of young women. The interview schedule included questions on contraceptive and relationship history, reasons for use and non-use of contraceptives, the influence of partners, parents, friends, and others, and the use of sexual and reproductive health services. Interviews were transcribed verbatim and analysed using framework analysis.
Results: Young women were able to spontaneously name various contraceptive methods including condoms, oral and injectable contraceptives, and the IUD. Condoms were the predominant contraceptive method used, with all participants reporting use of these at some time; all but one reported oral contraceptive use. Most had used emergency contraception and half reported episodes of unprotected (in contraceptive terms) sex. All of the young women had changed their contraceptive method at least once. Changes occurred within and between relationships, as a result of contraceptive crises (condom breakages, experience of side effects), and for non-contraceptive reasons (management of irregular menstruation, PMS, acne). Each young woman had her own specific experience of contraceptive use, but overall three patterns were apparent: consistent, complex and chaotic. Consistent contraceptive patterns were characterised by uniform and regular use over time, regardless of relationship changes or experience of contraceptive crises. Complex patterns were characterised by change and variability, with method use depending on relationships, partner type, non-contraceptive reasons and contraceptive crises. These young women incorporated change in a manageable way. Chaotic patterns were characterised by frequent method changes within and between relationships and multiple contraceptive crises. For these young women the experience of frequent method change was a further complication in somewhat disordered lives, leaving them further exposed to contraceptive crises.
Conclusions: Young women experienced contraceptive method change and they did not share a homogenous contraceptive pattern. Consistent, complex and chaotic patterns were evident. To help young women control their fertility, health care professionals must understand the influences that may be important in young women's lives and appreciate the dynamic nature of their reproductive health needs.

P250

Acceptability of NuvaRing in young women

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Introduction: The once-a-month contraceptive NuvaRing has been shown to be an effective method with excellent cycle control and a favourable tolerability profile (Roumen et al. Hum Reprod 2001; 16: 469–75). During such studies, women (aged 18–40) also rated NuvaRing as a highly acceptable method of contraception that they would recommend to others. The aim of this trial was to assess whether NuvaRing was acceptable to younger women (aged 16–18), as approximately half of this age group in Finland use oral contraceptives (OCs).
Design and methods: Due to recruitment issues (parents were informed of subjects' participation in the trial), only 21 of the intended 125 women were enrolled (mean age 17.6 ± 0.7 years) in this non-comparative trial. Women were treated with NuvaRing for up to 6 cycles (comprising 3 weeks of ring use and a 1-week ring-free period). Information on cycle-related characteristics, acceptability and tolerability was gathered at baseline and after cycles 1, 3 and 6.
Results: Eight women discontinued the trial: five were lost to follow up, one had no further need for contraception, one suffered a migraine (reported as a serious adverse event) and one withdrew because the ring was uncomfortable. No pregnancies were reported during the trial. Menstrual period length did not change in $>75\%$ of subjects, and $>75\%$ reported similar or less menstrual pain with ring use. Prior to the study, most (65%) subjects had used an OC as their last method of contraception and most subjects rated OCs as the best method of contraception. At cycle 6, subjects frequently (31%) or always (69%) found the ring easy to insert, and frequently (23%) or always (77%) found it easy to remove. By cycle 6, most subjects said that they (54%) and their partners (69%) never or rarely felt the ring during intercourse and 77% of partners never or rarely minded the subjects using the ring. At cycles 3 and 6, all subjects were satisfied (46–54%) or very satisfied (50–53%) with the ring and all (100%) would recommend the method to others. The most popular reasons for liking the ring at cycles 3 and 6 were 'do not have to remember anything' ($>50\%$) and 'easy to use' ($>15\%$). Ten subjects (77%) rated NuvaRing as the best method of contraception at cycle 6. NuvaRing was well tolerated and no clinically relevant changes in blood pressure or body weight were observed. Adverse events (AEs) were recorded in 11 (52%) subjects with two (10%) having treatment-related AEs.
Conclusions: These results show that NuvaRing was effective and well tolerated in younger women who found this a convenient and easy to use contraceptive method. Thus, NuvaRing is a viable contraceptive method for women of all ages, including young women.

P251

Oral contraceptive compliance in adolescents and young women

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Objective: To evaluate and compare sexual behavior and oral contraceptive compliance (acceptability, continuation rate, side effects) after one year of combined oral contraceptive (OC) use in adolescents (15–19 y) and young women (20–24 y).
Methods: 58 girls, adolescents (28/58) and young women (30/58) with one year of combined low-dose oral contraceptive (OC) use were included. They attended a gynecological outpatient unit of Children's Hospital Zagreb and data were obtained by questionnaires.
Results: 2 out of 58 girls used OC because of hormonal disturbances and they had no sexual experience. Adolescents had significantly earlier sexual debut (<15 y) than young women. Both groups have had mostly one partner, but in 26% cases they had multiple sex partners. Discontinuation rate of OC use is high (40,8%) in both groups and the main reason was physician's recommendation especially in a group of young women. Incidence of side effects during the first three months were similar in both groups (57,2%) and the most frequent were: weight gain, breast tenderness, mood changes and multiple side effects. They commonly missed 1 or more pills per cycle (64%) and one third of OC users had missed pills 3 and more times. Both groups have read information distributed with OC packing and they continued to use pills further. Their partners were supportive of their OC use. In both groups dual consistent use of condoms and OC was similar (12,5%).
Conclusion: Education and counseling of both groups, adolescents and young women is fundamental to the effective use of contraception. It is recommended that first follow-up visit is 3 months after starting OC and it should be viewed as a compliance check.

P252

Creating a healthy respect

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Healthy Respect is the national health demonstration project established to test out different interventions and approaches in relation to sexual health for young people. The first phase of the project is complete, a second phase of the project will commence in 2005. A large part of the work evolves around the school setting.
Objectives: To deliver a multi-disciplinary programme of sexual health and relationships education in 10 schools. To establish a drop-in/sexual health services in schools, community and medical settings. To target key groups of young people identified as 'hard to reach'.
Methods: Teachers and school nurses have been trained to deliver SHARE alongside youth and community workers. Needs assessments with young people have identified service provision needs and wants, leading to a range of services being established. Specific work has taken place in deprived areas, targeting LGBT young people and young men specifically.
Results: The link between education and services is acceptable to young people resulting in young people who are part of education sessions making the leap to using a local service provision. The employment of an inreach/outreach nurse has been particularly beneficial.
Conclusion: Providing linked, improved education, services and information whilst targeting key groups is resulting in an increase in service users.

P253

Sexual behavior between Greek adolescents

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Introduction: In developed countries, 7.5% - 10% of adolescent women get pregnant, while half of these cases end in technical abortion with all possible complications. These pregnancies are characterized by increased perinatal and maternal mortality due to frequent obstetric complications and must be treated as high-risk pregnancies. The reported age of menarche has declined in our days, with a mean age of 12.5 years old when 150 years ago the mean age was around 17.5 years old.
Material and methods: We conducted a survey, regarding sexual behavior, age at first intercourse and contraceptive methods during adolescence
Results: Our study had made clear that approximately 30 % of teenagers aged between 16 and 18 years old are sexually active. At the time of their first sexual intercourse, 5,0% aged between 12–14 years old, 4,2% between 14–16 years old and approximately 20% aged between 16–18 years old. Despite all the initiatives on educational programs concerning sexuality and contraceptive issues, a large percentage of adolescents uses none (30%) or ineffective contraceptive methods such as withdrawal (30%).
Conclusions: It is noted that teenagers are sexually active in younger ages and demonstrate lower compliance to contraceptive methods. The fact that most of these unintended pregnancies are out-of-wedlock pregnancies of low financial status, imply the necessity for specialized youth sexual, health-counseling programs and extended follow up in adequate adolescent gynecological, well-organized clinics, for the support of teen mothers.

P254

Pregnancy and abortion rates in Greek adolescent health clinics

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Objective: To evaluate the incidence of teenage pregnancy and abortion in Greek territory. Design and Methods: Record of teenage pregnants, admitted in Departments of Obstetrics and Gynecology of Athens University Medical School, from 1985 till 2003. We investigated the gestational age at presentation, pregnancy outcome and birth weight. We also evaluated pregnancy and delivery complications.
Results: Adolescent mothers, aged 14–19 years old, represent 7.53% of total births, occurred within these years. Among the teenage pregnancies, 34% resulted in birth, 57% in abortions and 9% in miscarriage. The mean gestational age at presentation was 31 weeks when mean gestational age at delivery was 38 weeks and 3 days. The mean birth weight was 2,880 g. Teenage birth rate has decreased from 9.0% in 1985 to 5.2% in 2003.
Conclusions: Although premature pregnancy rates have declined recently, abortion rates during adolescence are still a problem of high importance. Complications are noted more often due to age particularities, such as low compliance and immaturity of the genital tract.

P255

Observational study of contraception methods used by adolescents age 11–20

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Objectives: The aim of the study was to analyze the contraceptive methods (CM's) of new applicants age 11–20, the accessibility, deciding about the method, tolerance and benefits.
Design & Method: This was a retrospective observational study of the CM's used by adolescent women, all being new applicants during one year. A total of 542 adolescent, age 11–20, were recorded from February 2003 until February 2004. This sample was divided in three age groups: 11–14 years, 15–17 years and 18- 20 years. We followed up the addressability (post abortion, by own request, on medical advice, in emergency), demographic characteristics, past gynecological history (age of first menstrual cycle, pattern of menstrual cycle, pre menstrual symptoms, number of pregnancies, abortions and deliveries), past medical history, contraceptive method (COC, POP, condom, spermicide, injectable contraceptives, IUD), availability (free of charge contraception or at low cost), side effects (nausea, vomiting, headaches, dizziness, tender breasts, spotting or bleeding between periods, amenorrhea, depression and mood changes, weight gain, galactorrhea), failure, adverse events, change of CM.
Results: As expected the largest age group was that of 18 – 20 years (74,90%). There were 9 applicants age 11 – 14 (1,66%) from which 44,45% were sexual active and had abortion in the past; the other 55,55% were virgo and requested contraceptive as they were about to begin their sexual life. The recorded risk factors for our sample were: an early beginning of sexual activity, smoking, pregnancies under the age of 18, abortion as first contraceptive method. A percent of 57,93% received contraception by own request, 23,06% of them on medical advice and 19% post abortion. The CM's were chosen after counseling by the GP and examination by the gynecologist, as follow: COC – 88,74%; POP – 0,74%; condom – 8,31%; spermicides – 0,55%. There were two other CM's expressly requested by 9 applicants: 6 requested injectable contraception (1,11%) and 3 IUT (0,55%). The tolerance of all CM's was good. Minor side effects were recorded in 9,77% of adolescents. Due to these effects 16,98% of them changed the CM. From the total, 18,81% had to change the type of COC due to impossibility of receiving the free of charge pill, and 7,56% due to medical reasons. No adverse events were recorded but one failure due to incorrect use of the condom (0,18%). We noticed a high rate (25%) of applicants who abandoned CM's after a variable period of time.
Conclusions: COC was the main CM's used by adolescents age 11–20 (88,74%). The high addressability demonstrated that there is a high level of information about CM's. Concerning for us is the fact that many applicants (19%) had at least one abortion before requesting a CM.

P256

Developing a young person's leaflet for general practices

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Objective: UK General Practices and Primary Care Trusts (PCTs) are currently inundated with work to implement the GMS II Contract. Improving access to Primary Care for young people is therefore of low priority and poorly resourced. In order to correct this important deficit we set out to develop a Young Person's Leaflet for our practice in a format which is not only useful and acceptable to our own patients but also easy to adopt by other practices. The leaflet promotes information about and access to holistic health and sexual advice for young people in line with the 'Confidentiality and Young People' initiative.
Design and Method: An extensive local search and national enquiries via the National Primary Care Development Team failed to reveal any previous example of a similar leaflet. We therefore researched and designed our prototype, 'The Ottershaw Surgery Young Person's Guide' which we launched in July 2003 to coincide with the 13th birthday of our surgery. Subsequently we sought feedback from Our patients – young (9–25 yrs) and older (mostly their parents).Local GP's, practice and PCT staff, Connexions Surrey and Health Promotion staff, Surrey Youth Council: 14 – 19 yr olds.
Results: Feedback was so universally enthusiastic that we were encouraged to develop the leaflet in the light of this! We have converted it to a web-based format to be uploaded onto N Surrey PCT website (www.nsurreypct.nhs.uk) and West Surrey Health Community website (www.west-surrey.nhs.uk). We have included a separate Word Document with a list of local services throughout West Surrey (i.e. 3 local PCT's areas) which can be selected as appropriate by individual practices. Our Health Promotion Specialist (Sexual Health) and Teenage Pregnancy Facilitator will work with the PCTs to encourage all practices to download, personalise and print this leaflet for their own use.
Conclusion: Developing a Young Person's Leaflet for General Practice in an acceptable and informative format is both popular and achievable. This can be easily modified for use nationwide by General Practices and PCTs.

P257

Prevention of unwanted pregnancies among adolescent girls in Bulgaria – our experience with low-dose oral contraceptive Novynette

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Introduction: The rate of unplanned and unprotected sexual contacts among adolescents in Bulgaria is high, so the usage of low-dose oral contraceptives is an option for prevention of unwanted pregnancies.
Aim and methods: The aim of the study was to assess efficacy, cycle control and tolerability of a low-dose oral contraceptive Novynnete (Gedeon Richter Ltd, Hungary) containing 20 micrograms ethinylestradiol and 150 micrograms desogestrel. Twenty-nine sexually active girls aged 15 – 18 years who have not given birth were involved in the study. The duration of the investigation was 4 – 9 months (203 cycles altogether).
Results: No one pregnancy occurred during the study, Pearl index=0. The ovulation was restored within three months after discontinuing the pills. The side effects were rare, mild and tended to decrease with prolonging the period of administration. The incidence of breakthrough bleeding in 5 (17.2%) and spotting in 3 (10.3%) of the girls was observed.
Conclusion: The low-dose contraceptive Novynnete is highly effective, with good cycle control, well tolerated and reasonable for using under medical supervision in adolescent girls.

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Sexual life aspects and contraception in Greek adolescents

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Introduction: The knowledge of the current opinions and attitudes regarding the sexuality and contraception among Greek adolescents is important to plan a strategy of prevention of the sexually transmitted diseases (STDs) and the avoidance of unwanted pregnancies.
Design & Methods: One hundred and sixty Greek adolescents answered a questionnaire about theirs sexual activity and behaviour as well as their knowledge about contraception. The participation in the study was voluntary and anonymous.
Results: 113 (70.6%) of the participants were female and 47 (29.4%) were male. The mean age was 17.3 years (15–18 years). The Greek teenagers prefer to have a regular partner (65%) and they want to build up their relationship on a combination of understanding and sexual pleasure (76%). Sexual activity starts at the age of 17 for 43% of the teenagers, probably later than in other European and American countries. The majority of the participants (86%) consider contraception essential in avoiding STDs and unwanted pregnancies. The most used contraceptive methods are male condom (56%), following by coitus interruptus (18%) and oral contraceptive pill (10%). Most of the adolescents (79%) have a negative point of view regarding the use of intrauterine devices, mainly due to the risk of contraception failure, pelvic inflammatory disease and ectopic pregnancy. The use of barrier contraceptives such as diaphragm and sponges is extremely rare, while they almost ignore the use of spermicides. The knowledge regarding contraception is mainly derived by friends or the sexual partners and to a lesser degree by the media. 62% of the teenagers choose a contraceptive method after discussion with the erotic partner. They believe that information about contraception should be provided by professionals (54%), as well as from the parents (35%).
Conclusions: The provided information regarding aspects of sexual life, especially the need of contraception and the protection by STDs, should be given by well-organized programs, with a primary role of the physicians. The use rate of oral pills remains low, and the education of the teenagers regarding the advantages of such a contraceptive method has to be further enhanced.

P259

What influences young people's contraceptive choice?

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Introduction: Clinicians have suggested that use of long-acting contraceptive methods such as Evra the contraceptive patch, NuvaRing the contraceptive vaginal ring and Implanon the contraceptive implant may help reduce teenage pregnancy rates. However, little is known about young people's attitudes towards these methods.
Objectives: The aim of this project was to explore the attitudes of young people towards Evra, NuvaRing and Implanon in order to contribute towards the improved understanding of the choices which young people make about contraception.
Design and Methods: A cross sectional survey was carried out using a self-completion questionnaire developed for this study. Participants were a self-selecting sample of young people attending young people's contraception and sexual health clinics. Statistical analysis was carried out using appropriate univariate tests. Qualitative analysis involved detailed identification of key themes which were continuously challenged by looking for conformity and variation and by identifying disconfirming cases.
Results: One hundred and twenty nine questionnaires were returned. The majority of participants had no prior knowledge of Evra, NuvaRing or Implanon. Approximately one third indicated that they would wish to use Evra; five percent that they would wish to use NuvaRing and approximately one quarter that they would use Implanon. Statistically significant associations were found between participants' attitude towards using these contraceptives and their age, experience of a pregnancy scare, experience of an unplanned pregnancy and prior knowledge of the contraceptive. Five major themes emerged relating to the advantages and disadvantages of Evra, NuvaRing and Implanon: convenience, effectiveness, safety and side effects, invasiveness and discretion.
Conclusions: There is variation in young people's knowledge of and attitudes towards long-acting contraceptives which may be influenced by contraceptive need, experience of lack of effective contraception and access to information. The themes identified in their perceptions of these contraceptives are useful in developing an understanding of what young people look for in a contraceptive. It will be important for health professionals to provide information on all these themes when assisting a young person in making an informed decision about contraception.

P260

Sex and young people in Glasgow: audit of under–16 reporting in a Young People's Sexual Health Service

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Recent rulings in court cases involving children have thrown child protection issues into sharp focus for clinical and non-clinical staff involved in provision of all clinical services for young people. This is particularly problematic in the area of sexual health. Clients under sixteen years may have complex needs and their care can raise ethical and medico-legal questions for staff.
At a sexual and reproductive health centre with a specialised young people's service, a 'reporting form' was developed for use in clinical consultations with service clients under 16. After piloting, this form was introduced and staff training was held to inform all staff of local written policies on the management of sexually active young people and confidentiality, guidance on child protection issues, and the new policies for reporting of consultation with clients under 16. A Clinical Support Group was also instituted to allow a forum for discussion of difficult individual cases as well as providing a more general supportive team environment.
The results of the first six weeks of the pilot including age of client and partners, presenting problems, uptake of condoms, other contraception and testing, and parental knowledge of the sexual activity, are summarized.
Most clients presenting state they are in relationships of some duration. Most do not tell their parents of their sexual activity. Most clients initially present requesting emergency contraception and the inference is that unprotected sexual intercourse is common in this group of clients. Condom uptake is high in our service users. The uptake of chlamydia testing is currently low in this group. The use of additional ongoing contraception was not well documented initially and this has been an area for further training for staff in our service. Introduction of an Under-16 reporting form was readily accepted by staff, especially after user-led modification.
The data collected gives a valuable overview of the type of issues dealt with in the clinical context and can help to target training and teaching as well as potentially to highlight child protection issues.

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What do clients of a young people's sexual health service recall about their sex education programme at school?

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Scotland has one of the highest teenage pregnancy rates within Europe, and a rising incidence of sexually transmitted infection. There is evidence that good access to quality information about sexual and reproductive health improves clinical outcomes with regard to unwanted teenage pregnancy, without lowering the age of first intercourse. In line with local policy and national guidelines, Glasgow is endeavouring to improve the breadth and quality of sex education to improve the sexual health of young people. The Place is an open- access drop-in sexual health service for young people. Clients attending this service were asked individually to recall whether they had received teaching on key areas of sex education outlined in the Scottish Executive's Sexual Health and Relationship Strategy and Greater Glasgow NHS Board's guidelines for sex education in schools. These areas included: reproduction, puberty, good relationships, safer sex and risks of sexual activity, contraception, sexually transmitted infection, rights and responsibilities, and being good parents. Their responses were analysed by age and gender.
34/157 respondents (21.6%) were under 16 with the remainder (123/157, 78.4%) aged 16–18. 86% were female, reflecting the client group. Although all schools in the area offer a sex education programme, only 132/157 (84.1%) could recall any sex health education being offered. Although most could remember teaching about risks of sexual activity (unwanted pregnancy 60.5%, safer sex 76%), there was little recall of teaching in areas such as having good relationships (44.6%), rights and responsibilities (35.7%), and being good parents (25.5%). Further research is needed to establish why recall of taught sex education is low in this group of clients, and how to improve retention of important sexual education information.

P262

OC in therapy of dysfunctional uterine bleeding in adolescent girls

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Introduction: The menstrual cycle disorders consist one of the mane places in structure of gynecological diseases in adolescents. One of the main reasons of dysfunctional uterine bleeding is unmaturity of central nervous and ovary regulation in adolescent girls. Hormonal changes occur in parallel in central nervous system and in the ovary as a result of the maturation of the reproductive organs and their regulatory mechanisms (Spence J.E., 1997; Gurkin U.A, 2000). During the first years after menarche menstrual cycles are often irregulare and in high percentage menstrual cycles are anovulatory. The reproductive system is carefully controlled from hypothalamic centers. The normal regulation can violate as a result of influence of somathic illness,nutritional insufficiency, negative emotions and sexual transmission infections. Timely correction of this disorders and its reasons permit of following problems of reproductive health.
Materials and methods: 109 girls aged of 13–19 suffering of dysfunctional bleeding were investigated. Hormonal level (FSH, LH, Estradiol, Progesterone, Kortizole, DEAS,17OH-progesterone, Prolactin), Ultrasound researches, bleeding analysis (trombocytes, Hb, Er, fibrinogen, AT111) were examined. 58 girls were included in 1-th group. This patient's don't suffered of endometrial hyperplasia and received therapy of low dose oral contraception during 6 month's after hormonal hemosthasis. The patients of the 2-th group with revealed endometrial hyperplasia (n=32) were treated by didrogesteroni in dose of 20 mg per day during 6 monthe. Before treatment by gestagens to 26 patients (with endometrii 12–14 mm) provided Pipel-diagnostic, bleeding in 19 patients were required of surgical hemostasis Clinical and laboratory control were provided before and after treatment. In control group were included 15 girls with traditional therapy without hormones.
Results: In all patients of 1-th and 2-th groups were achieved stable normalization
of menstrual cycle and hormonal homeostasis after 6 months of therapy. Positive effect were reached in treatmentof endometrial hyperplasia by didrogesteroni in all 32 patients.
Conclusion: Adolescents with dysfunctional bleeding with endometrial hyperplasia are needed in treatment of progesterone; girls without hyperplasia can treating by low dose OC.

P263

Benefits of oral contraception in late reproductive age and in perimenopausal period

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Objective: To evaluate efficacy, acceptability of oral low-doses contraceptives in users of late reproductive age (over 40 to 45 years) and in woven in perimenopausal period (from 46 to 51 years).
Design and Methods: 65 patients aged 40–51 (1 group–42 women aged 40–45; 2 group – 23 women aged 46–51) non-smokers, healthy, without contraindications for OC, reserved low-dose OC (20 mg ethynyloestradiol, 75 μg gestaden – Logest; 20 mg ethinylestradiol and 150 μg desogestreli -Novinett). Laboratory tests and clinical examination were performed at inclusion and after 6 and 12 and 24 months. The OC users were observed in 768 cycles and control group women (don't users of OC, n=21, aged 40–51) in 235 cycles. The blood pressure level, lipid and glucoses profiles, parameters of hemostasis were investigated.
Results: we don't obtained serious side effects. On follow-up visits the lipid levels (total cholesterol, triglycerides, HDL, LDL), plasma levels of glucose, parameters of hemostasis (fibrinogen, thrombocytes, AT111) were no difference between 1, 2 and control group. There were no pregnancies in the OC groups, and were 3 in the control group. Three patients of 2-th OC group were menopausal (high FSH); HRT were recommended
as a continuation for guarding of health.
Conclusion: Using of low-dose oral contraceptive Logest fnd Novinett can be recommended as effective and acceptable method in healthy non-smoking women over 40 to 51years with the next applying HRT.

P264

Contraception in menopause

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Introduction: Contraception in premenopause is one problem little studied in the literature of speciality. It is considered probability that the risk of pregnancy in premenopause is low and so is not necessary the contraception
Aims and Methods: Were studied two groups of women with age between 40 and 49 yers (in Romania the most frequent age for the beginning of menopause is 49). This study was made in the period 2002 – 2003. The first group was formed by 109 women which refused to use none method of contraception. The second group formed by 98 women: 61 of them used HRT for hormonal deficiency in premenopause or for early menopause; other 37 used contraceptive methods (natural, etc.).
Results: At the first group of women which did not use any methods of contraception in the period 2002–2003 recorded three pregnancies which were solved by medical abortions. At the second group of women who used hormonal therapy for any diseases or used one contraceptive method did not record any pregnancy. Though the hormonal therapy administered was not given for contraception we considered that this hormonal treatment had contraceptive effect too. At this group of women observed another phenomenon. They were not stressed by the risk of a pregnancy and this thing had as result the growth of life quality
Conclusions: The contraception in premenopause represents an insufficient known problem as medical point of view that social point of view. In that problem one aspect is sure: it cannot be ignored.

P265

Menstrual disorders in early puberty in girls 14–17 years

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Introduction: One of the most important events in one's life is the period of adolescence and maturity. The factor for recognizing the real maturity in young girls is the first menstruation (monthly period). Against that monthly period is not a deniable happening, it has not been written about its effective factors. The girls don't know enough about adolescence, maturity and related disorders. If they don't have enough knowledge and can not adapt to the situation, the bad effects with the mental problems will appear in their conjugal life as well as the society. Hence, it is necessary to consider this case.
Methods: The present study is an analytic and descriptive study. The samples included 1536 girls, 14 to 17 years old who were students of grade 3 at guidance schools and grade 1 to 3 at governmental high schools in 3 distinct regions (18 , 5 and 9) of education ministry. The samples were chosen randomly. Data collecting tool was a checklist including 2 parts and statistical inferential methods were used for analyzing the data. The applied software is S.P.S.S 10
Results: Results of the study show disorders of monthly period in the girls as Amenorrhea 5.7% Menorrhagia 11.11%, Polymenorrhea 14.6%, Hypermenorrhea 22.9%, Olygomenorrhea 24.6%, Hypomenorrhea 12.9%, Metrorrhagia 11.7%, Dysmenorrhea 75%, besides, the average menarcheal age of the girls is 12.8% years and 48% of the girls experience disorder cycles in the first year after menarche. The average of menarche is 2.09 days. In this study, significant statistic relationship was found among menstruation and doing exercise ($P=0.047$), BMI ($P=0.003$), Stress ($P<0.001$), and it was also shown that pregnancy during high or low ages or after a short period of pregnancy (less than or equal to 6 months) does not increase the monthly period disorders of the next generation
Discussion: Results of the mentioned study show that 75% of the students suffer from dysmenorrhea, and factors such as stress, BMI and exercise can affect the monthly period disorders. Therefore to satisfy and improve the girls' health, it seems necessary to consider reducing pain during menstruation, nourishment, weight controlling and reducing stress factors as well as planning to do exercises especially at schools.

P266

A descriptive study of the university students about their knowledge on reproductive health and assessment of their needs

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Introduction: Turkey's shape is like a bridge between Asia and Europe and the population is over 70 million. It has young population; around 50% of the population is under age of 20, 98% of population is Muslim but Turkey a secularized country. Turkey is a developing country. There are not in routine established programs about reproductive health in any of the formal education in Turkey. Besides there are not sufficient reproductive health services for the young population. On the other hand the university life may give young people some extra freedom and opportunities. But also creates risks such as unwanted pregnancies and sexually transmitted infections in the big cities. Marmara University is located in Istanbul, which is the biggest city of Turkey.
Aims and Methods: This study was carried out in order to determine the knowledge and needs of university students about RH and RH services in Turkey. The university students who participated in this study had come from different cities of Turkey. A descriptive study was applied in April 2003, among the preparatory school students of the Marmara University in Istanbul. Data were analyzed in SPSS 11.05.
Results: In this study, data was collected from the 723 students (Female: 47.4%, male: 52.6%). Most of them were single (98.9%). The average age was 20 (minimum: 18, maximum: 22). Merely 27.4 of them had experienced intercourse. The average age of the first intercourse was 16.5 ± 1.1 for males and 17.9 ± 1.1 for females. Only 26.3% of males and 36.7% of females could know the exact days carrying the risk for pregnancy. When it was asked about their current contraceptive method usage, 46.6% of the males and 9.3% of the females reported that they were using condoms and 18.2% of males and 7.6% of females said that they were using withdrawal. Even though they have heard about AIDS, only half of them had used condom in their last intercourse. Almost all of the students (85.5% of males, 92.1 of females) stated that both men and women should be responsible from deciding on the intercourse and to use any contraceptive methods, but only 35% of males and 53.7% of females had decided that with their spouses in their first intercourse.
Conclusion: It was found that the young students, which have just finished the high school and just begun the university and newly begun to live in the biggest cities of Turkey, are under the high risks of unwanted pregnancies and STI. Education programs about RH at the universities should be implemented into the formal education and the RH services into the routine school health activities.

P267

A model: which factors affect the use of contraceptive method of husbands in Turkey?

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Introduction: Some family planning (FP) programs had avoided men because they assumed that men were indifferent or even opposed to family planning. Indeed, men as a group are frequently blamed of many of women's reproductive health (RH) problems. Men often dominate decision-making. In order to increase men's participation and men's responsibility in RH as mentioned in International Congress of Population and Development ICPD (1994), it is important to determine the factors affecting men's contraceptive usage nationally.
Aims and Methods: 1998 Turkey DHS-husband, women and household data groups has been analyzed in order to gain detailed and comparative information about men's knowledge and attitudes of RH to develop some recommendations under the light of scientific findings for the health planner and health decision-makers to improve national RH services. A weighted, multistage, stratified cluster sampling approach was used in selection of the sample. Interviews were carried out in 8059 households, with 8576 women and with 1971 husbands. The husband's reports related with the current use of contraception were defined as the dependent factor. Some husbands, women's and household's characteristics were put in the model. Data groups were analysed in SPSS 11.05 and binary logistics regression analyses were done.
Results: In this study, it was found that 37.4% of husbands did not use any FP methods but 62.6% of them currently used some methods. The 9 factors were defined in this model as the most important factors to affect men using some FP methods (X^2:425.384, df: 18, $p < 0.001$, R^2 (Cox&Snell):0.228). Model can explain 23% of the variation and estimate 79.8% of all observation and %93.4 of any FP users correctly.
Conclusion: It is needed to understand that the factors affecting men's FP methods usage nationally, in order to increase men's participation in reproductive health. This model defined in this study will help to understand deeply the factors affecting men's FP methods usage.

P268

Does place of birth have an effect on the contraceptive use?

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Introduction: Trends in fertility charecteristics and contraceptive use may change within years, also place of birth may affect these characteristics.
Aims and Methods: The aim of this study is to evaluate the effect of place of birth on fertility characteristics and contraceptive use and also to determine the changes if any within 15 years among 1555 women over age of 50.The study evaluated two groups of women within the period of 1982–1987 (group I) and 1997–2002 (group II). Number of pregnancies, abortions and living children, place of birth and the last contraceptive method used were determined for two groups retrospectively. Statistical analysis included Student's t-test and chi square test .
Results: Number of pregnancies ($p > 0.05$), number of abortions ($p > 0.05$), number of living children ($p > 0.05$), use of any contraceptive method ($p > 0.05$) and modern contraceptive method use ($p > 0.05$) were similar for women born in urban and rural area. Percentage of women born in urban area were higher in group II ($p < 0.001$). Concerning women who were born in urban area, number of pregnancies ($p < 0.05$), number of living children ($p < 0.001$) were lower and number of abortions were higher ($p < 0.001$) in group II. Meanwhile, among women born in rural area, number of pregnancies ($p < 0.001$) and number of living children ($p < 0.001$) were significally lower in group II.
Conclusions: Place of birth (urban or rural area) does not have an impact on the fertility characteristics and contraceptive use. For the recent period, there is a trend towards more abortions and use of modern contraceptive method, less pregnancies and living children.

P269

Evaluation of sexual behaviors and use of contraceptive methods among teenagers and young adults from Silesian Region in Poland

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Introduction: According to WHO, contraception is defined as a conscious action in order to prevent an unwanted pregnancy and equally, to enable human to take independent decision of having progeny. The development of science enables to create more and more effective methods of family planning and prevention of sexual transmitted diseases (STD). Effectiveness, safety as well as individual preferences are the main elements in evaluation of contraception methods.
Objectives: The aim of the study is to evaluate sexual behaviors and activity, awareness and propagation of contraceptives among young adults in Upper Silesian Region, and to establish the correlations between contraceptive methods used, knowledge about family planning, prevention of STD, sexual behaviors and age, gender, education and religion.
Design and Methods: A group of 360 pupils, students and working adults were included in the study. Age between 18 and 26 was a criterion for qualification to the investigated group. The research tool was an individually prepared 'Sexual Behaviors Questionnaire' containing 26 questions. Statistica 6,0 computer software with multiple regression model, ch2 and F Fisher-Snedecor tests were used for statistical analysis.
Results: The results were obtained on the basis of questionnaire analysis. General population was divided into 3 subgroups, relating to the age. 75,8 % of young adults had initiated sexual life. The average initiation age for the general population was 18,4 ($\pm$1,92); the earliest time of initiation was observed at the age of 14 (0,8%), the latest – at the age of 24 (24%). 2,5% of sexual active respondents did not use any of contraceptives (they were all below the age of 20). A contraceptive method used the most frequently was a male condom (60,8%); the least – emergency contraception – (4,2%).
Conclusions: The present study established that an average age of sexual initiation (which is 18,4) was attenuated by the age of respondents and their higher education. Therefore, it seems to be essential that young people should be provided with appropriate and complete information about sexual behaviors before first sexual contacts.

P270

A comparative study on knowledge, attitude and practice of adolescents in two different methods of counseling (counseling through parents & teachers) in Tehran, Iran

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Objective(s): To identify the patterns of knowledge including beliefs and misconception regarding to puberty and sexual behavior, also performing programs to help them to move successfully from childhood to adulthood.
Designs & Methods: This is a pre-post operational study. A preliminary self-administered questionnaire was prepared to asses the adolescents KAP on puberty. It was a school – based survey and schools were allocated randomly in two groups. The subjects of the first group were educated by their health teachers and the second ones were trained by their parents. After one years of intervention, the secondary questionnaire was filled-up by the same students. A total of 1900 girls were required. The designed sample was selected proportional to the size of school population.
Results: 1923 girls were enrolled in this study. 905 in teachers and 918 in parents group.69.5% of girls considered mothers as a confident person for telling their secret and most of them (86.2%) mentioned that they are satisfied in this regard. In parents group 80% of girls felt closer relationship with their mothers after intervention. Based on preliminary questionnaire, 14.8% of respondents were unfamiliar with puberty signs. The difference between girls' knowledge about signs, before and after interventions, is meaningful and also their information about puberty in teacher group was more than parents group. 374 (20.5%) of respondents had menstruation before intervention. They experienced different feeling after their first menstruation. 75% of them felt surprise, 67.1% was scared. 7.8% felt happy, 17.6% was thankful and pride and 79.4% had bad feeling.313 (21.0%) of girls mensed during the intervention time. The girls' positive feelings were improved after parents and also teacher's involvement. There are also marked psychosocial changes during adolescence. These changes were reported in 58.3% of subjects after menstruation but in both interventional groups it decreased to half.
Conclusion: So we believe that adolescence is willing and able to take greater responsibility for their health and their lives, but whether they actually do so is greatly dependent on the behavior of others. Today a broader understanding of adolescent reproductive health is gaining ground and a lot has happened, but there is still a long way to go.

SESSION 18: STERILISATION – MALE AND FEMALE

P271

Community-based vasectomy services: from medical to holistic care

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Introduction: The vasectomy service within the Sandyford Initiative, Reproductive and Sexual Health Centre, Glasgow has traditionally been medically-led, with medical staff performing both the counselling and operating sessions. It was felt that the service could be more holistically driven, by improving the surroundings and increasing the input from family planning nurses.
Method: Five designated FP nurses attended in-house training, to give them an overview of the procedure, it's complications and failure rates and completed a short supervised practice session prior to staffing individual clinics. The nurses counselled the client and obtained written consent, but did not perform scrotal examination. 'De-medicalisation' during the procedure itself was also improved with background music and, after consultation with the Trust infection control team, green operating gowns were replaced with plastic aprons and no masks were worn. Clients were audited during a one-month period for their views on the counselling and operative visit.
Results: 66 attended for counselling all of which completed questionnaires (100%). All reported the reception and counselling staff to be courteous with the length of appointment (20 mins) adequate and the information given comprehensive. 43 had a female nurse counsellor and all felt comfortable with this. 85 attended for vasectomy and all completed questionnaires (100%). 83 felt the counselling prepared them for the procedure with 27 stating the discomfort was as expected, 53 less and 5 worse than expected. All clients who wished background music (30) felt it was useful in distracting them but only 4 of the 23 clients who chose not to have background music felt afterwards that it may have been useful. 5 clients asked for their partners to be present and this was agreed by the surgeon involved.
Conclusion: It is possible to provide a more holistic vasectomy service without compromising on the level of medical care received. The introduction of a nurse led vasectomy counselling service in a holistic setting led to a high level of client satisfaction.

P272

Hysteroscopic sterilisation of women in the outpatient department without any anaesthesia with the new Essure device

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Female laparoscopic sterilisation has been offered as the standard last 3 decades. Complication rates of 5/1000 and failure rates meant by pregnancies 5–7/1000 are still very low and accepted. Nevertheless, admission, general anaesthesia, one day stay in clinic is required combined with complaints of nausea, vomiting and abdominal pains and scars of the skin. At least 2 days out off work are the consequences. Keeping these disadvantages in mind a large group of women does not take the decision for a sterilisation by laparoscopy. A new method of hysteroscopic sterilisation has been introduced last 2 years. This method is meant to be performed on the out patient clinic without anaesthesia and admission.
The 'Essure' device consists of a tinitol-coil with dacron fibers in the centre, causing a sterile reaction in the intramural part of the tubes within 3 months. We developed a protocol to sterilise patients without any anaesthesia on the out patient department within less then 14 minutes in total. Using a 4.9 mm Bettocchi CF hysteroscope without tenaculum and without a speculum, according to the vagino-approach, the tubal ostia are located and the Essure device is introduced on both sides. Patients, often accompanied with husband or friend follow the procedure on the monitor while the doctor is explaining the procedure. Patients take some tea or coffee and leave the clinic for their work or other activities. After 3 months an ultrasound is performed , immediately followed by a hysterogram to locate the devices and to proof obstructed tubes. During the period of these 3 months additional anticonceptives have to be used or continued. Failure of placement is 3% and after 2 years none pregnancy is found in our group. Pain scores during placement are 2.2 on the VAS ,less then during the menstrual periods. Phase II and III studies as well as world wide follow-up of all correctly treated patients- >15000, did not resulted in one pregnancy.This method is the perfect sterilisation to be performed on the Out Patient Department for all those women who feared the clinical laparoscopic procedure.

P273

Color Doppler flow analysis of uterine and ovarian arteries prior to and after tubal sterilization: electrocautery vs. Pomeroy

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Objective: To compare the changes in uterine and ovarian artery blood flow in patients who had voluntary laparoscopic surgical sterilization via bipolar cautery or Pomeroy tubal ligation via mini-laparotomy.
Design and Methods: Ninety consecutive fertile women with regular menses applying for voluntary tubal ligation who had no gynecological pathology, history of dysmenorrhea and use of intrauterine device or oral contraceptive in the last 3 months were recruited in this prospective study. After getting an informed consent, the patients either had laparoscopic tubal ligation via bipolar electrocoagulation (Group 1) or Pomeroy tubal ligation via mini-laparotomy (Group 2) according to their preference. Color Doppler flow analysis of uterine and ovarian arteries were carried out on the 3rd day of the cycle prior to the procedure (D_0), on the postoperative 3rd day (D_1) and on the 3rd day of the cycle, 3 months (D_3) following the surgery. The significance of difference between three measurements was analyzed by using analysis of variance.
Results: The demographic characteristics of both groups were similar. Prior to surgery, the mean pulsatility index (PI) of the uterine artery, left and right ovarian arteries were 1.9 ± 0.3, 1.8 ± 0.3, 1.8 ± 0.2 in group 1 and 1.8 ± 0.08, 1.8 ± 0.08, 1.8 ± 0.07 in group 2; respectively. There was no statistically significant difference between group1 and group 2 in terms of D_0 values ($p > 0.05$). Postoperative 3rd day and 3rd month measurements of both uterine and ovarian arteries in group 1 and group 2 did not show any statistically significant difference between preoperative values ($p > 0.05$).
Conclusion: Mesosalphengeal destruction due to the sterilization technique and its end-results has long been a matter of concern. In this study, tubal sterilization performed by bipolar electrocautery and Pomeroy's technique did not induce any alterations in the flow of either ovarian or uterine arteries both in the immediate postoperative period and three months after the surgery.

P274

Changes in menstrual pattern, dysmenorrhea and ovarian function following Pomeroy's ligation of the tubes for voluntary surgical contraception

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Objective: To analyze the changes in menstrual pattern, ovarian reserve and presence of dysmenorrhea and ovulation using Pomeroy's tubal ligation technique via minilaparotomy.
Design and Methods: Thirty consecutive women with regular menses applying for voluntary tubal ligation who had no gynecological pathology, history of dysmenorrhea and use of intrauterine device or oral contraceptive in the last 3 months were recruited in this prospective study. After getting an informed consent, the patients had tubal ligation using Pomeroy's technique via minilaparotomy under general anesthesia and were discharged the same day uneventfully. One cycle before the procedure, blood samples were collected on day-3 for determination of follicle stimulating hormone (FSH), luteinizing hormone (LH) and estradiol (E_2) and on day-21 for progesterone levels. All the operations were carried out in early follicular phase (day 2–5) with evaluation of FSH, LH and E_2. Day-21 progesterone levels were also measured in the same cycle following tubal ligation. The same hormonal evaluation was carried out on the 3rd cycle following the procedure. All patients were followed for 3 months and changes in menstrual pattern, presence or absence of dysmenorrhea and ovulation were noted. The significance of difference between preoperative and postoperative values was analyzed by using analysis of variance and paired t test.
Results: After the procedure, menstrual pattern change occurred in one patients (3,3%), whilst 2 patients had mild dysmenorrhea (6,6%). The incidence of ovulation was 43% preoperatively, rising to 48% in the same cycle after surgery and maintaining almost a constant level at 50% 3 months after tubal ligation. There was no statistically significant difference in the serum FSH, LH and E_2 levels in preoperative and postoperative assessments ($p > 0.05$).
Conclusions: Tubal ligation has been blamed for causing luteal phase defect as a result of effected ovarian circulation. In our study, the rate of ovulation was even improved after the procedure and ovarian reserve was not negatively affected. Pomeroy's ligation of the tubes did not alter the ovarian reserve and function in the early follow-up period of 3 months.

P275

Fact, fallacies and Filshie Clips

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Introduction: Female sterilisation is the most popular method of contraception worldwide when a woman has completed her family[1]. In 1996, the CREST long-term follow up study of different methods of female sterilisation was published in the USA. This showed a higher than anticipated failure rate and ectopic pregnancy rate than had been otherwise expected. This study did not include the Filshie Clip, as it was not available in the USA at that time. Present studies have shown that the Filshie Clip has a comparatively lower long-term failure rate and ectopic pregnancy rate. However, senior clinicians still quote the Crest Study figures for counselling purposes despite the fact that the Filshie Clip is being used in their units[2&3].
Fact 1. The overall long-term failure rate of the Crest Study is 36.5/1000[4] compared with the Filshie Clip, which is 2.7/1000[5].
Fact 2. The ectopic pregnancy rate quoted in the Crest Study is 1/3 of failures i.e. 1% whereas the ectopic pregnancy rate of the Filshie Clip is 1 in 10,000 (4% of 2.7/ 1000)[6], which actually equates to just 0.000108%!
Fact 3. The regret rate of the Crest Study is up to 20%[7] compared to just 5% with the Filshie Clip[8].
Fact 4. The Mirena IUS has been quoted as having a failure rate equivalent to the failure rate of female sterilisation with Filshie Clips. Where as this may be the case, the definitive study of the IUS compared to the Filshie Clip with intention to treat has not yet been undertaken. Pregnancies associated with patients who have had their IUS removed for pain, bleeding and side effects have not been included in the overall failure rate. The five year ectopic pregnancies with LNG-IUD-20 is reported to be 1 in 5000[9]
Conclusion: In units where the Filshie Clip is used for female sterilisation; Filshie Clip data should be used for counselling purposes not the Crest Study.

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Competing interest: Marcus Filshie is also the Medical Director of Femcare Limited.

P276

A new method of hysteroscopic sterilization: Essure

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Introduction: Essure is an irreversible method of permanent contraception. The device is a dynamically expanding micro- insert which is placed in the proximal section of the Fallopian tube using a hysteroscopic approach. This micro-insert induces a local fibrous tissue in-growth that occludes the tubal lumen in a period of three months.
Design & Methods: We present our experience with 162 cases. They proceed from two prospective clinical trials and from clinical use. On the 3rd of March 2000 Phase II clinical trial started with 25 cases, on the 7th of October 2001 pivotal clinical trial started with 37 cases and on the 5th of October 2001 after the CE approved this method, we started its clinical use with 100 cases. The protocol followed has been: information about the method, medical history, gynecologic exploration, Pap Smear and transvaginal ultrasound if pathology was detected. The patients signed an informed consent and the preoperative exams consisted on a blood test. The placement procedure was programmed on the follicular phase of the cycle and it took place in an Ambulatory Surgery Unit. The equipment we used was an Olympus hysteroscope with a 5 Fr working channel. Only paracervical block was used, but an anesthesiologist was available if the patient was stressed or felt pain. The patient had to use an alternative contraception method until we demonstrated, 3 months later, that both tubes were occluded by an hysterosal pingogram (HSG) or a pelvic X-Ray.
Results: The successful bilateral placement was achieved in 93,2% of the cases. This number changed between 90.3% during the clinical trial and 95% on clinical use. The procedure time oscillated between 8 and 10 minutes. Regarding the anesthesia used, 58% of the patients of Phase II and Pivotal and 47,5% of the clinical use only needed paracervical block. Adverse events: 6 cases of vasovagal reaction during the procedure. 5 cases of vaginal expulsion that had had unsuccessful placement, four out of these five underwent a second procedure which was successful and one case of tubal perforation, in a assymptomatic woman, which was diagnosed at the moment that the HSG was performed, she underwent a laparoscopy we removed the micro-insert and sterilized her. As of February 2004, 3275 women-months of effectiveness data have been accumulated and there are no pregnancies reported. Regarding the comfort of this procedure it was rated as good, very good or excellent by 95% of the patients. At 6 and 12 months the satisfaction was close to the superior grade.
Conclusions: Hysteroscopic sterilization is an effective permanent contraception method, safe and acceptable to women. High patient tolerability and satisfaction. Feasible for 95% of the women with few side effects.

P277

Minilaparoscopy with local anaesthesia: an even less invasive surgery for female sterilization

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Introduction: Fallopian tubes sterilization is the most popular choice for definitive female contraception. Local anaesthesia (LA), with or without intravenous sedation, has been used in the last 25 years in this procedure. However, this intervention is usually made under general anaesthesia (GA) in our country. After 133 laparoscopic procedures in the Ambulatory Surgery (AS) Unit, we considered the possibility of making tubal ligation under LA and intravenous sedation, based on two important facts: we had the availability of a minilaparoscope (3,3 mm scope, 3 mm tools) and we deal with the necessity of reducing the postoperative stay in the recovery of the AS Unit. We present a retrospective five years study of the results of our cases of sterilization with minilaparoscopy under LA.
Aims and Methods: 1846 gynaecologic surgical procedures were made between 1999 and 2003 in our Department; 697 of them in the AS Unit (38%). We made 228 laparoscopic tubal interruptions in these years, 100 of them (44%) as Ambulatory Surgery cases. Patients included in the minilaparoscopy group must not be obese, be interested in avoiding GA and sign the informed consent. 29 patients underwent tubal sterilization under LA and were included in this study. After local injection of mepivacaine or bupivacaine in the umbilicus and suprapubic zone, and in uterine cervix, a carbon dioxide pneumoperitoneum was induced up to 6–8 mmHg. Slight Trendelemburg position was made. Fallopian tubes were electrocoagulated with a bipolar forceps and afterwards sectioned.
Results: 3 of the 29 procedures began with GA, as the presence of adhesions because of previous operations was suspected. 15 of the 26 procedures beginning with LA and sedation were completed. 11 cases had to be finished under GA, 6 of them because of the pain of the patient and 5 as a consequence of technical failures. These failures were a bad evaluated obesity; a preperitoneal false way of the port; no vision of fallopian tube in one case, and two cases of breakdown of the bipolar forceps
Conclusions: Tubal ligation under LA with minilaparoscopy is useful to selected patients, and has to be included as an Ambulatory Surgery indication. This method provides a good quality view, but reduced visual field. Surgeons have to be trained to develop a careful proceeding and to manage with limitations like an undersized visual field and a slight Trendelemburg position.

P278

The evaluation of tubal reanastomosis request in the patients who were administered tubal ligation score

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Introduction: Tubal ligation is the most widely used method for contraception among the world. Unfortunately 1 to 10% of these patients later request the reversal of tubal ligation with various reasons. In order to decrease the reversal of tubal ligation request there are methods such as tubal ligation score for the patients.
Aims and methods: We have used the 'Tubal ligation score' presented in Paris Congress in 1982 to 389 patients who administered to Çukurova University, Faculty of Medicine, Obstetrics and Gynecology department, between January 1990 and December 1999 for tubal sterilization: Laparoscopic tubal ligation (with Yoon ring) was administered to 368 patients who got 6 or higher score. Twentyone patients who got less than 6 in score were reevaluated and another family planning method was administered to them. In the same time interval 417 patients, who underwent caesarean section and at the same operation bilateral Pomeroy type tubal ligation (Tubal ligation score was not found) were accepted as the control group.
Results: None of the 368 patients, in whom tubal ligation score was found and laparoscopically tubal ligation was administered, returned to our clinic for tubal reanastomosis. In the control group, 15 out of the 417 patients (3.6 %) returned to our clinic for tubal reanastomosis, ($p < 0.05$).
Conclusion: Administration of tubal ligation score will decrease the ratio of patients who equest the reversal of tubal ligation.

P279

A study to compare continuation rates between Yasmin® and existing combined oral contraceptives in UK clinical practice

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Introduction: Large comparative trials have shown Yasmin (30 μg ethinylestradiol/3 mg drospirenone) to have a contraceptive reliability and cycle control comparable with existing combined oral contraceptives (COCs). Drospirenone is a new progestogen unlike those found in existing COCs, having a pharmacological profile more closely related to natural progesterone. Non-comparative studies of Yasmin have demonstrated an improvement in androgen-related skin conditions, together with an improvement in some symptoms of premenstrual problems related to water retention.
Aims and Methods: To investigate if, in clinical practice, the pharmacological profile and non-contraceptive properties of Yasmin result in a higher continuation rate than those observed with existing COCs. Data were gathered from 163 nationally distributed GP practices across Great Britain. Women who met the inclusion criteria were followed for 12 months. An age-matched comparator cohort of women using other COCs was drawn from the same practices concomitantly. Discontinuation of Yasmin or a comparator COC was defined as failure to return for another prescription for the same product within 1 cycle (4 weeks) of the end of the first prescription. Pregnancy, or the use of alternative contraception (excluding condoms, spermicides and emergency contraception), were also defined as discontinuation.
Results: Data from 632 women (mean age 27 years) were analysed. A significantly higher proportion of women in the Yasmin cohort continued to take their pill, compared with the comparator arm (8.5%, $p=0.022$). Additionally, women taking Yasmin were found to continue their pill for significantly longer than those in the comparator cohort (+35 days over a 12-month period) ($p \leqslant 0.001$). Source of data: DIN-LINK data, CompuFile Ltd., November 2003
Conclusions: This study showed that continuation rates with Yasmin are significantly higher compared with comparator COCs. As the contraceptive efficacy and cycle control of Yasmin is comparable with existing COCs, it may be that the higher continuation rate is attributable to its pharmacological profile and associated non-contraceptive properties.

Abstracts of Symposia

S1-1

Contraceptive use in European women: a research survey on contemporary behaviour

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The choice of currently available contraceptive methods has increased considerably in recent years, offering women of reproductive age a variety of different methods dependent on their needs and lifestyle. In order to determine the pattern of use of current methods in contraception, a survey was conducted in a large population of women drawn from five European countries (France, Germany, Italy, Spain and the United Kingdom).

More than 12,000 randomly selected women, aged 15–49 years, were interviewed using a standardized questionnaire which addressed the use of current methods of contraception. The responses were analysed for the total study population, and, where appropriate, by country and age.

An oral contraceptive was confirmed as the most widely used method of contraception for women in the European study population, with an estimated 22 million users in the five countries. Women using an oral contraceptive reported very high levels of satisfaction (>90%). Male and female sterilization were the main methods of contraception in women aged 40 years and older. One-half of the women had undergone their sterilization before the age of 35 years. More than 50% of the women who had undergone sterilization had not been adequately informed and counselled about alternative reversible contraceptive options. No method of contraception was being used currently by 23% of the European study population, and unreliable methods of contraception (including cap/diaphragm, chemical, and natural and withdrawal methods) were being used by a further 6% of the population. Although valid reasons (e.g. not in a sexual relationship, wish to become pregnant) were given by many women who were not using contraception, there still remains a large number of women who need counselling regarding the importance of using reliable contraceptive methods. The number of women aged 15–49 years in the five European countries who are considered at risk of an unwanted pregnancy is estimated to be 4.7 million (6.5%).

Differences in the use pattern of contraceptive methods were demonstrated that emphasize the social and cultural differences between the countries. The findings in the current study can be used as a baseline from which to monitor trends in contraceptive use and behaviour in subsequent studies.

S1-2

Long-term contraception in young women: special focus on nulliparous women and contraception following abortion

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Many young women in the western world plan to delay childbearing until they feel established in their chosen career and financially able to cope with children. The average age for first birth in the UK is now over 29 years. Young women have traditionally used the combined oral contraceptive pill and/or condoms but, for those in established, stable relationships, it is entirely appropriate to consider a longer-term method of contraception which offers high efficacy but a rapid return to fertility at the time when pregnancy is desired. A longer-term method of contraception gives a young woman freedom from having to remember contraception on a daily basis. Careful counselling and selection of suitable women are the key to success for long-term methods of contraception.

The options to consider include the depot injection of medroxyprogesterone acetate, the subcutaneous implant (Implanon®), an intrauterine device (IUD) or hormone-releasing intrauterine system (IUS). The IUD and IUS have traditionally been mainly reserved for parous women but may be entirely appropriate methods of contraception for young nulliparous women within stable relationships. Insertion of an IUD or IUS can often be achieved without difficulty in a nulliparous woman, particularly if the operator is experienced and willing to use local anaesthesia and cervical dilatation. IUD continuation rates in nulliparous and parous women are not dissimilar.

Following abortion, women may be optimally motivated to prevent a further unplanned pregnancy. The timely provision of contraceptive advice and supplies is vital as the return of fertility is rapid and low numbers of women attend follow-up visits following abortion. However, it has been shown that most women discontinuing combined oral contraception are likely to do so in the first 2 months of use and therefore offering a longer-term method may be associated with a possible reduction in repeat abortion rates. Immediate post-abortal insertion of an IUD has been found not to be associated with an increased risk of perforation, expulsion, pelvic inflammatory disease or failure compared to an interval insertion. The well-informed woman will accept the higher incidence of amenorrhoea associated with an IUS.

In summary, longer-term methods of contraception may offer the younger woman significant advantages in terms of reliability and high efficacy. Women embarking on these methods should receive careful counselling and be given good back-up support from their health-care advisors.

S1-3

Contraception as a therapeutic option in the treatment of menorrhagia

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The levonorgestrel-releasing intrauterine system (Mirena®) is used by over three million women. Mirena® is an extremely effective contraceptive particularly for the woman who seeks a long-term, reversible method. A major feature of the Mirena® system is the non-contraceptive but very beneficial associated health benefits with use. Use is associated with a dramatic reduction in menstrual blood loss and there is a documented lower risk of anaemia with use of a Mirena® system. The mechanism of action by which menstrual blood loss is reduced or abolished is a consequence of the local action of levonorgestrel on the endometrium. Excessive menstrual bleeding (menorrhagia; greater than 80 ml loss of blood per menses) is a common gynaecological problem in women of reproductive age. At least 50% of patients who complain of excessive menstruation have no evidence of any uterine pathology. In Europe, heavy menstrual bleeding has become a major indication for use of this intrauterine contraceptive system.

Effective medical treatments suitable for long-term use include the Mirena® sytem, antifibrinolytic agents (tranexamic acid) and non-steroidal anti-inflammatory agents (mefenamic acid). There are not sufficient good-quality trial data to provide the evidence to adequately assess the effectiveness of the combined oral contraceptive pill. Long-acting depo progestogens may offer health benefits in women with heavy menses requiring contraception. Up to two-thirds of users experience amenorrhoea by 2 years of use. Concerns do, however, exist about related side-effects with long-term use (a small decrease in bone density after 5 years and changes in lipid profiles among long-term users). Importantly, amenorrhoea is now being seen by women as an advantageous side-effect of certain regimens of hormonal management, for both contraception and menstrual blood flow problems.

Until recently, hysterectomy was the only surgical option for women with menorrhagia resistant to medical treatment. Recent developments in gynaecological endoscopy have given rise to new and less invasive techniques, such as transcervical resection of the endometrium and other second-generation endometrial ablative techniques, as conservative surgical approaches to management of menorrhagia. A long-term (mean 5.1 years follow-up) review has reported that hysterectomy may be avoided in 76% of women, with no overall difference in satisfaction between the hysterectomy and endometrial resection groups. There is evidence from randomized controlled trials that efficacy in reduction of menstrual blood loss with a Mirena® system is equivalent to the blood loss reduction achieved with endometrial ablation. Two-thirds of women were reported to defer their plans for hysterectomy after a 6-month trial of a Mirena® intrauterine system. Recently published data concerning clinical outcomes and costs of Mirena® and hysterectomy at 5 years of follow-up indicate that, although 42% of women assigned in a randomized controlled trial to treatment with Mirena® subsequently underwent hysterectomy, the overall direct costs and productivity losses were 40% lower in the Mirena® group. The women in general were equally satisfied with Mirena® and hysterectomy.The levonorgestrel-releasing intrauterine system therefore provides an excellent reversible alternative to surgery for women with menorrhagia who also seek reliable long-term contraception.

S1-4

The non-contraceptive benefits and acceptability of Yasmin®

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Health professionals are aware that women complain of hormonal side-effects with different oral contraceptives. Progestogens in oral contraceptives differ, with some improving cycle control and others having anti-androgenic effects on the skin, leading to improved well-being and higher continuation rates. However, complaints related to salt and water retention continue. A new oral contraceptive, Yasmin®, has been developed which contains drospirenone, a progestogen resembling progesterone. This progestogen is quite unique as it is derived from 17-spirolactone and has antimineralocorticoid as well as antiandrogenic properties. The addition of this compound to an oral contraceptive provides additional non-contraceptive benefits and leads to a reduction in salt and fluid retention and an improvement in skin conditions such as acne and seborrhoea.

A non-comparative study of Yasmin® in normal women showed significant decreases from baseline in negative affect, water retention and increased appetite. A randomized, placebo-controlled trial of Yasmin® in women with severe premenstrual syndrome found a consistently greater reduction of symptoms from baseline using the Calendar of Premenstrual Experiences. A recent European 6-month study has assessed the effect of Yasmin® on general well-being and fluid-related symptoms. The results suggest that women who report premenstrual symptoms before starting Yasmin® have improved scores when their Psychological General Well-being Index is measured and also have fewer somatic symptoms. A further study in the USA also found that Yasmin® helped to reduce premenstrual symptomatology and improved health-related quality of life and general sense of well-being.

With these non-contraceptive benefits, do Yasmin users continue to take their pills longer when compared to other oral contraceptive users? In Newcastle, Yasmin® was compared to an oral contraceptive containing ethinylestradiol/norgestimate. At 6 months, discontinuation rates for Yasmin® were significantly lower than for the comparator. Data were also gathered from 150 UK practices. Subjects were followed for 12 months and a significantly lower proportion of discontinuation was found in the Yasmin® cohort compared to the comparator arm. Women taking Yasmin® were found to continue for significantly longer than those in the comparator cohort. The higher continuation rates observed with Yasmin® are attributable to its unique pharmacological profile and corresponding non-contraceptive benefits.

S1-5

Yasmin® and the extended regimen: current experience

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The conventional regimen for hormonal oral contraceptives is a 21-day pill-taking period followed by a 7-day pill-free interval. In a recent survey among 252 oral contraceptive users in five European countries, women were asked if they were aware of the possibility of postponing menstruation by delaying pill intake and whether they had used this method. Overall, 32% had delayed menstruation at some time, and 37% were aware of the method but had not used it. Of the 79 women who had postponed menstruation, almost two-thirds had seldom done so, while 11% used the method more than once every 3 months. The majority of these women had delayed their menstruation for a period ranging from 1 week to 3 months. In the total population surveyed, 46% were very or somewhat interested in trying the concept of postponement.

In a large, prospective, observational 6-month study in Germany, cycle control, premenstrual symptoms and general well-being were compared in 1433 women taking the oral contraceptive Yasmin®, containing 30 μg ethinylestradiol and 3 mg drospirenone, in either an extended regimen (63–126 days) or a conventional regimen (short cycle). Fluid retention was reduced in 49% of women on the extended regimen compared to 34% of women on the conventional regimen. Women reported a reduction in breast tenderness of 50% on the extended regimen and 40% on the short-cycle regimen, while one-third of the women on either regimen noticed an improvement in their skin condition. Improvement in dysmenorrhea was reported by 65% and 50% of women on the extended and short regimens, respectively. General well-being was improved in 85% on the extended regimen and 66% on the short-cycle regimen ($p < 0.0001$). Altogether, 97% of extended-cycle users and 91% of short-cycle users would recommend Yasmin® for further treatment. These results confirm previous observations that Yasmin® reduces premenstrual symptoms and improves general well-being. These effects were further increased through application of an extended cycle regimen.

S3-1

Acceptability, safety and premenstrual symptomatology in women using an oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg

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This presentation will focus on previously unpublised data on the acceptability, safety and efficacy in a group of healthy women using an ultra-low dose oral contraceptive containing gestodene 60mcg/ethinylestradiol 15mcg (Minesse®). The data will give an overview of an open, non-comparative, multicenter study carried out in Brazil, involving 163 women aged 18–39 years (mean 25 ± 5 years) treated with an oral regimen of gestodene 60mcg/ethinylestradiol 15mcg daily from day 1–24 of the menstrual cycle, followed by a 4-day pill-free interval from day 25–28 of the cycle.

S3-2

The impact of estrogen dose when selecting an oral contraceptive

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Oral contraceptives are widely used and thoroughly studied. Forty years of clinical experience and scientific inquiry have demonstrated that they are safe and effective. During that time OCs have improved so that serious effects are increasingly rare and bothersome ones are minimized. OC side effects are a consequence of estrogen-progestin interactions and are dose-related. Weight change related to fluid retention, headache, nausea, and effects on skin and hair are more commonly estrogen-dose related. Reducing the estrogen dose may reduce risk of serious and minor OC side effects.

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