



10th

ESC Seminar

Unwanted pregnancy or abortion

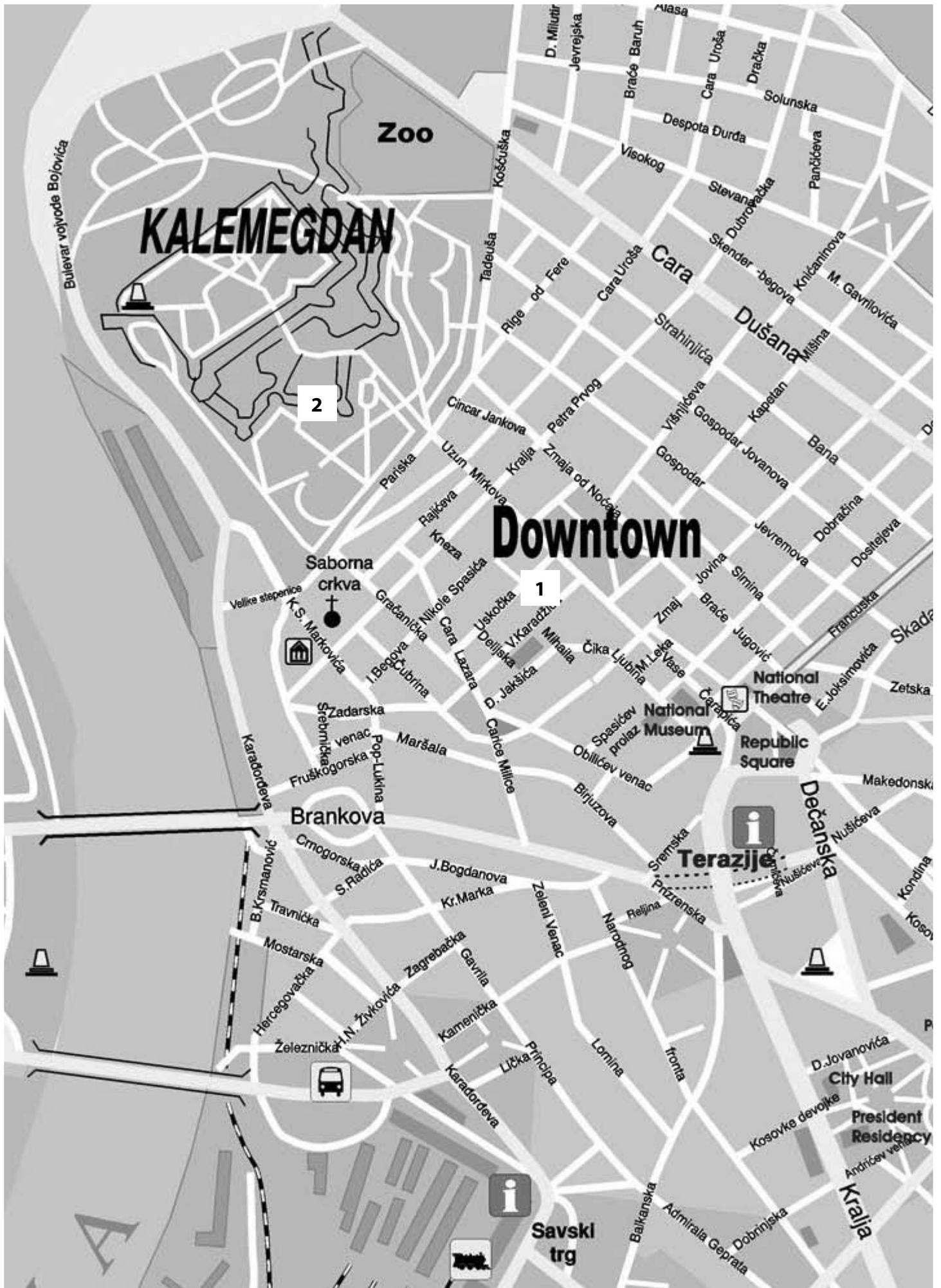
18 - 19 September 2009

The Ilija M. Kolarac Foundation
Belgrade, Serbia



Final programme and book of abstracts





1. Seminar venue (The Ilija M. Kolarac Foundation, Studentski trg 5, 11000 Belgrade, Serbia)
2. Seminar dinner venue (Kalemegdan Terrace, Mali Kalemegdan, Belgrade, Serbia)

• GENERAL INFORMATION •

10th Seminar of the European Society of Contraception and Reproductive Health
Unwanted pregnancy or abortion
September 18 - 19, 2009
Belgrade, Serbia

Language

All plenary sessions, free communication sessions and sponsored symposia are in English. Simultaneous translation from English into Serbian is scheduled. **Please do not forget to leave your headphone and receiver when leaving the room!** The workshop moderators will ensure that every participant understands and actively contributes by alternatively speaking English and Serbian.

Free communications and poster presentations

We would like to invite you to visit the poster presentations in the Music Gallery during the coffee and lunch breaks.
For the authors:

- Authors need to put their poster up on Friday 18 September by 13:30 if they want to be considered for the best poster award.
- We would like to invite you to attend the closing session as a best poster award and a best free communication award will be awarded during the closing session (19 September, 15:20 - 16:00).

Seminar Dinner (18 September, 20:00)

Unfortunately not all participants will be able to attend the seminar dinner as there is limited availability. If you already have a ticket but have changed your mind and decided not to attend the dinner, please will you return your dinner ticket to the registration desk. You will find your ticket on the back of your badge.

The seminar dinner will take place at Kalemegdan Terrace (Kalemegdan Terrace, Mali Kalemegdan, Belgrade, Serbia, +381 11 328 30 11). Kalemegdan Terrace is within walking distance of the Seminar Venue. You will find the location of the dinner venue on the map and your dinner ticket on the back of your badge (if you have asked to attend the dinner). Please remember to take this ticket with you!

Map

1. Seminar venue (The Ilija M. Kolarac Foundation, Studentski trg 5, Belgrade, Serbia)
2. Seminar dinner venue (Kalemegdan Terrace, Mali Kalemegdan, Belgrade, Serbia)

Evaluation

The Seminar Organiser would be very grateful if you would take a few minutes to complete the evaluation form inserted in your personal envelope. Thank you for dropping your completed evaluation form at the registration desk at the end of the Seminar.

Do not hesitate to contact the information and registration desk should you have any other question.

Wishing you a pleasant stay in Belgrade!



Katarina Sedlecky,
Seminar Organiser

• SCIENTIFIC PROGRAMME •

FRIDAY 18 SEPTEMBER 2009

09:30 - 11:00 Registrations - exhibition and poster viewing

Concert Hall

11:00 - 11:30 OPENING SESSION

11:00 Welcome address by the ESC President
J. Bitzer (Switzerland)

11:06 Welcome address by the Minister of Health of the Republic of Serbia
T. Milosavljevic (Serbia)

11:12 Welcome address by the Mayor of Belgrade
D. Djilas (Serbia)

11:18 Welcome address by the President of The Section of Gynecology and Obstetrics of The Serbian
Medical Society
T. Vejnovic (Serbia)

11:24 Welcome address by the the President of The Society for Gynecology and Obstetrics of
Serbia, Montenegro and Republic Srpska
P. Momcilov (Serbia)

11:30 - 12:40 PLENARY SESSION 1: OPTIONS IN FAMILY PLANNING
Chair: M. Lech (Poland) - G. Radonjic-Lazovic (Serbia)

11:30 Different strategies of the birth control in Europe
J. Bitzer (Switzerland)

11:45 Unwanted pregnancy, reproductive health and abortion
J.-J. Amy (Belgium)

12:00 Contraceptive prevalence rates and demographic situation in Serbia
A. Mitrovic (Serbia)

12:15 The role of gynaecologists in the promotion of modern contraception
D. Apter (Finland)

12:30 Discussion

12:40 - 13:30 SPONSORED SYMPOSIUM - BAYER SCHERING PHARMA

Contraception: investment into the future

V. Boskovic (Serbia) - G. Radonjic-Lazovic (Serbia) - B. Nikolic (Serbia)

13:30 - 15:00 LUNCH AND POSTER VIEWING

- 15:00 - 16:00 FREE COMMUNICATION SESSION
Chair: V. Yaglov (Russia) - D. Stanojevic (Serbia)
- 15:00 Reasons for/ against choosing the pill
A. Mitrovic-Jovanovic (Serbia)
- 15:12 Program of knowledge-attitudes-practices evaluation on combined hormonal contraception methods
T. Bombas (Portugal)
- 15:24 Contraception in late-reproductive age
O. Forestieri (Argentina)
- 15:36 Contraceptive option after legal abortion
M.J. Carvalho (Portugal)
- 15:48 Contraceptive use and family planning in he Serbian University Hospital: cross-sectional study
J. Dotlic (Serbia)
-

16:00 - 17:00 FOUR PARALLEL WORKSHOPS

Concert Hall WORKSHOP 1
Contraceptive counselling - What is necessary for satisfaction of women with contraceptive choice?
Coordinators : A. Kapamadzija (Serbia), B. Frey Tirri (Switzerland), M. Stefanovic (Serbia)

Small Hall WORKSHOP 2
Contraception guidance in different ages of women
Coordinators : S. Spremovic (Serbia), M. Kishen (UK), M. Andjelic (Serbia)

Josif Pancic WORKSHOP 3
Contraception and In Vitro Fertilization
Coordinators : N. Radunovic (Serbia), H. Satiroglu (Turkey), M. Savic (Serbia)

Milan Grol WORKSHOP 4
Family planning: the Balkan experience
Coordinators: A. Zivanovic (Serbia), R. Stojic (Serbia), B. Pinter (Slovenia)

20:00 Seminar dinner (Supported by Bayer Schering Pharma)

SATURDAY 19 SEPTEMBER 2009

08:30 - 09:00 Exhibition and poster viewing

Concert Hall

09:00 - 10:00 PLENARY SESSION 2 : UPDATES IN MODERN CONTRACEPTION PROVISION
Chair: G. Bartfai (Hungary) - B. Nikolic (Serbia)

09:00 Hormonal contraception may cause cancer
D. Cibula (Czech Republic)

09:15 Clinical and metabolic aspects of combined hormonal contraception use
P.G. Crosignani (Italy)

09:30 Extended and new oral contraceptive regimens: new options for regular use
K. Sedlecky (Serbia)

09:45 The effect of a continuous regimen of drospirenone 3 mg/ ethinylestradiol 30 mcg on
inflammatory and angiogenic mediators in the endometrium
H. Maia Jr. (Brazil)

10:00 - 10:30 Coffee Break, Exhibition and poster viewing

10:30 - 11:20 SPONSORED SYMPOSIUM - GEDEON RICHTER

Access to hormonal emergency contraception
G. Bartfai (Hungary)
Ultra low dose contraceptive pills
A. Bjelica (Serbia)

11:25 - 12:25 FOUR PARALLEL WORKSHOPS

Concert Hall WORKSHOP 5
Combined oral contraception and cancer
Coordinators : V. Kesic (Serbia), D. Cibula (Czech Republic), R. Dzodic (Serbia)

Small Hall WORKSHOP 6
Combined oral contraception and cardiovascular risk
Coordinators : D. Macut (Serbia), J.-J. Amy (Belgium), I. Petrovic (Serbia)

Josif Pancic WORKSHOP 7
Significance of media in overcoming fears and prejudices
Coordinators : M. Nikolic (Serbia), D. Apter (Finland), Z. Stankovic (Serbia)

Milan Grol WORKSHOP 8
How to overcome prejudices in the contraceptive counselling
Coordinators: A. Bjelica (Serbia), C. Mc Nicolas (Ireland), S. Colovic (Serbia)

12:25 - 13:20	<p>SPONSORED SYMPOSIUM - SCHERING PLOUGH PATIENT-PHYSICIAN DIALOG - IT REALLY CAN MAKE A DIFFERENCE</p> <p>Introduction C. Egarter (Austria) Contraceptive counselling : the Spanish experience - Results of the TEAM and REMO studies I. Lete Lasa (Spain) Contraceptive counselling: the Portuguese experience - Results of the IMAGINE Study T. Bombas (Portugal) Summary, closing remarks & questions and answers C. Egarter (Austria)</p> <hr/>
13:20 - 14:20	<p>Lunch</p> <hr/>
14:20 - 15:20	<p>FREE COMMUNICATION SESSION Chair: T. Vejnovic (Serbia) - B. Pehlivanov (Bulgaria)</p>
14:20	<p>Should medical abortion in the Netherlands be used more often? O. Loeber (the Netherlands)</p>
14:32	<p>Urgent contraception in adolescent age in serbia A. Kapamadzija (Serbia)</p>
14:44	<p>Compliance and user satisfaction with the injectable contraception I.E. Blidaru (Romania)</p>
14:56	<p>Contraceptive behaviour in women seeking for legal abortion V. Ramos (Portugal)</p>
15:08	<p>Influence of media and internet on using birth control methods A. Mitrovic - Jovanovic (Serbia)</p> <hr/>
15:20 - 16:20	<p>CLOSING SESSION Chair: J. Bitzer (Switzerland) - K. Sedlecky (Serbia)</p>
15:20	<p>Summaries from the workshops Summary workshop 1 - A. Kapamadzija (Serbia) Summary workshop 2 - S. Spremovic (Serbia) Summary workshop 3 - M. Savic (Serbia) Summary workshop 4 - B. Pinter (Slovenia) Summary workshop 5 - R. Dzodic (Serbia) Summary workshop 6 - D. Macut (Serbia) Summary workshop 7 - Z. Stankovic (Serbia) Summary workshop 8 - C. McNicholas (Ireland)</p>
16:00	<p>Best Poster / Free communication Award D. Apter (Finland)</p>
16:10	<p>Closing remarks K. Sedlecky (Serbia) / S. Randall (United Kingdom)</p>

• ABSTRACTS OF THE SESSIONS •

PLENARY SESSION 1 : OPTIONS IN FAMILY PLANNING

Different strategies of birth control in Europe

J. Bitzer, Basel, Switzerland

Three major strategies of birth control can be differentiated:

- 1) **Interventions on demand**, (only applied if necessary) targeting intercourse or early pregnancy like barrier methods, emergency contraception and abortion.
- 2) **Long term contraception** applied mainly with the help of a health professional like IUD, Implants, Injections.
- 3) **Continuous application of contraceptive methods by the woman herself** like oral, transdermal or intravaginal hormonal contraception.

For each strategy there are i) subjective motivations and appraisals and objective facts like availability, cost etc determined by sociocultural and socio-political factors and ii) efficacy, risks, negative and positive non contraceptive effects determined by biomedical factors. Empirical studies show a large variability across Europe with respect to the prevalence of these strategies. In central and northern Europe **Strategy 3** is widely applied while in Eastern and partially in Southern Europe strategy 1 is frequently found. But even among countries with similar socioeconomic conditions the distribution of contraceptive methods varies largely. This variability is also present with indicators like age at first intercourse, knowledge about contraceptive methods and it is present with respect to the standard of sexual and reproductive health measured by different indicators like pregnancies, abortion and contraceptive prevalence among teenagers, prevalence of STI etc. Looking at the factors that contribute to this variability we can distinguish 5 levels: Legal and political framework, Socioeconomic – cultural conditions, National Health System, Sexual and Reproductive Health Professional and the individual behaviour of the woman. Focussing on the role of the professional there are several tasks which contribute to the quality of sexual and reproductive health of the population: advocacy (abortion legislation, sexual norms, socio-cultural norms etc.); Activities on the field of social medicine and public health (working conditions for women, women in migration etc); Quality of contraceptive counselling and care. In the latter field 3 the professional has 3 basic tasks: Screening (Dysplasia; STD; Sexual Dysfunction and Sexual violence; Behavioral disorders); Counselling (Contraceptive methods, Sexual problems, Behavioral risks etc.); Care (Early treatment of STI; Contraceptive treatment and care; Psychosocial interventions for the couple and the family etc.)

Reproductive health, unwanted pregnancy, and abortion

J.-J. Amy, Editor-in-Chief, European Journal of Contraception and Reproductive Health Care

Reproductive health

People must be informed of and have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice. WHO Member States in the European Region agreed that:

- Abortion should *not* be promoted as a method of family planning (FP).
- The recourse to abortion should be reduced through improved FP services.
- All should be done to prevent unwanted pregnancies and eliminate the need for abortion.
- Post-abortion FP counselling, education and services should be offered promptly, which will help to avoid repeat abortion.

Unintended pregnancy

Eighty million unintended pregnancies occur worldwide each year resulting in 42 million induced abortions and 34 million unintended births. The latter contribute substantially to the annual world population growth of 78 million.

Groups at risk are:

- *Contraceptive non-users*, particularly socially disadvantaged women (except those with lower income), women over 40, and women who have intercourse infrequently.

- Women using FP methods with high failure rates and high rates of discontinuation within a year (e.g., male condoms, the pill and the 3-month injectable).

In many East-European countries, abortion is still *the* predominant means of fertility regulation. In Greece the absence of sex education at school, the lack of correct information on contraception and shortcomings in service provision have led to fears and doubts about contraceptive use, a very low prevalence of modern contraceptive use, and frightening rates of unintended pregnancies and abortions. Many women still resort to induced abortion as a primary method of birth control. Registered abortions between 1994 and 2000 ranged between 100,000 and 120,000 per year, which equals the annual birth rate. It is estimated that, next to the *registered* abortions, there were also 300,000 *unregistered* abortions annually.

Reducing unintended pregnancy

The best FP method is the one that users feel happy with. Methods not requiring adherence are most effective but they do not protect against sexually transmitted infections (STIs). Those at risk of STI should use condoms *and* a more effective method simultaneously.

Information on sexual and reproductive health must be upgraded and spread to target groups via proper channels. Contraception should not merely be *accepted* but also *highly valued*.

Sexual education and the provision of FP services for young people must be improved. Youths should be involved in defining their educational programmes. To prevent adolescent pregnancies, interactive sex education at school must start early in the curriculum and be progressive; responsible behaviour and condom negotiating skills must be taught; discussion of sexual matters within the family should be encouraged; the simultaneous and pursued use of condoms and another contraceptive, ideally one not dependent on compliance, must be promoted.

Abortion rates in central and eastern Europe *have* dropped. That of the Russian Federation decreased from 75.1 abortions per 1000 women of reproductive age in 1994 to 45.8 in 2002. However, the number of abortions in adolescents and young women remains high. Maternal mortality following abortion is still a major problem, even in certain countries where it is legal. In the Republic of Moldova 50% of all maternal deaths in 2003 were related to abortion. However, in Ukraine, unsafe abortion accounted for 35% of the maternal mortality in 1998, but only for 23% in 2002 and 0% in 2003.

Long-acting reversible contraception methods

Intrauterine devices (IUDs), the *levonorgestrel releasing-intrauterine system* (LNG-IUS) and *implants* are suitable for a wide variety of women, convenient, generally well accepted and cost effective; they have a long duration of action; their efficacy equals that of sterilisation. Two problems must be tackled:

Patients' fears, misinformation and lack of knowledge, resulting in low demand.

Providers' lack of information, concern for unsubstantiated risks and lack of training in IUD/IUS and implant insertion.

Emergency contraception

Emergency contraception (EC) acts *after* intercourse, but *before* implantation; it is a back-up method for prevention of unwanted pregnancy after unprotected intercourse or suspected failure of contraception. The *levonorgestrel-only emergency contraceptive* is most often used. It is more effective and better tolerated than combined oral contraceptives used in the Yuzpe method. Postcoital (up to five days) insertion of a *copper IUD* has the advantage of providing ongoing contraception.

EC pills have *not* reduced unintended pregnancy rates. People concerned indeed frequently underestimate the risk of conceiving. A wide-scale effort of information must be undertaken in this regard.

Contraceptive prevalence rates and demographic situation in Serbia

A. Mitrovic-Jovanovic, Belgrade, Serbia

Serbia covers the area of 77.474 km², with 7.498.000 inhabitants who live there. Their average age is 40,2 years. Overall number of women in reproductive period amounts to 1.800.000(23,28%), and 440.000 of them live in Belgrade. 56,6% of women in reproductive period are married. Average age of female population is 41,5 years. Data do not include Kosovo and Metohia. Serbia ranks as an old nation with aging index of 1.0 (this index is 1,2 for women and 0.9 for men).

The estimated number of abortions in 2007 is about 100.000, with officially registered ones being 24.273, 81% (19.752) of which are medical abortions. The biggest number of women (48,6%) had abortions between the age of 25 to 34, and 4% of them were

younger than 20 years of age. The greatest number of abortions is registered in women who already have two children, while the share of women who had a termination and are childless is 24,6%. Unfortunately, judging by the number of abortions, it can be concluded that this is one of the most common methods of family planning.

Most women, 46%, do not use any contraceptive methods, but the one which they occasionally use is male condom as the most present one -34%, withdrawal /coitus interruptus - 17%, natural contraceptive methods-11%, OC -10%, morning after pill -2%, IUS-Mirena -1%. In the last two years, the increase of using urgent contraceptives is marked. Acceptance rate of oral contraception has risen from 2,3 in 2005 to 2,8 in 2008. The most important influencing factor for taking the pill are doctors/gynaecologists, as well as sources of information for all contraceptive methods.

Reasons for not using a birth control method are: I do not need any (68%), I want to have child (19%), I don't want to take harmful elements (7%), I don't want to take hormones (4%). Being familiar with contraceptive methods, their efficiency, safety and availability is on a satisfactory level in Serbia. However, the application of contraceptive methods is not on a satisfactory level and what is necessary is to systematically work hard with the aim to promote contemporary methods of family planning.

The role of gynaecologists in the promotion of modern contraception

D. Apter, Helsinki, Finland

Sexuality and contraception are surrounded by many myths, which are harmful for sexual health. Contraceptive use is highly culturally dependent. The gynecologists are to a large extent opinion leaders. Colleagues listen to their advice, and media use them as well, so they need to be well informed. The educational capacity of gynecologists is often used, so also this side need to be developed.

WHO has produced good guidelines about medical eligibility criteria and contraceptive methods. The UK Faculty of Family Planning and Reproductive Health Care has produced further evidence based guidelines of e.g. what is needed before first prescription of combined oral contraception and counseling to be provided. ESC has reviewed several national contraceptive guidelines, is working within WHO Europe working group to establish sexuality education guidelines throughout childhood and youth, and has produced a net site with sexuality education material and references.

As resources are limited, they must be optimally used. The practitioner need to know, what is useful, and what is not. History taking and appropriate examinations allow assessment for hormonal contraception. According to the guidelines cited above, breast examination, pelvic and genital examination, cervical cytology screening and routine laboratory tests do not contribute substantially to safety of combined hormonal contraception and are therefore not recommended routinely before starting hormonal contraception and can even be harmful. Particularly, fear for the pelvic examination might reduce the likelihood of young adolescents seeking services.

Good counseling is most essential, and it will affect whether the method is properly used. With good counseling, the client will use a method that best suits her contraceptive needs. Services need to respect the need of individual clients. Confidentiality is highly important. Contraceptive strategies need to include prevention of both sexually transmitted infections and pregnancies. The first option is condoms backed-up by emergency contraception. According to the WHO guidelines, hormonal contraception can be safely used from the age of menarche onwards. No intervals are needed in the use of hormonal contraception. An IUD is also possible for nulliparous women. If IUD has been in use, the old can be removed and new inserted at the same visit. The prevention of unintended pregnancies requires four elements: a desire to use protection, a good contraceptive method, ability to obtain the contraceptive method, and ability to use it. When sexuality is not condemned but sexuality education, counseling and sexual health services are provided, it is possible to profoundly improve sexual health with comparatively small costs.

PLENARY SESSION 2 : UPDATES IN MODERN CONTRACEPTION PROVISION

Hormonal contraception may cause cancer

D. Cibula, Prague, Czech Republic

Abstract not available at the time of printing

Clinical and metabolic aspects of combined hormonal contraception use

P.G. Crosignani, Milan, Italy

Oral contraceptives (OCs) is the most widely used contraceptive method in Europe. They are prescribed for long-term contraception to young while there is an increased use by older woman. The available OC preparation differ from the previous ones for the reduced dose of estrogen and for the new progestin: these changes improved the overall safety of the new pills. The so called third generation OCs (pills containing desogestrel and gestodene) show no more risk for myocardial infarction but their use is still associated with several mild changes in several metabolic variables and a 2 fold increased risk for ischemic stroke (Baillargeon et al., 2005). The pills containing antiandrogenic progestins show favourable metabolic impact both in healthy (Cagnacci et al., 2009) and in hyperandrogenic women (Cagnacci et al., 2003). Quite recently the use of OC containing drospirenone, an antiandrogenic progestogen with antialdosteronic properties, shows in addition a protective effect against water retention, body weight increase and the occurrence of blood pressure elevation (Oelkers et al., 1995).

References

- Baillargeon JP, McClish DK, Essah PA, Nestler JE. Association between the current use of low-dose oral contraceptives and cardiovascular arterial disease: a meta-analysis. *J. Clin. Endocrinol. Metab.* 90, 3863-3870, 2005.
- Cagnacci A, Ferrari S, Tirelli A, Zanin R, Volpe A. Insulin sensitivity and lipid metabolism with oral contraceptives containing chlormadione acetate or desogestrel: a randomized trial. *Contraception* 79, 111-116, 2009.
- Cagnacci A, Paoletti AM, Renzi A, Orrù M, Pilloni M, Melis GB, Volpe A. Glucose metabolism and insulin resistance in women with polycystic ovary syndrome during therapy with oral contraceptives containing cyproterone acetate or desogestrel. *J. Clin. Endocrinol. Metab.* 88, 3621-3625, 2003.
- Oelkers W, Foidart JM, Dombrovocz N, Welter A, Heithecker R. Effects of a new oral contraceptive containing an antiminerocorticoid progestogen, drospirenone, on the renin-aldosterone system, body weight, blood pressure, glucose tolerance, and lipid metabolism. *J. Clin. Endocrinol. Metab.* 80, 1816-1821, 1995.

Extended and new oral contraceptive regimens: new options for regular use

K. Sedlecky, Belgrade, Serbia

The extended regimens of combined oral contraception (COC) use have been prescribed for years by clinicians in the treatment of conditions such as endometriosis, bleeding disorders, menorrhagia, dysmenorrhea, conditions related to androgen excess, menstrual migraine headaches, chronic diseases exacerbated by menstrual cycles, like bronchial asthma and menstrual seizures. There is no rationale for recommending a pill-free interval, because the withdrawal bleeding linked to conventional regimen design of a 21-day period of active COC use followed by a 7-day hormone-free interval has no proven medical benefit and could be coupled with some bothersome symptoms, like headaches, mood changes and bloating. The easing of withdrawal symptoms could be achieved with expanding the number of days of active-pills intake or by shortening of a pill-free interval. The numerous advantages to the extended regimens of COC use exist, due to increased suppression of follicular development and inhibition of estrogen and androgen production in ovaries, as well as by making more stable hormone environment. The increased contraceptive effectiveness, reduction of hormone withdrawal symptoms and the improvement of affective and somatic symptoms of premenstrual syndrome could be achieved by extending of the COC use and shortening of a hormone-free interval. The endometrial findings observed in women treated with extended COC regimen showed no significant pathology. Additionally, the endometrium reverted quickly to normal cyclic changes after completing therapy. The most frequently reported adverse effects of the extended regimens of COC are breakthrough bleeding and spotting which may occur during the first

few cycles. The existing data on the long-term risks associated with extended regimens are insufficient, due to the small number of trials carried out with a limited number of women for a short period of time. However, according to current knowledge no significant changes in blood pressure, mean body weight or serum levels of glucose or insulin were observed. Changes in lipid profile are comparable between the groups of women on conventional and extended COC use. And with respect to coagulation parameters, the non-statistically significant deterioration in parameters related to fibrinolysis was observed. According to the results of several investigations, the increasing number of women in reproductive age from developed, as well as from developing countries would prefer extended menstrual cycles and shorter pill-free periods. It is particularly the case of women who are engaged in occupational or sport activities in which menstruation can pose a unique challenge. As there is no evidence to suggest that the amount of additional hormone exposure associated with extended use of low-dose contraceptives confers a clinically relevant increased risk when compared with traditional cycling, the extended regimens of COC should be the contraceptive option offered to all women

The effect of a continuous regimen of drospirenone 3 mg/ ethinylestradiol 30 mcg on inflammatory and angiogenic mediators in the endometrium.

H. Maia Jr., J. Casoy, C. Athayde, J. Valente Filho

Centro de Pesquisas e Assistência em Reprodução Humana (CEPARH), Salvador, Bahia, Brazil

Objective: To determine whether the use of a continuous regimen of drospirenone 3 mg/ethinylestradiol 30 mcg (DRSP/EE) is more effective than the 21/7 regimen in suppressing cyclooxygenase-2 (Cox-2) and vascular endothelial growth factor (VEGF) expression in the endometrium of patients with menstrual symptoms.

Patients and Methods: Forty patients of reproductive age with symptoms of menorrhagia were submitted to hysteroscopy with endometrial biopsy. Twelve patients in the proliferative phase who were not in use of any form of hormonal medication comprised the control group. In the remaining 28 patients, hysteroscopy was carried out either during continuous use of DRSP/EE (Libbs Farmacêutica, São Paulo, Brazil) (n=18) or 4 to 8 days following discontinuation of this regimen. In the continuous use group, 12 patients were amenorrheic and 6 were experiencing breakthrough bleeding at the time of hysteroscopy. Endometrial samples were fixed in formalin and sent to pathology for determination of Cox-2, Ki-67 and VEGF expression by immunohistochemistry. The intensity of Cox-2 and VEGF expression in the endometrial glands was graded from 0 to 3. Ki-67 results were expressed as a percentage of positive nuclei. The patients using DRSP/EE were separated into 3 groups: Group A - amenorrheic women, Group B - women with breakthrough bleeding and Group C - patients in the hormone-free interval. Statistical analysis was performed using Fisher's exact test or the chi-square test and significance was defined at $p < 0.05$.

Results: In patients with menstrual symptoms, both Cox-2 and VEGF were strongly detected in the glands and stroma during the proliferative phase. The mean scores for these markers were 2.4 ± 0.5 and 2 ± 1.2 . Cox-2 expression was not detected in the glandular epithelium of the endometrium in any of the patients who became amenorrheic during continuous use of DRSP/EE (Score 0), and was detected only focally in the superficial epithelium in 30% of cases. VEGF expression in the endometrial stroma also became negative during DRSP/EE use. In patients who discontinued use of DRSP/EE (Group C), on the other hand, there was a significant increase in both Cox-2 and VEGF expression between days 4 and 8 of the hormone-free interval. Mean scores were 2.4 ± 1 and 1.4 ± 0.9 for Cox-2 and VEGF, respectively. A similar increase in the mean scores of both markers was observed in patients with breakthrough bleeding (Group B); however, this increase was only significant in the case of Cox-2. Mean values of Ki-67 were $30 \pm 23\%$ during the proliferative phase and $2 \pm 3\%$, $4 \pm 3\%$ and $32 \pm 22\%$ in patients with amenorrhea, breakthrough bleeding and in the hormone-free interval, respectively.

Discussion: The present results show that amenorrhea during the continuous use of a contraceptive combination of drospirenone/ethinylestradiol is associated with a reduction in both Cox-2 and VEGF expression in the endometrium. However, during episodes of breakthrough bleeding there is a flare-up of proinflammatory mediators in the endometrium. A similar increase in both Cox-2 and VEGF is also observed during the hormone-free interval, thus explaining the return of menstrual symptoms.

FREE COMMUNICATION SESSION 1

Reasons for / against choosing the pill

A. Mitrovic-Jovanovic, B. Jocic, D. Jovanovic, V. Krsic, D. Dimitrijevic, M. Jovanovic
University Clinic Narodni front, School of Medicine, Belgrade, Serbia

Aim: of the study was to evaluate what are the main reasons for choosing/not choosing the pill/OC.

Methods: Quantitative approach with age 15-49, semi-structured personal interviews. Mainly pre-coded questions, several open-ended questions, 45 minutes, conducted from December 2005 to mid-march 2006 and from January 2008 to mid-February 2008 in Serbia. Sample size >2006-n=1000, and 2008>n=1000.

Results: Main reasons for choosing the pill: Reliable/safe method 48% / 54%, ease of use 35% / 26%, less menstrual pain 15% / 24%, heard good things 10% / 19%, regulates periods 6% / 7%, modern method 7% / 7%. Main reasons for not considering the pill /OC: they are harmful 31% / 28%, it is unhealthy 12% / 11%, side effects 11% / 11%, not necessary 9% / 15%, contain hormones 9% / 8%. For majority of pill users 55-60% used pill for the first time between 25-34 year, 19-23% between 15-19 y, 15-16% between 20-24 y.

Conclusion: The most important influencing factor and sources of information, for taking /not taking the pill are doctors. Negative, possible, aspects of birth control pills such as: weight gain, hormonal imbalance, increase risk of cancer, hair growth, reduced libido-desire, regular intake necessary, are reasons and possible explanation for low acceptance rate of OC in Serbia.

Program of knowledge-attitudes-practices evaluation on combined hormonal contraception methods

A.R. Costa * (Oporto, Portugal), F. Palma * (Lisbon, Portugal), J.L. Sá * (Coimbra, Portugal), L. Vicente * (Lisbon, Portugal), T. Bombas * (Coimbra, Portugal), A.M. Nogueira ** (Lisbon, Portugal), S. Andrade*** (Lisbon, Portugal)

*Núcleo de Estudos de Contraceção (NEST) (Group of Contraception Studies), **Schering-Plough Farma, Lda., ***KeyPoint, Consultoria Científica, Lda.

Introduction: The efficacy of contraceptive methods is based, essentially, on the correct use of each method and on the importance of compliance by women. This has been the major challenge over the last years and the main reason for the difference between efficacy and effectiveness on each method. The improvement in compliance is related with the adequate selection of the method for each patient and with the establishment of a relation with the physician based on confidence. The purpose of this study is to assess knowledge, attitudes and practices of the gynecologists in informing and selecting combined hormonal contraception methods and their perception in what concerns adherence.

Material and methods: Cross-sectional study conducted through a self-administered questionnaire completed by a sample of gynecologists nationwide. It was conducted a descriptive analysis of the information collected.

Results: Three hundred and three gynecologists were included in the study with a median time of service as specialist of 15 years. When woman is initiating a contraceptive method, 90% of the physicians declare to decide together with her about which method is the most suitable, 3% decide by themselves and 7% decide regarding the woman request. In the physicians' opinion, the most important factors in this choice are efficacy, adverse effects analysis and safety. According to the gynecologists' perception, the issues women value the most are efficacy, tolerability and easiness of use. The strengths and weaknesses identified for the several contraceptive methods are, respectively: daily pill – high level of experience vs. the possibility of forgetfulness; Weekly patch – lower chance of forgetfulness vs. the possibility of dislocating itself or of causing rash; monthly ring – to be used monthly vs. the need for vaginal manipulation. In what concerns to subjects difficult to discuss during a medical appointment, the most sensitive subject is related to sexuality. This is a subject considered difficult by 17% of gynecologists and very difficult by 2% of them.

Conclusions: Most gynecologists claim that the contraceptive method is chosen together with the woman. This study also revealed that there are items difficult to be discussed in the gynecology medical appointments. The communication between patient and physician constitutes a vital subject for the success of any therapy and it must be valued and included in the health care personnel continuous training.

Contraception in late-reproductive age

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Objectives: To evaluate biopsychosocial aspects of both populations related to knowledge, available use and control of contraceptives in late-reproductive age.

Design and methods: Four hundred and sixty-four surveys to women in two age groups were assessed: adolescent females (between 12 and 19 years old) and climateric women (between 40 and 52 years old) analysing: 1) Knowledge about contraceptive methods and the way they find information; 2) Access to the health system (private or public); 3) Biopsychological risk factors; 4) Relationship between the type of contraceptive method in both populations and the socioeconomic level.

Results: As regards the adolescent group (n=243), 49.6% had no medical information about birth control, it was given by friends, school partners or pharmacists but no information from a health team. Fourty seven percent uses emergency contraceptives as a birth control method and 34.5% uses low effectiveness methods. 68.2% have limited access to safe contraceptive methods (condom, pills) and a high rate of HPV, STD, L and HSIL, unsafe abortion, while a 31.8% has access to all contraceptives (totality of OC, IUD). On the other hand, 43.3% of the climateric women (n=2241) have information provided by physicians and have access to the totality of contraceptive methods while the rest of the population (56.7%) does not go to check-ups and decide on their own what method to use. 48.7% of the group uses contraceptives. The most chosen methods are: OC, IUD, condom, coitus interruptus, diafragma, LNG and surgical sterilization. 24.6% register a higher rate of infections (HPV, STI) and unexpected pregnancy, with a lower incidence SIL lesions than in the adolescent group.

Conclusions: Considering that both analysed groups have the peculiarity of being populations that are exposed to the risk of undesired pregnancy or socially transmitted diseases, it is important to mention a marked inequality as regards the access to the reproductive health system. The groups belonging to low socioeconomic levels have the following in common: low rate of contraceptives use, low efficacy methods, HPV and STI and unsafe abortion. On the other hand, even though the groups of women of both ages belonging to high socioeconomic levels access the health system, the level of information is low in both groups of women. In this way, we highlight the need of a Programme of Reproductive Health, which lowers such observed inequality and promotes contraception at all healthcare levels, thus improving women's life conditions.

Contraceptive option after legal abortion

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Obstetric Service, University Hospitals of Coimbra, Coimbra, Portugal

Introduction: Changing women's behavior in attending planning centers seems crucial to prevent unplanned pregnancy. Abortion before 10 weeks has been legalized in Portugal since July 2007. Public services are organized in order to give contraceptive advice with free contraceptive distribution after abortion.

Objectives: Evaluation of women contraceptive choice after legal abortion.

Design & Methods: Analysis of 510 cases of contraceptive choice after legal abortion in the population attended at our Service between July 2007 and March 2009.

Results: Mean age of women at the moment of legal abortion was 28.2 ± 7.3 [13-48], they were mainly Portuguese and 11% (n=57) of other nationalities. Only 50% of women had attended family planning during the year that preceded the current pregnancy and 29% (n=146) did not use any contraceptive method. In general, after abortion, contraceptive option was hormonal contraception (HC) in 56% (n=284), intrauterine device (IUD) in 18% (n=91), implant in 12% (n=59), condom in 4% (n=25) and tubal ligation (TL) in 3% (n=15). Two percent (n=13) of the women refused contraception and in 4% (n=23) the option is unknown. Those with no contraception before legal abortion have chosen HC in 51% (n=74), IUD in 18% (n=27), implant in 15% (n=22), condom in 3% (n=4), TL in 1% (n=2), no contraception in 4% (n=6) and contraception is unknown in 8% (n=11). Women taking HC before pregnancy, have maintained HC in 56% (n=96), chosen IUD in 15% (n=25), implant in 12% (n=20), condom in 8% (n=14), LT in 2% (n=4), no contraception in 2% (n=3) and contraception is unknown in 5% (n=8). Calendar-based method

was replaced by HC in 46% (n=6), IUD in 38% (n=5), implant in 8% (n=1) and TL in 8% (n=1). Condom users have opted for HC in 60% (n=103), IUD in 16% (n=28), implant in 9% (n=14), TL in 4% (n=7), have kept condom in 4% (n=7), no contraception in 2% (n=4) and contraception is unknown in 5% (n=8).

Conclusions: After abortion, women have chosen a safe contraceptive method. These data reflect the tendency for long acting methods.

Contraceptive use and family planning in the Serbian University Hospital: Cross-sectional study

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Objective: The aim of the study was to document frequency of contraception use and the attitude of examined women towards contraception and family planning.

Design and Methods: Cross – sectional study on 138 women, of average age 28.4+/-5.1, who had given birth per vies naturals to a live, healthy child with Ap score >5 at delivery during one month period in the Institute of Gynaecology and Obstetrics, School of Medicine, University of Belgrade. After giving consent to participation in the research, each woman filled out an originally made questionnaire, with 32 questions, on use and attitude towards contraception. For statistic analysis we used frequency (f), measures of central tendency and nonparametric test for assessing differences (X2 test).

Results: There are highly significantly ($p<0,01$) more women who are married (X2J = 85,139), have regular gynaecologic examinations (X2J = 92,529), consider themselves to be well informed about contraception (X2J = 27,068) and are informed by their doctor (X2 = 102,439), who use contraception (X2J = 16,008) and are satisfied with contraception methods they use (X2J = 51,524), consider the chosen contraception easy for use (X2J = 78,108) and of good price (X2J = 47,800), who use withdrawal (X2J = 13,466) or natural contraception (X2J = 6,47, $p<0,050$), who believe that contraception should be used even in marriage before planning reproduction (X2J = 60,032), who did not get pregnant while using contraception (X2J = 95,238), who planned their pregnancies (X2J = 85,440), whose pregnancies are wanted (X2J = 130,066) and who did not suffer from Sexually Transmitted Disease (X2J = 0,845).

Conclusions: The obtained data showed that examined women mostly have positive opinion on family planning and use of contraception. However, a lot of them still use traditional methods of contraception, which are hardly safe. Therefore, the role of gynaecologist is not only the cure but primarily education of population.

FREE COMMUNICATION SESSION 2

Should medical abortion in the Netherlands be used more often?

O.E. Loeber

Mildred-Rutgershuis, Arnhem, The Netherlands.

Objectives: In the Netherlands, early medical abortion (EMA) for early pregnancies has been used sparsely and is lower than in some other European countries where EMA is available. Reasons for this discrepancy have not been researched before.

Design & Methods: A study was conducted in one clinic to collect women's motivations for choosing surgical or medical abortion. At the post-operative check up following the abortion, information was collected about the women's satisfaction with the method chosen, and these women were asked what method they would choose should they have another abortion. 501 consecutive patients with a pregnancy < 7 weeks were included. SPSS was used for statistical analysis. Information about the percentage medical abortion in the Netherlands and in some European countries was collected. A short survey was done to collect information about the proportion of medical abortion in the other clinics of the Netherlands and the opinion of patients regarding their opinion about provision of medical abortion by general practitioners.

Results: 71% of the women opted for a surgical abortion. Except for "previous experience," women had different motivations for preferring a specific method. At the post-operative check up, women were more often negative about medical abortion.

Satisfaction with the medical procedure itself was also lower compared to the surgical abortion. Nevertheless, 80% of the women who had chosen medical abortion initially would do so again. The proportion of medical abortion differs per clinic between <1% and 33%. More women seem to prefer provision by the clinic rather than by their general practitioner.

Conclusions: In the Netherlands, surgical abortion is the preferred method of abortion for a large majority of women. The motivation for having a surgical procedure is different from that for a medical procedure. The percentage medical abortion is influenced by non-patient related factors. Provision of medical abortion by the general practitioner is not a generally endorsed opinion by patients.

Urgent contraception in adolescent age in serbia

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Clinical Center Vojvodina, Department of Obstetrics and Gynecology, Novi Sad, Serbia

Objective: to establish the level of knowledge and usage of urgent contraception among adolescents in northern Serbia as well as their sexual practice and attitudes.

Design & methods: In 2008 a survey was conducted among 717 high school adolescents in Novi Sad, northern Serbia, in 5 high schools, 3rd and 4th grade (17, 18 years of age) – 3 vocational schools and 2 grammar schools. A questionnaire for this purpose was made with 22 questions about their sexual knowledge, attitudes and practices, especially about urgent contraception.

Results: The survey included 717 adolescents - 38,77% of male and 61,23% of female high-school students. Among them, 48,95% had already had sexual intercourse- 41% of all female students and 60,79% of all male students. The average age of the first sexual intercourse was 15,66 for male and 16,36 years for female students. By the age of 15, 12,13% of the adolescents have already had sexual intercourse (21,58% of males and 6,15% of females). No method of contraception used 5,88% of the students; 46,76% always use contraception, and the rest of them – 47,36%, use contraception often or sometimes, but not always. The adolescents use several different methods of contraception. Almost all sexually active adolescents use condom– 95,7% (condom as the only method is used by 30,98% of adolescents), withdrawal is used by 62.6% of students and rhythm method by 38.75%. Urgent contraception was used in only 13.8% cases, contraceptive pill in 6.1%, IUD in 0.9% and spermicides used only 0.6% adolescents. Further discussion includes adolescent attitudes towards urgent and hormonal contraception.

Conclusions: Adolescents in Serbia use modern methods of contraception, especially urgent contraception and condom, more than they used to 10 years ago, but this is still not enough. There are still a lot of prejudices against hormonal contraception – urgent contraception and combined pills, which are important barrier to wider use of modern methods of contraception in this age group as well as in other age groups of women. Adolescents need and want more education/ knowledge in the field of sexual education in order to preserve their reproductive health.

Compliance and user satisfaction with the injectable contraception in the Family Planning Unit of the "Cuza Voda" Maternity University Hospital

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**Family Planning Unit, "Cuza Voda" Maternity University Hospital, Iasi, Romania.

Objectives: The study was designed to assess the main characteristics, the compliance and the degree of satisfaction amongst the injectable contraceptive method users.

Design and Methods: Data were assessed retrospectively by means of the clinic records belonging to the women that attended the Family Planning Service during five years.

Results: A total of 51,225 family planning consultations were delivered from 01.01.2003 to 31.12.2008, amongst which 23.8% (12,222) were orientated towards the injectable contraceptive method. During this interval of time medroxyprogesterone acetate depot (Depo Provera®, Megestron®) was used in 2766 women. The majority of these patients were from the rural area (61%) and 57% were aged over 31. The most common reason for the choice of the injectable contraceptives was the breastfeeding status, found in 69% (n=1908) of the women. The remaining reasons have included medical indications (e.g. endometriosis, anaemia,

severe premenstrual syndrome, advanced age, uterine fibroids, etc.) in 12% (n=332) and the contraceptive advantages in the rest of the cases. Most of the users have received an average of 5 doses (n=1603) and about 10% (n=237) up to 12 doses. The satisfaction amongst the injectable users could be assessed by means of the discontinuation rate which reached a 33.5% level (n=926). There were 16 unwanted pregnancies which represent a Pearl Index of 0.53. The side-effects that determined the discontinuation of the method in most of the cases were the menstrual bleeding changes, as amenorrhoea in 60.8%, spotting or breakthrough bleeding in 29.4% and depression in 0.15% of the cases.

Conclusions: Injectable contraception provides an excellent family planning method for several selected categories of users as breastfeeding mothers, older women, or patients with medical conditions as endometriosis, anaemia, severe premenstrual syndrome, uterine fibroids, etc. Although the injectables usually have a shorter duration of use, they have high levels of safety and effectiveness and are culturally easily accepted in this area.

Contraceptive behaviour in women seeking for legal abortion

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Background: Women in Portugal have access to free, modern and effective contraceptive methods. In spite of this, the rate of unwanted pregnancies is high. This is an indicator that general contraceptive compliance is far from being ideal.

Objectives: The aims of this study were both to analyse contraceptive practices in women who came for legal abortion, taking into account different methods, and to explore reasons for failure.

Material and Methods: Retrospective study of 580 cases of women undergoing for legal termination of pregnancy, in our department, from July 2007 to March 2009.

Results: The mean age was $28,2 \pm 7,4$ [13-48]. Thirteen percent of women were teenagers. Only half of all women attended family planning over the last year. We considered two groups, those using contraception at the time they became pregnant (72%, n=416) and those who were not using any contraceptive method (28%, n=156). In the first group, the male condom (46,9%) and oral contraceptives (44,7%) were the leading methods; 2,4% of women had used intrauterine device, 1% contraceptive device, 1% vaginal ring, 0,2% hormonal implant, and 3,8% had used methods regarded as being less reliable as spermicides and natural methods (calendar). Only 14% of pill users had no explanation for the failure, but 62% of them reported forgetting pills, 23% referred drugs interactions (antibiotics), and 2% experienced vomiting and diarrhoea, which might have compromised the method effectiveness. Sixty-two percent of condom users reported that its use had been irregular. In the second group (n=156), 2,6% (n=4) of women were former pill users, who were on a break. Nonusers stated that they didn't use any contraceptive method mainly due to the unexpected sexual activity. Of those women, only 5% (n=8) used emergency contraception within 72 hours of intercourse.

Conclusions: We have to encourage women to look for family planning appointments, in order to solve their issues with contraception use/non-use. Since OCs have been considered a reliable method, we need to identify and solve behaviour errors and mistakes and side effects to diminish OCs failure. Effective contraceptive counselling is vital, including emergency contraception.

Influence of media and internet on using birth control methods

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University Clinic Narodni front, School of Medicine, Belgrade, Serbia

Aim: The aim of the study was to evaluate the influence of media and internet on using birth control methods within the last two year in Serbia.

Method: Methods of quantitative approach with age 15-49, semi-structured personal interviews. Mainly pre-coded questions, several open-ended questions, 45 minutes, conducted from December 2005 to mid-march 2006 and from January 2008 to mid-February 2008 in Serbia. Sample size >2006-n=1000, and 2008>n=1000.

Results: Most important sources of information about birth control methods are : doctors 69%/78% , friends/relatives 13%/17% ,

my experience 6%/11% , newspaper 3-5%.The main media channel for most respondents still seems to be TV stations with music shows receiving the highest mentions 50%/49%. 17% of all respondents are aware of a website in Serbia which is dedicated to increasing knowledge about contraception; among those who are aware of a specific website www.21dan.com was mentioned spontaneously by 48% follow at distance by www.jzas.org.yu, www.doctor.co.yu . Internet usage is quite widespread in SERBIA 57%/64%.Women stated that they are mainly interested in music websites, fashion, traveling, whereas websites dedicated to health issues are of less interest.

Conclusion: Overall , respondents do not consider the topic of contraception to be discussed more often with the last two years in different media sources , only in the internet is it assessed to be slightly more frequently addressed.

PARALLEL WORKSHOPS FRIDAY

Workshop 1 : Contraceptive counselling – What is necessary for satisfaction of women with contraceptive choice?

Coordinators : A. Kapamadzija (Serbia), B. Frey Tirri (Switzerland), M. Stefanovic (Serbia)

Topics:

- Consultant gynecologist's profile
- Patient profile including situation profile
- Profile of certain method of contraception

Workshop 2 : Contraception guidance in different ages of women

Coordinators : S. Spremovic (Serbia), M. Kishen (UK), M. Andjelic (Serbia)

Topics:

- Teenager contraception
- Mid-life contraception
- Contraception in perimenopausal women

Workshop 3 : Contraception and In Vitro Fertilization

Coordinators : N. Radunovic (Serbia), H. Satiroglu (Turkey), M. Savic (Serbia)

Topics:

- OC in infertility, is it controversial ?
- OC pretreated stimulation cycle: advantages versus disadvantages
- Pretreatment of ovarian stimulation : comparison between OC and other hormonal regime

Workshop 4 : Family planning: the Balkan experience

Coordinators: A. Zivanovic (Serbia), R. Stojic (Serbia), B. Pinter (Slovenia)

Topics:

- What is the opinion of gynaecologist and other doctors on hormonal contraception in your (Balkan) country?
- What are the statistics on induced abortion rates in your country? Are they reliable?
- Which contraception in your country must be prescribed by a doctor?

PARALLEL WORKSHOPS SATURDAY

Workshop 5 : Combined oral contraception and cancer

Coordinators : V. Kesic (Serbia), D. Cibula (Czech Republic), R. Dzodic (Serbia)

Topics:

- Does COC increase the risk for cervical cancer
- Possible mechanisms of inducing cervical neoplasia
- Other factors that can contribute to increased risk of cervical cancer in COC users
- Estrogens and breast cancer

Workshop 6 : Combined oral contraception and cardiovascular risk

Coordinators : D. Macut (Serbia), J.-J. Amy (Belgium), I. Petrovic (Serbia)

Topics:

- Impact of combined oral contraceptives on the carbohydrate metabolism
- Impact of COC on the lipid metabolism
- Impact of COC on the VTE

Topic 1: Impact of combined oral contraceptives on the carbohydrate metabolism

Question: Which characteristics/complications of diabetes are (absolute) contraindications to the use of combined oral contraceptives?

Abstract by Prof. em. Jean-Jacques Amy

Glucose/insulin homeostasis

The changes observed during COC use (increased insulin resistance and decreased glucose tolerance) depend on the dose of ethinylestradiol (EE), the type and dose of progestogen, and user's features. The effects of progestogens resemble those of androgens; they are more pronounced with progestogens with an androgenic profile. Progestogens increase insulin clearance and insulin resistance, thereby reducing the uptake of glucose by muscle and fat tissue. This reduced glucose tolerance is compensated by a rise in insulin secretion. EE contributes to the development of insulin resistance possibly by increasing the secretion of growth hormone, total cortisol and free cortisol. In certain women, high-dose ($\geq 50 \mu\text{g}$ EE) COCs impair glucose tolerance, increase insulin resistance, and induce hyperinsulinism. Within 12 months of use or after discontinuation of the COC, glucose levels during an OGTT mostly return to base values. In most women, low-dose ($\leq 35 \mu\text{g}$ EE) COCs have no relevant impact on carbohydrate metabolism. They may cause a slight insulin resistance and a rise in fasting insulin levels but both the glucose and HbA1c levels are unchanged. Only in predisposed women may the impairment of glucose tolerance be pathological.

Risk of diabetes

The long-term use of low-dose COCs does not significantly increase the risk of diabetes even among women with a history of gestational diabetes whereas, among the latter, particularly those with overweight, long-standing use of COCs containing $\geq 50 \mu\text{g}$ EE may increase that risk. Morin-Papunen et al. (2008) reported discordant findings. They investigated a cohort of women aged 31 years comprising OC users, women wearing a LNG-IUS, and women using no hormonal contraception. Compared with the other groups, OC users had impaired insulin sensitivity and raised insulin levels.

COC use by patients with or at risk for diabetes

Insulin-dependent diabetic women with no end-organ complications may safely use lowdose COCs. Infrequently, the latter induce a small increase in insulin resistance and in insulin requirement but this effect is not consistent among individual patients. Oral contraception does not increase the risk of development of nephropathy or retinopathy.

Severe/longstanding (>20 years duration) DM or end-organ damage (retinopathy, nephropathy, neuropathy, arterial disease) are (absolute) contraindications to the use of COCs. For less severe stages of the disease, not associated with vascular complications and of shorter duration, the use of a low-dose COC is allowed. A history of gestational diabetes does not restrict in any way the use of low-dose COCs. Women with a family history of diabetes can safely use COCs without special medical surveillance.

A large, randomised controlled trial analysing both intermediate (glucose and lipid metabolisms) and true clinical endpoints

(micro- and macrovascular disease) in users of combined, progestogen-only and non-hormonal contraceptives should be conducted. Given the low incidence of vascular lesions, the large sample and the long study period required, this seems hardly feasible.

Topic 2: Impact of COC on the lipid metabolism

Question: Which component of the OC could deteriorate lipids in women: Estrogen / Progestagen / Both of them

Topic 3: Impact of COC on the VTE

Questions:

Don't OCT put women at increased risk for VTE?

How worried should physicians be about VTE in women taking OCT?

May we suggest tentative guidelines to avoid VTE during OCT?

Workshop 7 : Significance of media in overcoming fears and prejudices

Coordinators : M. Nikolic (Serbia), D. Apter (Finland), Z. Stankovic (Serbia)

Topics:

- The role of media in FP and RH promotion and education
- The impact of promotion of contraception in decreasing rate of abortion
- Short useful information and questionnaires " truths vs prejudices" in broadcast about safe sex and STD

- Doctor's multidisciplinary approach in suggesting hormonal contraception through media -once per three months
- Hormonophobia and cancerophobia vs hormonal contraception - Role of media
- Media - doctor's short suggestions and counseling (one a week)

Workshop 8 : How to overcome prejudices in the contraceptive counseling

Coordinators: A. Bjelica (Serbia), C. Mc Nicolas (Ireland), S. Colovic (Serbia)

Topics:

- Prejudices among patients
- Prejudices among medical professionals
- Couple-directed contraceptive counseling

SPONSORED SYMPOSIUM : BAYER SCHERING PHARMA

Contraception: Investment into the future

V. Bošković

Family Planning Unit, Institute of Gynecology and Obstetrics, CCS, Serbia, Belgrade

It is a fact that only by investment into knowledge through various forms of professional education of young colleagues, particularly students of medicine and pharmacy may we make a long-term impact on correct and professional attitude of our physicians to modern birth control. Over the last two years, on the basis of such assumption, a team of doctors, mostly gynecologists practicing in that particular field and teaching at the School of Medicine University of Belgrade, have been preparing a book on contraception, based on the latest medical recommendations and attitudes. Opinion and position of the Publishing Board of the School of Medicine University of Belgrade is expected in near future. Female reproductive health is valuable not only to individual women, but to the society as a whole, as well. In addition to its teaching purpose for the students, this book aspires to encourage the society to undertake pertinent educational measures, and introduce sex education to schools using role models (Finland) to bring relevant knowledge in the area closer to young people.

G. Radonjić Lazović

Gynecological Endocrinology Department, Institute of Gynecology and Obstetrics, CCS, Serbia, Belgrade

The rate of use of modern birth control in Serbia has been estimated at about 3%. In comparison, the percentage is three times lower than in Croatia, and 8-15 times lower than in Slovenia, Hungary, Czech Republic or Germany. Various surveys conducted among medical professionals have shown that doctors prescribe oral contraception for therapeutic reasons more commonly. Gynecologists are, undoubtedly, burdened with a large number of patients per day, making it difficult for them to find enough time to discuss birth control with their patients thoroughly. Professional attitude of doctors of various specialties to reproductive health of women should be developed from the very beginning of medical education and subsequently by continuous update on modern trends. Publication of the first guide for birth control in our country has made the globally accepted trends accessible. With this book we wanted to provide broader knowledge in the field and train young physicians, investing into care of reproductive health of our female population. Regardless of the percentage of use of modern birth control, our physicians have the opportunity of recommending the latest pills that are available to doctors in more developed European countries. Owing to permanent advancement in the area, we have low-dose pills at our disposal, with new dosage schedule that enables better compliance, both due to improved tolerance and additional indications for use.

B. Nikolić

Department of Gynecology, Narodni Front Teaching Hospital, Serbia, Belgrade

Long-term reversible birth control is a method of choice for women who do not want to comply with daily use of other contemporary methods. A large number of abortions in our country (estimated at 150,000 per year) is an additional argument to focus Mirena at this Symposium as the most advanced product in the group, and highlight the most important differences between IUDs. Numerous studies have substantiated the high efficacy, lower number of ectopic pregnancies, reduced number of pelvic infections and therapeutic effect of Mirena, placing it at the top of the list of most reliable methods of modern contraception.

SPONSORED SYMPOSIUM : GEDEON RICHTER

Access to hormonal emergency contraception

G. Bartfai (Hungary)

University of Szeged Faculty of General Medicine, Albert Szent-Györgyi Medical Centre, Department of Obstetrics and Gynaecology

Easy and rapid access to effective emergency contraception should be an integral part of women's rights. Although unsafe abortion is relatively rare now in this geographical region and abortion carried out professionally seems to be safe, the decrease of the incidence of such medical procedures is one of the priorities in the health-care policy. Rape, misused contraception, negligence, insufficient information, difficult access to reliable contraceptive methods and the lack of or even ineffective education contribute to the serious consequences of unwanted pregnancy.

Widespread emergency contraceptive use is a sufficient tool to decrease the abortion rate. Therefore, the identification of those at risk is emphasized to have easy access to emergency contraception and provision of appropriate information by motivated health-care providers. A better attitude, improved knowledge, enhanced practice of emergency contraception and determined providers might meet the requirements of good clinical practice and help us to preserve the reproductive health of women in general and especially those women who are at the beginning of their reproductive careers.

Women should be aware that something can be done to prevent unwanted pregnancy after unprotected intercourse. They should know that emergency contraception is a safe and reliable method which is effective up to a time limit 120 hours. Media campaigns and public education are also stressed to improve knowledge about emergency contraception. The knowledge of health-care providers and especially pharmacists concerning hormonal emergency contraception is of paramount importance to make this method available. Over-the-counter service provides easy access for women-in-need to receive the pills with appropriate advice.

Ultra low dose contraceptive pills

A. Bjelica

University Department of Ob/Gyn, Clinical Center Vojvodina, Novi Sad, Serbia

Contraception is one of the basic human needs. It is also essential part of preservation of reproductive health. It is said that the invention of contraception is as important – as the invention of a wheel. But, when we talk about modern contraceptives we actually have in mind hormonal contraceptives. In the absence of contraindications, the use of oral contraceptive pills (OCP) may be considered for any woman seeking a reliable, reversible, coitally-independent method of contraception. The effectiveness of OCP is about 99%. The OCP are particularly suited for women who wish to take advantage of its noncontraceptive benefits. The use of OCP is definitely beneficial in these conditions: dysfunctional uterine bleeding, dysmenorrhea, mittelschmerz, endometriosis treatment and prophylaxis, acne and hirsutism, PCOS, hormone replacement and beneficial in many cases of functional ovarian cysts, premenstrual syndrome and control of bleeding. The OCP introduced at pharmaceutical market about 50 years ago contained 150-mcg of a synthetic estrogen, mestranol, that metabolizes to ethinyl estradiol (EE). By contrast, most OCP prescribed today contain 35-mcg or less of EE (low dose pills). A lot of studies have established that they provide the same level of contraceptive efficacy as their higher-dose forerunners but are associated with a lower risk of adverse cardiovascular side effects. In keeping with the trend toward producing OCP with progressively lower doses of estrogen, OCP containing 20-mcg EE were introduced (ultra low dose OCP). Numerous studies comparing the contraceptive efficacy have found that the efficacy of 20-mcg preparations is similar to that provided by 30/35-mcg formulations of OCP. Overall cycle control is comparable with a similar percentage of normal cycles and cycles with intermenstrual and withdrawal bleeding. Many studies have suggested that 20-mcg EE formulations are associated with a lower frequency of estrogen-related side effects. 20-mcg EE OCP have a more favorable effect on lipids and lipoproteins than higher-EE-dose OCP do. 20-mcg EE OCP exert an influence comparable to the 30/35-mcg EE formulations. Some studies have demonstrated that the 20-mcg EE preparations have less effect on hematologic factors than OCP containing higher doses of EE do. Low-estrogen dose OCP users do not seem to be at any increased risk of

thrombotic or hemorrhagic stroke. Several studies suggest a synergistic interaction between OCP, smoking, and stroke risk. Because OCP containing 20-mcg EE have been shown to be effective in preventing ovulation, they should maintain the noncontraceptive benefits of suppressed ovarian activity. Lindynette 20 is typical example of the above mentioned. Since it contains gestodene (GSD) it causes fewer problems with the missed pill (Pearl index: 0.07). Besides, it demonstrates an excellent cycle control with minimal frequency of spotting, breakthrough bleeding or amenorrhoea. Among other significant benefits it should be mentioned that the use does not affect body weight. An overall effect results in good patient compliance.

SPONSORED SYMPOSIUM : SCHERING PLOUGH

Contraceptive counselling : the Spanish experience - Results of the TEAM and REMO studies

I. Lete Lasa (Spain)

Abstract not available at the time of printing

Contraceptive counselling: the Portuguese experience - Results of the IMAGINE Study

T. Bombas (Portugal)

Abstract not available at the time of printing

POSTER PRESENTATIONS

TOPIC 1: CONTRACEPTION IN DIFFERENT AGES AND REPRODUCTIVE STAGES

P001

Oral hormonal contraception in adolescent period

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Modern OHCC represents a form of fertility regulation and protects psycho-physical health and reproductive abilities. We have researched the application of oral HCC in girls aged 15-19 who would turn to the Youth Contraceptive Counselling in two-year period in Sremska Mitrovica. During the abovementioned period 676 girls were examined, whereas the OHCC was introduced in 55 girls. Seven patients gave up contraception, among which only one due to medicinal indications (suffering from Erythema nodosum), whilst the rest had side-effects (such as spotted bleeding). In the group of girls who use OHCC nine of them are 16 year-old girls, 28 of these girls are 17, and 27 of them are 18 years old. In only one case the contraception was introduced under the age of 15. The primary indication for the OHCC treatment is the need for contraception (48 users), but the decision on the change of treatment was influenced by the reported indications such as dismenorea (12 cases), the disturbance of the menstrual cycles (27 cases), the recidive of follicular cystitis (7 cases), the excessive PMS (19 cases). The OHCC treatment starts most frequently on the first day of the menstrual cycle (47 girls), 3 girls started taking pills after the abortion, whereas 6 of them did it during the first menstruation after the application of post-coitus contraception. Also, simultaneous condom application was recommended to all of them. Nevertheless, OHCC was introduced in 5 girls with no previous examination, because they chose the abovementioned treatment when they planned to start sexual activity, that is to say before the first sexual intercourse. Timely introduction of OHCC and simultaneous condom use is an efficient and comfortable way of protection from unwanted pregnancy and STD. It is in this way that equal partnership and the conscience and responsibility towards one's own health and the health of others are developed. Through the work of the Youth Contraceptive Counselling Centre healthy, equal and responsible relations among partners are promoted. Not only do the young people who accept them, protect their own health, but with their influence in the same age group they themselves become the promoters of good behavioral patterns.

P002

Postpartum contraception

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Introduction: Usage of contraceptives in postpartum period requires knowledge of mechanism of different contraceptives action and knowledge of specific changes in female body after the delivery. Pregnancy, delivery, lactation and baby care decreases libido in many women. Lactation does not make absolute protection of unwanted pregnancy later than ten weeks after the delivery. Because of overburden, unsatisfaction with overweight, women repress their sexuality and become deeply dissatisfied and qualm. Puerperal contraceptive method should be effective and non-aggressive and with minimal influence on the new-born baby. Although it was shown that oral contraceptives do not influence the psychosomatic development of the baby, it is also known that the steroids are being transported to human milk, leading to decrease of amount and quality of milk. Usage of intrauterine diaphragm can lead to spontaneous expulsion or infection. Local contraceptives in postpartum period are very important because of easy application, minimal vaginal absorption, minimal concentration in mother's blood, no effect on baby metabolism and no effect on female body. New generation of local contraceptives with Benzalkonium chloride does not have the toxic effect on Lactobacillus.

Aim: The aim of the study was to examine the influence of local contraceptives on Lactobacillus, eventual predisposition to E. coli infection and E. coli bacteriuria.

Material and method: We examined 30 women in puerperal period that were delivered in Institute for Gynecology and Obstetrics, Clinical Center of Serbia. Analyses were taken in three periods: 30 days after the delivery (when we started the usage of local contraception), 45 days after and 120 days after start of local contraceptives usage.

Results: Cervical and vaginal cultures as well as urinoculture were positive before the start of local contraception as it was expected in all the patients. In the next control cultures there were no Gram-negative bacteria and no toxic effect on Lactobacillus. Only in one patients there was < 50.000 E coli, so it did not demand antibiotic treatment.

Discussion and conclusion: Local spermicid application in postpartum period does not influence the increased E. coli infection and E. coli bacteriuria. We did not notice toxic effect on Lactobacillus. Degree of active substance release in local contraceptive shows high release in the first 30 minutes after the application and the lower release in the next 6 hours. That time interval is important for prevention of vaginal microbe toxicity. Altogether with usage of condom, their efficiency and safety is very high.

P003

Current trends in contraceptive behaviour-does age matter?

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Objectives: To evaluate the influence of age of the patient on the type of contraceptive method used amongst women in Belgrade, Serbia.

Methods: A representative sample of 480 women in Belgrade was assessed by means of a self-administered questionnaire from January 2009 to April 2009. All women were divided into two groups by age. The first group (A) consisted of 272 women aged under 30 years and the second group (B) of 208 women over 30 years old.

Results: The average age in group A was 25.06 ± 2.21 and 43.85 ± 8.59 years in group B. There was a significant statistical difference in education level between these two groups of women ($X^2 = 5.984$, $p < 0.05$). Group A had a significantly higher proportion of university graduates (60%) in comparison to group B (40%). Group A had a high proportion of sporadic use of any contraception (53%), 72% of them using a single mode of contraception. In group B only 35% used contraception sporadically, 89% using a single method. When comparing the subgroup in this sample of patients who used contraception sporadically we noted that there was a statistically significant difference a choice of contraceptive method between the two groups ($X^2 = 9.429$, $p < 0.05$). 94% of sporadic group A used condom in comparison to 44% in group B. The remaining proportion of Group B used oral hormonal contraceptives (22%), intrauterine device (22%) and natural method (12%). 3% of women in group A do not use any contraceptive method while in the Group B this increases to 30%.

Conclusions: We noted a significant difference in the behaviour of women towards the use of contraception, depending on age, in our sample from Belgrade. It appears that the younger age group is more likely to use contraception sporadically and to use barrier methods, whilst the older group varies in the methods of contraception but showed a large proportion of women who do not use contraception at all in addition to the significant number who also use it sporadically. These finding are indicating a trend in behaviour and a further study may be indicated to assess the impact of these trends on female sexual health.

P004

The use of levonorgestrel intrauterine system in adolescents

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Introduction: The Levonorgestrel intra-uterine system (LNG IUS) is now widely used in adult women for the management of menstrual problems and contraception. It is very effective in menorrhagia management and has also been demonstrated to have a role in dysmenorrhoea. Contraceptive options for adolescents and nulliparous women do not usually include the use of intrauterine devices due to failure rates and concerns about the risk of pelvic inflammatory disease. Never-the-less menstrual

management for young women with intellectual (ID)/ physical disabilities and high support needs where there is a low risk of sexual activity, is a challenging and relatively common problem. In this patient group, non compliance with oral contraceptive pill (OCP), inability to swallow pills, needle phobia, and hormonal side effects including mood changes and behavioural changes may impose limitations in the treatment options and impact on the quality of life for these young women, their family and carers. Clearly the range of options for menstrual and contraceptive management in a younger population must exclude those surgical options that have an impact on future fertility. The LNG IUS does not have an impact on future fertility.

The aim of this study was to review the experience of using the LNG IUS in young women aged <20 years.

Design and methods: A retrospective case series of young women <20 years who had a planned LNG IUS inserted under the care of specialist pediatric and adolescent gynecologist in Belgrade from 2003-2008. Medical records were reviewed to collect data on age at time of insertion, symptoms, indication, and duration of follow-up from date of insertion, symptom resolution, and complications.

Results: Of the 12 young women in this case series, the commonest indication for insertion of LNG IUS was menstrual management with failure of first line measures in young women with an ID and high support needs. There was 1 case of expulsion of LNG IUS occurred. Thus 11/12 (92%) young women with ID had ongoing significant improvement in their menstrual symptoms. The overall success rate with use of the LNG IUS in this group of women <20 years was 92%.

Conclusion: The population reported is clearly a highly selected group of adolescents with the indication being menstrual management and menstrual problems. No LNG IUS was inserted solely for contraceptive reasons. This series suggests that the LNG IUS successfully reduces menstrual management problems in 92% of women <20 years with an intellectual disability.

P005

Contraceptive use at first intercourse in 20 adolescent girls

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Aim: Adolescence is a period of transition that involves numerous changes. Adolescent population is at high risk for unintended pregnancy and sexually transmitted diseases, partly because of inconsistent use of contraceptives. The aim of this study is to determine the attitudes and contraceptive use in adolescent girls at first intercourse.

Methods: An interview was conducted with 20 sexually active adolescent girls aged from 17-19 years, regarding the attitudes and use of contraception at first intercourse. Patients were referred to our Department for human reproduction for gynaecological problems or for contraceptive counseling.

Results: The mean age of this group of patients was 18,25 years. The mean age at first intercourse was 17,3 years. Roughly half (55%) of adolescents used a contraceptive method at first intercourse. 40% of patients used condom at first intercourse, one girl relied on the pill and two more used the combination of pill and condom. Regarding the relationship characteristic, the average duration of the relation, prior the first intercourse was 8,6 months (range from 1-36 months), no differences were noted in duration of relation prior the first intercourse between the patients who did and did not use contraception at first intercourse. 3 patients (15%) reported having been pregnant in the first year after the first intercourse, in patients who did not use contraception or used it inconsistently. All pregnancies have been terminated. The reasons stated for not using contraceptive methods was little or no knowledge of contraceptives and fear of harmful contraceptive effects. Two girls (10%) sought contraceptive advice before initiating first intercourse. 80% of patients claimed that they know at least one method of modern contraception.

Discussion: In this studied group of patients, one half opted for contraceptive use at first intercourse and the most common contraception used was male condom. Duration of the relationship was not a determining factor in contraceptive decision. Unplanned pregnancies occurred in adolescents with little or no contraceptive knowledge.

Conclusion: Appropriate contraceptive counseling is necessary in adolescent patients. Adolescents should be encouraged to use condom to reduce the risk of sexually transmitted diseases.

P006

Knowledge of contraceptives and contraceptive practice in sexually active adolescent girls

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Aim: Despite improvements in contraception and contraceptive use, effective contraceptive counseling remains a priority for health care providers. We examined, in this study, knowledge of contraceptives and contraceptive practices in 31 adolescent girls, who attended the Department for human reproduction.

Methods: An interview was conducted with 31 sexually active adolescent girls regarding knowledge of contraceptives and contraceptive practices.

Results: The average age in this studied group was 19,78 years. The mean age at first intercourse was 17,85 years. Twenty one (74,19%) adolescent considered contraceptive use necessary, 22,58% considered that contraception is not necessary and 9,7% did not have a opinion on contraception use. Twenty seven (87%) patients claimed to be informed about modern contraception. The average number of cited contraceptive methods by patient was 3,6 (range from 1-6), and the average number of used contraceptive methods was 1,32. Four patients (12,9%) have had gynaecological consultations and discussed contraception prior first intercourse. Twenty two patients used condom regularly, two of them used contraceptive pill and 3 patients used pill and condom. Out of 31 sexually active patients, 3 (9,6%) reported to have been pregnant and have had an abortion. None of them used any contraception.

Discussion: These data suggest that almost two thirds of adolescents is aware of contraceptive possibilities and susceptible to use regulary some contraceptive method. The most common contraceptive method used was condom while other methods were used mostly by patients who have had previous contraceptive counseling. Pregnancies were noted in patients with no or little contraceptive knowledge. It is important to provide adequate contraceptive advice and improve contraceptive knowledge in those patients.

Conclusion: Appropriate contraceptive counseling is necessary in adolescent patients in order to add to the patient's perception of future possibilities on the use of contraception and to improve adolescent contraceptive behavior.

TOPIC 2: CONTRACEPTIVE COUNSELLING

P007

Women's preference and reasons for selecting one of the three combined hormonal contraceptive methods

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Objectives: 1.To identify the combined hormonal contraceptive method preference by Lithuanian women who consulted doctors for contraception; and reasons for selecting or rejecting one of three presented combined hormonal contraceptive methods (pill, skin patch and vaginal ring) 2. To determine the factors affecting the selection.

Method: This was a cross-sectional survey, performed by Lithuanian Society of Private Obstetricians and Gynecologists in 2007. Women completed self-administered questionnaires regarding the reasons for the selecting a method of contraception and for the refusal of other two methods. Descriptive and inferential statistic methods were used for data analysis.

Results: Data of 4134 women aged 18 to 49 (mean age 27.88 years) was analyzed. The contraceptive method preferred was the vaginal ring (55.4%); the pills - 35.6% and the skin patch by 9%. The vaginal ring was mainly preferred because of monthly frequency of use (72.9%), convenience and lower probability of inadvertent omission but it was mainly rejected because of refusal of vaginal insertion (39.8%), fear of using a foreign body and fear that the ring will fall out. The pill was mainly selected because its familiarity (50.7%), easiness to use and proven efficacy; skin patch was mainly preferred because of convenience (71%), lower probability of inadvertent omission and weekly frequency of use. The reasons for pill rejection were the need of daily intake (62.5%) and possibility of inadvertent omission; the skin patch was mainly refused due to the possibility of detachment or

skin irritation (52.5%) and perceived unreliable and not discreet. The vaginal ring showed the highest percentage of acceptance in the majority of age groups with the highest acceptance at the age group of 25-29 years (26.4%). The greatest preference for the patch and pills (32.4% and 33.1%, $p < 0.001$) was in the younger (20-24 years) age group. Higher percentage of women with university education selected the vaginal ring (41.6%) compared with the pill and the skin patch (38.9 and 28.3%, $p < 0.001$). There was a trend to select the vaginal ring more often than the skin patch or the pill by working women (69.6% comparing with 57.9 and 61.4% respectively, $p < 0.001$), and select the pill or patch by students (26.5 and 25.1% comparing to 17.2% for vaginal ring, $p < 0.001$).

Conclusions: 1. Vaginal ring was the most combined hormonal contraceptive method preferred among Lithuanian women due to its monthly frequency of use, convenience and lower probability of inadvertent omission. 2. Woman's age, education and working status were the factors affecting the acceptance.

TOPIC 3: FAMILY PLANNING AND REPRODUCTIVE HEALTH

P008

Urgent contraception of intrauterine device Multiload 375

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Introduction: Urgent contraception includes methods of contraception, which are used after sexual intercourse, without contraceptives in order to avoid unwanted pregnancy. For this contraception intrauterine device (IUD) - can be used, with the supplement of copper, which is inserted up to 120 hours after unprotected sexual intercourse.

Method: During the period from 2007 to 2009 year, we have practiced with 39 female patients, after sexual intercourse, without using any contraceptives. They had control from third to ninetieth hour after sexual intercourse. The patients aged between 19-41 years old. We took detailed anamnesys data about their reproductive health and sexual history. They were adduced by urgent contraceptives, with detailed explanations. Thirteen patients decided to take pharmaceutical contraceptives. Twenty six patients decided for the method of insertion of IUD, Multiload 375. The patients were submitted to gynaecological and hypersonic control, pregnancy test, (which was negative for the treated patients), laboratory analyses: leukoformula and CRP. Because of temporal limiting, mikrobiological analyses could not be taken. The device Multiload 375 is inserted with administration of Sumamed (Azithromycin) of 1 gr, in a dose, considering of variety and effect on eventual presence of the most frequent pathogens of sexually transmitted diseases (Chlamydia, Neisseria gonorrhoea etc.). IUD are apped 36-90 hours after sexual intercourse (23-multipare and 3-nulipare). All patients got the next menstruation on time, at latest 23 days after application of IUD. The pregnancy test and leucocyte formula, CRP, gynaecological and hypersonic control are done after that. The patients were advised to remove IUD after menstruation in order to prevent eventual late effects and treat present condition of chronic cervitis, with the recommenced application, after detailed analyzing.

Results: The prevention is achieved on every patient, which is proved by negativity of recommenced test. 22 patients had spot perishable bleeding on the day of application, and 12 patients had poor bleeding the next day. 2 patients had bleeding which continued three to four days after application, and it extincted after that. 22 patients had ache and ailment the same day, after application and it continued from two to four hours. We did gynaecological and hypersonic control afer menstruation – pathogens were not found in internal genitals which, could be connected with the application of IUD. Test results of leucocyte formula and CRP were in standard limits after menstruation.

Conclusion: In our opinion this is very effective, easy accesed and acceptable method of urgent contraception.

P009

The action of primary health care in protection of women's reproductive health in Vojvodina

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Aims of investigation: The study was assumed to answer the question how to improve the women's health care at the primary level during prenatal, perinatal and postnatal period with the resulting giving birth to a healthy child and preservation of general and genital health of the woman and the consequent ability of nursing her child and giving birth to one more or more than one child.

Material and methods: The investigation encompassed 300 patients (100 patients from each center: health centers at Temerin, Mali Idoš and Žitište) of the generative age. It included answers to the questionnaire introduced at the three mentioned health centers in Vojvodina, previously chosen by the level of birthrate in the local district. The patients answered to the anonymous questionnaire containing 24 questions by underlying one of the offered answers or by addition of a text where necessary-concerning the primary health care and its influence on reproduction of the population of Vojvodina. The results obtained in different health centers have been compared.

Results: One half of investigated patients did not use contraceptive devices. 32,66% of the patients visiting the health centers for the control of their pregnancies, 26,33% for the treatment of diseases, 11,33% for contraception advising, 2,66% for the treatment of infertility and 27,33% for other reasons. More than half of the polled patients thought that there was a need of improvement of the work in the women's health centers. The suggestions of 74,66% of the patients comprised organized lectures on different type of health care and family planning associated with the purchase of modern equipment for diagnostics (13,33%). In order to obtain better health care, it is necessary to improve the system of control of outpatient's health care in health centers.

Conclusion: The primary health care has a significant place in the process of reproduction of the population and these results point to the necessity of its more active role in improvement of the women's health as well as in implementation of the measures of the population policy.

P010

Contraceptive practices in a Portuguese sample – How can we prevent unwanted pregnancies and sexually transmitted diseases?

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Introduction: The knowledge of women's contraceptive practices and options is essential to achieve a more effective counselling. Regarding the Portuguese reality, there are two national representative surveys. In 2005, the Portuguese Society of Gynecology and Reproductive Medicine (SPG/SPMR) conducted a transversal survey amongst women aged 15 to 49. The second national survey was a initiative of Dr Ricardo Jorge's National Health Institute (INSA) in 2005/2006 and involved women aged 15 to 55. Gafanha da Nazaré's Primary Health Care Center has a Family Planning Consultation, a consultation for adolescents and is also responsible for several educational actions concerning contraception and prevention of sexually transmitted diseases. The aims of this study were: 1) To characterize the contraceptive practice of our patients and, consequently be enabling to a more effective intervention in the prevention of unwanted pregnancies and sexually transmitted diseases; 2) To relate our results with those of the general population.

Material and methods: We obtained data using a 21-item anonymous questionnaire which comprised 468 women in a reproductive age, not pregnant, receiving care in the Gafanha da Nazaré's Primary Health Care Center.

Results: Of the participants, 93% were using a contraceptive method. Oral pills were the preferred method (66%), followed by condoms (27%). Eight percent has been sterilized. Coitus interrupts and intrauterine devices were chosen by approximately 3%. Implants, transdermic patch and vaginal rings didn't have a good acceptance among women. The rate of double contraception (pills and condoms) was 14%. Concerning women doing oral hormonal contraception, 25.5% admitted to have repeatedly forgotten taking the pill (≥ 4 cycles/year). Emergency contraception was already used by 23%.

Discussion: In spite of the existence of free family planning services and the easy access to a range of highly effective and safe contraceptive methods in Portugal, SPG survey showed that 18% of women didn't use any contraception and that 29% of the women taking oral pills had omissions in ≥ 4 cycles/year. Double protection was used by 7.8% and 13.3% already used emergency pills. The rate of contraception use in INSA survey was 85%, with oral contraception being used by 66%. Besides the different approach taken (different universes, sample dimensions, methods and statistics), our results seems to be not very different of those found in national surveys. Irregular use of oral pills remains very high, which reinforces the need to provide counseling about contraceptive methods that didn't require diary takes, such as implants, transdermic patch, vaginal rings or intra-uterine devices.

TOPIC 4: SEXUAL EDUCATION AND COUNSELLING

P011

Safety of oral contraceptives - what do our patients think?

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Objectives: To evaluate perception of safety of oral contraception amongst women in Belgrade, Serbia.

Methods: A representative sample of 480 women in Belgrade was assessed by means of a self-administered questionnaire from January 2009 to April 2009. Patients were chosen from a large primary care setting in central Belgrade.

Results: The average age of patients was 33,2 (+/- 11,05) years. 13,3% of women in this sample had one unwanted pregnancy. In total 18,3% of the sample used oral contraceptives. 15% of women reported no use of any form of contraceptive device. Among women who use contraception, 60% of them used only one method: 72% barrier contraception (condom), 14% oral contraceptive, 8% natural family planning, 3% interrupted intercourse and 3% intrauterine device (IUD). 22% of women practiced 2 combined methods of contraception; most women used barrier contraception condom with some other method (92%) and 31 % used condom in combination with oral hormonal contraceptives. With regards to advice about the forms of contraception and suitability 67% of women were advised by their gynaecologist to use oral contraceptives while 33% of women obtain advice from other sources: a friend, partner, internet or commercial advertising. As a reason for not using oral contraceptive 68% of women thought that they are harmful. Total of 60% of our sample had higher education. There was not statistical difference between the education level and opinion towards safety of oral contraceptives ($\chi^2= 2,930, p> 0,05$).

Conclusions: Oral hormonal contraception method is still underused as a contraceptive method among women in Belgrade. This sample indicates that a significant proportion of women in Belgrade feel that oral contraceptives are harmful. Gynaecologists have a key role in advising and educating patients regarding a choice of contraceptive method and preventing unwanted pregnancies. We propose that women in Belgrade have a high concern regarding the safety of oral contraception and that this may be due to lack of sufficient patient education. Further study into the aspects of patient education on the use of oral contraceptives may be warranted.

P012

Importance of contemporary contraception in reproductive health of adolescents

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Although there is no ideal contraceptive method, not using any can lead to unwanted pregnancy. In Serbia we perform about 100,000 abortions per year, and even unwanted teen pregnancy each year is increasing. The cause is unprotected sex and ignorance about contraception. It is forgotten that abortion is not a contraceptive method, but surgical intervention that can have very serious consequences for the health and possibility to get pregnant when it is wanted. In the manuals for secondary school do not exist any lessons about sexual education or about methods of contraception, so that depends on teachers themselves would they be dealing with this topic, which obviously youngsters are interested in. We should not ignore men, whose support in the selection and implementation of contraception methods is very important, and the responsibility in the case of unwanted pregnancy. Therefore both, men and woman, should together decide on the use of contraception.

Purpose: To show work in Counsultancy of young people from the establishment in April 2004. July 2009th, to educate young people to make right decisions and draw attention to the problem of unwanted pregnancies.

Discussion: includes youngsters from 14 to 19 years old, pupils attending 7th and 8th grade of elementary school and the four years of high school. Counseling Team consists of three gynecologist and nurse. It was held 171 workshops in the schools (in the city and villages), the topics were contraception methods, and there were 2900 attendants. In this period of counseling a three-day seminars were organized 136 times and 272 workshops, in which students were present in 1664. There was individual work (counseling) with the 464 attendant. Decision on the implementation of oral contraception, was brought in 112 attendants. Help on doubt (suspition) about the pregnancy requested 27 attendants. In this period the gynecology department carried out 29 abortions in adolescent girls, of whom 12 did not visit counseling for young people. We assume that they completed pregnancy in a private clinic.

Conclusion: Rational behavior, to get to know girls / boys without a rush, not to use alcohol and drugs, smart choice of partners, having less sexual partners, and the most important – sanity put always in front of emotion. These are measures which guided us in our previous work.

P013

Counseling about contraception : Five-year retrospect 2004-2008 / Gynecology Service in Sremcica

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Introduction: Beside modern ways of informing about contraception varieties, the role of gynecologist is still the most important and irreplaceable. That role consist of constant work on rise responsibility level of sexual active woman from different social, ethnic and intellectual groups as that is the case on Sremcica territory.

Aim: To analyse importance of constant work of gynaecologist through counselling about contraception.

Method: When we look insight into records retrospective there is established rise use of oral contraception and insertion IUD in five-year period from 2004 to 2008 in service of gynaecology in Sremcica.

Results:

In 2004, 107 new patients started to apply oral contraception and at 54 is inserted IUD. In total: 161.

In 2005, 141 new patients started to apply oral contraception and at 46 is inserted IUD. In total: 187.

In 2006, 224 new patients started to apply oral contraception and at 51 are inserted IUD. In total 275.

In 2007, 208 new patients started to apply and at 72 is inserted IUD. In total 280.

In 2008, 240 new patients started to apply oral contraception and at 41 are inserted IUD. In total 281.

Conclusion: Through consisted work with counselling and consultations about contraception we:

1. Break the mistakes about bad influence of oral contraception or IUD

2. Put in foreground importance general female health.
3. Substantial reduce of unwanted pregnancies, abortions and complications lead by them.

P014**Contraceptive counselling: personal experiences : period from 2004 until 2008 / Health Center "Dr Simo Milosevic" Zeleznik, Cukarica , Belgrade**

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Introduction: The number of artificial abortions in Serbia is estimated to be 200.000 per year. The reason for this are considered to be the widely spread conservative methods of birth control, dominated by coitus interruptus and, in case of unwanted pregnancy, induced abortions. Why are the contemporary methods of contraception being insufficiently used in Serbia? One of the answers to this question certainly lies in the fact that our health system is partly responsible for this situation and gynecologists in particular, as they are the pillars of counseling work in the area of sexual behavior and protection of the reproductive health of the population.

Aim: Analysis of gynecologist's work in contraceptive counseling.

Method: The data were taken from the Book of Records on the number of visits to contraceptive counseling appointments in the period from 2004 to 2008, at Health Center "Dr Simo Milosevic", Zeleznik, Cukarica. The data have been statistically processed.

Results: In the period from 2004 to 2008, 509 female patients reported for contraceptive counseling at Health Center "Dr Simo Milosevic" Zeleznik, Cukarica. Out of that number, 283 (55, 4 %) were prescribed oral hormonal contraception, whereas 226 (44, 6 %) were advised or prescribed another type of contraception. In 2004 there were 54 female patients, in 2005 – 82, in 2006 – 84, 2007 – 120 and in 2008 there were 169 female patients. Oral hormonal contraception was prescribed to 28 of them in 2004, to 44 in 2005, to 46 in 2006, to 72 in 2007 and in 2008 to 93 female patients.

Conclusions: 1. The data collected in the period from 2004 until 2008 clearly show a continual growth in the health services provided in the area of contraceptive counseling, with a tendency for further growth. 2. There is also a continual rise in the use of oral hormonal contraception. This may be explained by the fact that a younger, healthy, female population came to the Health Center for the purpose of contraceptive counseling and, further, by the fact that besides being a method of birth control, oral hormonal contraception has other beneficial effects to health and quality of life. 3. In conclusion, we can say that motivation, approach, patience and respect of a gynecologist towards future users of contraception is probably of crucial importance for the users to become satisfied with the chosen contraceptive method and use it regularly.

P015**The necessity of sex education of adolescents**

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Objectives: To estimate the level of knowledge about reproductive health and to tailor-make present sex education.

Design and methods: The survey was conducted among 1000 Novi Sad adolescents aged 15-19 using specially designed questionnaire. Both sexes were included. To measure the level of knowledge in reproductive health the set of 5 questions was used and summerised for final score. The questions were about period, menstrual cycle, time of conception in menstrual cycle, condition that can damage reproductive health and the situations when conception can happen. Every question was assessed by 0 if false, 1 partly true and 2 true. The minimum score was 0, maximum 10.

Results: There were 56% girls and 44% boys, average age was 17.49 years. There were 1.1% E students, 2.7% D students, 17.0% C students, 40.5% B students and 38.7% A students. The average grade of sore was 4.18. Better score results were among girls ($p < 0.05$) and A and B students ($p < 0.05$). The majority of false answers was in the question about the period and the time of possible conception in the menstrual cycle.

Conclusion: It is necessary to intense sex education of adolescents by tailoring present curriculum toward topics that were

estimated as the most unknown (the period, menstrual cycle, the difference between those two issues, the time of possible conception. Considering the fact that adolescents prefer to discuss about sexuality with their peers, the most appropriate model of sex education would be peer education supervised by their teachers.

TOPIC 5: RISKS OF MODERN CONTRACEPTIVE METHODS

P016

An unexpected postmenopausal bleeding cause : broken intrauterine device fragments

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Objective: Although it is very rare, retained intrauterine device (IUD) pieces can be the cause of postmenopausal bleeding. Direct visualization by hysteroscopic techniques allows to evaluate the cavity for the causes of abnormal bleeding and provides the opportunity to determine the position of the IUD in cases of embedding and perforation.

Design & methods: In this case report, we present a woman with postmenopausal bleeding and retained IUD pieces. The complaint of the 53 years old G4P3 patient was postmenopausal bleeding. The patient's intrauterine device (IUD) which was in situ for 7 years was removed 5 years ago without any difficulty. During the last 6 months she had postmenopausal bleeding as spotting. The pelvic examination of the patient was normal. Except 10,8 mm. thickness of endometrium the pelvic ultrasonography was within the normal limits. The result of endometrial biopsy was hyperplastic type polyp surrounded by secretory changes. At the office hysteroscopy there was a diffuse endometrial thickness increase and IUD fragments were seen as embedded in the posterior endometrial wall of the corpus. After office hysteroscopy, we took a direct pelvic graphy but there was no opacity showing an intrauterine device fragment.

Result: Operative hysteroscopy was planned for the patient and during the operative hysteroscopy we observed the same findings as in the office hysteroscopy. Intrauterine device fragments were removed by loop resectoscope and full ablation was made by coterloop. After removal of the IUD fragments we took one more direct film of the pieces but there was no opacity belonging to the IUD. So we thought that the IUD had lost its opacity.

Conclusion: As seen in this case, retained IUD devices should be thought in the differential diagnosis of postmenopausal bleeding, even in the cases with the history of easy removal of IUD. Endometrial sampling should certainly be made in these cases, but it should be kept in mind that hysteroscopic evaluation of the cavity is a valuable tool in the diagnosis and treatment of such cases.

P017

A rare case of IUCD related Pelvic Actinomyces mimicking Cervical Carcinoma

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Female genitalia are relatively rare sites for pelvic actinomyces but the incidence of intrauterine contraceptive device (IUCD)-associated cervicovaginal actinomyces is 11.4%. A 38 year old lady attended gynaecology clinic with a 6 month history of left iliac fossa pain, deep dyspareunia, intermittent foul smelling PV discharge. This was associated with nausea and vomiting, loss of appetite and weight. She had an IUCD in situ since 2003. Examination revealed a hard fixed irregular pelvic mass arising from the cervix and extending up to the pelvic side walls bilaterally. The IUCD was removed and a pipelle biopsy taken at the same time confirmed Actinomyces. A MRI /CT scan revealed a large pelvic mass with chronic inflammatory changes suggestive of Actinomyces with evidence of bowel obstruction. She needed Laparotomy and transverse loop defunctioning colostomy to relieve the intestinal obstruction. Long term penicillin therapy was advocated as well. Pelvic Actinomyces is almost exclusively observed in patients who present with prolonged use of IUCDs, usually for longer than 2 years. Patients present with nonspecific symptoms and findings, such as fever, weight loss, diarrhoea or constipation, and abdominal pain. Involvement of the bowel and extension to the perirectal space is not uncommon. These patients present with defecation symptoms or features of intestinal

obstruction. CT or MRI scanning of the involved area is useful in differentiating between an inflammatory mass and a tumour. A combined medical-surgery approach is frequently needed for complicated disease. For most complicated cases, 4-6 weeks of intravenous penicillin G followed by 6-12 months of oral penicillin V is indicated. Follow up of patients for a prolonged period is recommended because the risk of potential relapse is significant. Compliance with prolonged courses of antibiotics to prevent recurrences should be emphasized at every visit. When a mass or an abscess is found in the pelvis in patients with IUCDs, fevers, and laboratory findings that indicate presence of infections, a pelvic actinomycosis should be considered. Early treatment with medical therapy can prevent complications needing radical surgical intervention.

P018

Antiphospholipid syndrome (APS)-Thrombosis sinus sagitalis superior, sinus transversus et sinus sigmoideus-oral contraception - is there any connection?

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Success of family planning is based on the usage of contraceptives - a method of conception prevention. Contraceptives should be unharmed, acceptable to everyone, cheap and course efficient.

Hormonal contraception is based on the artificially created state similar to the state of pregnancy (suppression of ovulation). It has dated since 1959. Oral contraception can be single-phase, two-phase or it can be preparations with long-term effects (implants IUD with hormonal addition). They contain synthetic estrogen and progestin. They are recommended to the adolescents after 6-12 cycles up to 35 years (smokers). The counter-effects are vascular ailments (myocard infarct), liver ailments....

Intrauterus contraception is based on the fact that a foreign body in the uterus makes pregnancy difficult and prevents it. It has dated since 1950. Later copper, silver and progesterone are added. They represent a very cheap and efficient method. Counter effects are bleeding, painful syndrome, spontaneous expulsion, infection...Condoms have been used since 18th century. They protect from sexually transmissible diseases.

Antiphospholipid syndrome (APS) is a disorder which is characterised by recurrent thrombosis (veins or arterial) or by a spontaneous miscarriage accompanied with lab. Abnormalities (high level of antiphospholipid antibodies-aPL. aPL are directed against anion phospholipid membrane (cardiolipin) or with them connected plasma proteins (2 glycoprotein-I) or complex of phospholipid plasma proteins (lupus anticoagulant-LA, anticardiolipin at-aCL, anti 2 glycoprotein-lat-a 2GP-I). LA are immunoglobulin class IgG or IgM which when joined with their a,b, they prolong the time of coagulation. It comes to the intercourse of components of homeostatic system, when the process of homeostasis becomes dysfunctional. The overcoming of the pre-coagulation systems leads to recurrent thrombosis. With the help of clinical criteria, it is necessary that at least one lab. criterion exists (presence of LA or moderate high level of aCL or 2 GP-T (IgG or IgM). Primary APS is isolated (without clear clinical signs) and secondary is accompanied with a series of other diseases (SLE, rheumatic arthritis, HIV, pernicious anemia...) as well as application of certain medicines (procainamide, propranolol, oral contraceptives, amoxicillin). Prophylactic treatment means prevention of undesirable clinical „event“. We should eliminate risk factors - smoking, hypertension, hyperglycemia, application of oral contraception. Clinical manifestation of vascular thrombosis demands application of anticoagulants (disfractionary Heparin).

Review of the case : By reviewing this case we want to point out doctors' dilemmas. In the primary health-care patients, themselves, in spite of doctor's engagement make decisions which can have very heavy consequences for them. Patient G.M., 1964, 2 births (per vias naturales), 1 spontaneous (m.l.II), checked and treated in our department with regular yearly check-ups (PA-II, colposcopy, lab. reports orderly). First application of IUD (Biocuprum) was done at the age of 23. Extracted after 2 years. After that the patient had successful second pregnancy (Diabetes gestationis). After six months, spontaneous miscarriage happens (pregnancy desired) m.l.II. In the next four-year period she used Frilavon pills as contraception (with previous lab. treatment) - between the age of 26 and 30. Third application of IUD (Biocuprum) resulted in a peaceful four-year period. After ex., the patient was treated from unilateral adnexitis. After being recovered the patient had IUD (Biocuprum) applied which was extracted after a five-year period (Jan. month). Then she was 40. Next check-up followed after six months. Unfortunately now it was hard to recognize her. Actually she used, without consultations with her gynecologist, as a 40 year-old, smoker, on self-initiative, for two months Logest pills. In May she reported to the Urgent Centre, after which followed hospitalisation at

neurological department of the same. Hospitalised because of her headaches, vomiting, faintness and a sharp pain at back of her head. After done CT of the brain, subdural collection of blood cerebellary and intrahemispherical was detected. On the done panangiography DSA seen thrombosis of sagittal sinus, sinus transversus and sigmoides (the evidence about usage of oral contraceptives exists). Concerning additional diagnosis, the consultation with hematologist done which shows decreased PCG that indicates one of thrombophilias, type protein C or protein S failure, or resistance on the activated C protein. She was treated with high levels of Heparin (Th-Fragmin a 7500). Hospitalisation lasted for 29 days. The Conclusion of the letter of dismissal says: "Diagnosis of upper sagittal sinus thrombosis, sinus Transversus and sinus sigmoides of the right side. Excluded are genetic mutations of factors II, V, VII, XII, disorder of the natural coagulations inhibitors (protein C and S, antithrombin III APCR). The only parameter which deviated from the normal value was LAC. In the etiology of thrombophilia takes part the usage of the means of oral contraception. She was dismissed with Th-Farin pills 1,3/4, 1,3/4, alternate with checking of INR. The patient is still being checked-up within our department.

Literature : 1. Galli M., Luciani D., Bertolini G-Lupus anticoagulans are stronger risk factors for thrombosis than anticardiolipin antibodies in the antiphospholipid syndrome: a systematic review of the literature. *BLOOD* 2003;101(5):1827-32, 2. Asherson RA, Cervera R, Piette J.C. et al Catastrophic antiphospholipid syndrome clues to pathogenesis from a series of 80 patients *Medicine (Baltimore)* NOV 2001;80(6):355

P019

Inflammatory processes of a small pelvis or pelvis minor as a result of patient's irresponsibility with implanted intrauterine device - UID

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Often complications among women with implanted IUD are inflammatory processes of the small pelvis (also called pelvis minor). It happens because IUD causes the ascendant spreading of microorganisms in a vagina and in the cervix, or the neck of the uterus, along the uterine cavity. In 2 years period there were 58 women patients with implanted IUD which caused inflammatory processes in small pelvis. The average age of women patients was 45. The youngest was 39, and the oldest one was 73. Out of 14 women patients who had implanted IUD up to the time of five years, only 5 of them have been going on regular medical examinations. Out of 28 patients with implanted IUD up to the time of ten years, only 7 of them were being regularly checked up. And none of 16 women patients with implanted IUD up to the time of fifteen years or more, have been on a medical checkups. This diagnosis is based on a clinical picture (feature), gynecological examination, laboratory findings and ultrasound. The implanted IUD in all women patients was removed on their admission to infirmary or to the Clinic. They all began with conservative treatment taking the combination of at least 2 antibiotics. 12 of them, that have been conservatively treated, were cured. The rest 46 patients had operative treatment. Extensiveness of surgery was conditioned by the age of the patient, the parity and also by the expansion of the disease. In group of operated patients, 8 of them were submitted to the urgent surgical intervention, within 48 hours from being admitted to a hospital, for refractory to applied conservative therapy and for the fact that the gynecologic palpation exam showed that their findings were the same as before they had started the therapy. It can be concluded that IUD is one of the most high-risk factors that causes the occurrence of PID, therefore these women patients require the strict and regular examinations and checkups.

TOPIC 6: SPECIAL CONSIDERATIONS REGARDING CONTRACEPTION USE

P020

The influence of hormonal contraception on female dyadic and autosexual sexual behaviour

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Objectives: Previous research shows mixed evidence concerning the effect of hormonal contraception (HC) on female sexuality. To explore the reasons for the discrepancies, we tested the influence of HC on both women's and their partner's sexual behaviour, and the quality of the relationship in HC-users and compared them with couples of regularly cycling women.

Methods and results: Sample 1 consisted of 52 long-term cohabitating couples using HC and 34 couples not using HC participating in a longitudinal sexuality research. We found no significant between-group differences in overall relationship satisfaction (assessed by the Questionnaire of Dyadic Assessment), dyadic sexual satisfaction (assessed by the Hulbert Index of Sexual Compatibility) and extramarital tendencies of both partners (assessed by the Sociosexual Orientation Inventory). Nevertheless, non-users referred significantly higher frequencies of autosexual activities in comparison to HC-users. Sample 2 consisted of 200 women living in long-term relationship, 122 were HC users and 78 were not using HC. The data were collected for the purposes of the Czech national research of sexual behaviour (1993, 1998, 2003). We found no significant differences in sexual appetite, frequency of autosexual, dyadic and extra-pair sexual activities, frequency and quality of orgasms between HC-users and non-users. However, HC-users referred significantly lower self-perceived sexual satisfaction than non-users.

Conclusion: Our data suggest no effect of long-term usage on both the female's and her partner's dyadic sexual behaviour and the quality of the long-term relationship. On the other hand, it seems that HC could negatively affect self-perception of women's sexual satisfaction and thus it can lead to the decrease of her autosexual activities.

P021

The sterilisation after the third caesarean section

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The aim of this study was to establish necessity for sterilisation of the tubes after the third caesarean section (S.C.)

Methods: With the retro-prospective study in a period of ten years from 1.01.1989 till the 31.12.1998. on the University Clinic of Gynecology and Obstetric in Prishtina there were 2474 repeated caesarean sections.

Results and conclusion: With two S.C. were 2041, with three S.C. were 343, with four S.C. were 74 and with five S.C. were 16 women. We did a prospective study of the quality of the cicatrix (by counting number of the collagen fibbers) at multiple repeated S.C. in period from 01.01.1997. till 31.12.1998. With respect of the aim of this study - to establish necessity for sterilisation of the tubes after the third S.C. Is there a statistical importance in the quality of the cicatrix (number of the collagen fibbers in cicatrix) after the third S.C. in comparison with fourth and fifth and is there an higher interoperation risk after third S.C. in a comparison with fourth and fifth S.C. Results of the study show that there were no statistically important differences.

P022

Intrauterine device application after medical interruption- pro et contra

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One of dilemmas still waiting for a clear answer is an intrauterine device application - cervical coil, immediately after medical interruption of 10 weeks gestation pregnancy.

The aim of this study is to show the incidence of potential complications after the legal 10 wg abortion referring to intrauterine device application. Three groups of women were analyzed (20 in each group) according to specific parameters which were compared. The parameters are: cervical smear, infection parameters (SE Le, CRP), application of Povidon iod vaginalettes the night before intervention and eventual complications respectively. The pregnancy of 8-9 weeks gestation was confirmed by ultrasound in all groups, all examinees had deliveries in their obstetrical records. During the intervention a single doze of antibiotics (Gentamycin 120 mg i.v) was given.

Our results show that significantly less incidence of complication occurred in the group of previously prepared and evaluated patients when compared to control group (group without analyzes and preparation). In the group of patients without previous

evaluation complications occurred in 4 patients (20%). In the group where Povidon iod vaginalettes were applied preventively complications occurred in 2 patients(10%), whereas in the group with normal lab findings and where vaginalettes were applied therewere no complications which we could associate with IUD application.

We may conclude that application of IUD immediately after the interruption of pregnancy until 10 weeks of gestation, accompanied by appropriate treatment and adequate evaluation prior to intervention, should not present a dilemma for a gynecologist if the patients requests IUD.

P023

Analysis the effect of a levonorgestrel-releasing intrauterine system in the fertile women

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Background: The levonorgestrel-releasing intrauterine system (LNG-IUS) is an effective contraceptive and is also characterised by reduction of menstrual blood loss, the number of days of bleeding per cycle, diminished incidences of ectopic pregnancies and pelvic inflammatory disease.

Objective: To determine the effect of long lasting intrauterine progesterin on ovarian cyst formation, decreases menstrual blood loss, and the size of uterus in women.

Methods: This was prospective study. We applied LNG-IUS releasing intrauterine contraceptive system to the uterine cavity of 40 women (age range 21-45 years) referred for contraceptions. Transvaginal ultrasonography was used to study presence of uterine and ovarian size. Measurements were performed in the mid luteal phase before the application of LNG-IUS, on day 1 of menstruation and during a 12 months follow-up.

Results: The main outcome results were 8 ovarian cysts during follow up period. 7 cysts resolved spontaneously during six month. One patients had surgical tretmant – adnexectomy. Decreases menstrual bood loss after insertion LNG and irregular was noticed. No significant changes were observed regarding the size of the uterus. LNG-IUS use in the contraceptions was association with the development of ovarian cysts, but these were asymptomatic and showed a high rate of spontaneous resolution.

Conclusions: LNG-ISU use in the contraceptions was association with the development of ovarian cyst, but these were asymptomatic and showed a high rate of spontaneous resolution. The LNG-ISU did not affect the size of the uterus but decreased the menstrual blood loss.

P024

Clinical and ultrasonography finding in female adolescents with benign breast disease on oral contraceptives pills

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Introduction: In female adoescents on oral contraceptives, palpable breast masses present frequent clinical findings and require additional ultrasonographic examinations for further evaluation and decision. Ultrasonography is useful in differentiating a cystic from a solid mass. Breast masses appear frequently, and many patients give a history of a transient mass in breast or cyclic breast pain.

Design and Methods: The investigation included 100 young patients, aged between 15 and 24, on oral contraceptives. All patients have had, during the clinical examination, the diagnostified palpable breast mass and all of them have been requested to do the breast ultrasonography checkup.

Results: Ultrasonography diagnosis confirmed the breast tissue gland mass existence in 38 patients of which, in 27 of them dysplasia has been detected, 4 have had macrocysts, 7 have had fybroadenom, while all other 62 patients have had a normal breast ultrasonography finding.

Conclusion: The clinical and ultrasonography finding discordant could be explained by the breast gland tissue features. The

breast gland tissue is susceptible to the influences of sexual hormones. Protective effects of OCs have more recently been appreciated, including lower risk for benign breast disease and fluctuation in size and rapid appearance or disappearance are not common. The expired time, from the clinical diagnosed mass to the carried out ultrasonography examination could also be a significant factor, due to possible detected palpable mass regression.

P025

Contraception in women who had their pregnancy terminated in 2009 at GAK Narodni front Belgrade

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Introduction: In Serbia's National health institutions about 20,000 intentional pregnancy terminations are carried out every year in the first ten weeks of pregnancy. The evidence in private sector does not give a precise figure to be relied upon. In the first three months of 2009 790 artificial pregnancy terminations were performed. In Serbia 37% of all women use some kind of contraception, and the number is higher in women with their pregnancy terminated at least once. 81% of women researched had one or more children. 80% of women that gave birth at GAK Narodni Front in 2008 had never their pregnancy terminated. The aim of the research was to find out if the women with terminated pregnancies use any kind of contraceptives, how frequently and how regularly. Also, we wanted to compare differences taking into account age, education, parity, and opinion about possible consequences to health as a result of pregnancy termination.

Patients and methods: During 1st January 2009 and 1st April 2009 at Daily Hospital ward of GAK Narodni Front an anonymous questionnaire was offered to all women who visited clinic for pregnancy termination. 614 women answered questionnaire, 489 was taken for statistics and rest were rejected as invalid. For statistics analysis Studentov T test was used, HI kvadrat test, Wald-Wolfwitz test and methods of parameter and non-parameter correlation.

Results: 41.2% women in research don't use contraceptives, 58.8% do. 88.2% of patients that use contraception use it occasionally and 11.8% regularly. Average age of women who don't use contraception is 32.08 ± 6.68 years those that use contraceptives is 30.07 ± 6.3 years. In the group that use contraceptives 0.3% is without primary education, 6.6% finished primary school, 63.5% has secondary education, 16.3% has higher national diplomas and 13.2% hold university degrees. 81% of all researched women give birth, and 19% not. 53% of those who gave birth use contraceptives while 83% of women that didn't gave birth use contraceptives. 35.1% of women that use contraceptives think there is a likelihood of serious consequences regarding their health while 31.4% that don't use it think the same. There is no possibility of serious consequences think 9.7% of those who use contraceptives and 11.4% that don't. 55.2% of the women that use contraceptives and 57.2% that don't use it are not sure and about consequences.

Conclusion: From the samples researched we see that considerably higher number of women use some kind of contraception ($p \leq 0.001$) 11.8% regularly and 82.2% irregularly. Those that use contraceptives are much younger than those who don't ($p < 0.05$). With the higher level of education the greater number of women who use some kind of contraception ($p \leq 0.001$). Women that did not give birth use contraception in much higher degree than those who gave birth ($p \leq 0.001$). There is no real difference in opinion about consequences to health between those who use contraceptives and those who do not.

TOPIC 7: UNWANTED PREGNANCY

P026

Abortions in adolescents in clinical hospital center "Zvezdara" in the period from 2002 to 2008

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Adolescent pregnancies are pregnancies among girls younger than 19. Puberty is a period of sexual maturity. It is a transitional period of psychological maturity and a period when they try to be "grown-up". Frequency of adolescent pregnancies varies in different regions of the world, and it especially differs in developed and under-developed countries. Frequencies of adolescent

pregnancies was reduced considerably since the 90s of the last century, primarily owing to the use of contraceptives, while the pregnancy rate among girls aged between 10 and 14 is the lowest in the past 50 years. According to the data of the Save the Children Fund, about 13 million children in the world are born of mothers younger than 20, being 90% in developing countries. The aim of our study is an analysis of adolescent pregnancies, with a special view on artificial abortions in the period from 01.01.2002 to 31.12.2008 at the Clinical Hospital Center "Zvezdara". The research was conducted through an analysis of data on artificial abortions in adolescents executed at the Hospital of Gynecology and Obstetrics of the Clinical Hospital Centre "Zvezdara" during the period from 01.01.2002 to 31.12.2008. We analysed the following parameters: age, history of previous pregnancies, the length of the pregnancy which is being aborted, marital status, employment, as well as the relation towards abortions among adolescents. On the other side, we analysed births among adolescents. In this studied period, there were a total number of 9.426 artificial abortions, out of which 268 (2.84%) were abortions in adolescents. In the same period, there were 16.860 births, including 491 (2.91%) of births among adolescents. On the basis of gathered data, we can conclude the following:

- The percentage of abortions is smaller in relation to the number of births among adolescents, 2.84% towards 2.91%.
- Over 40% of abortions and births were among girls aged 19.
- Abortions were mostly done in the 8th week of gestation (38%).
- There were mostly abortions of the first pregnancy.
- These adolescents were mainly unemployed and unmarried, both in cases of abortion as well as of births.
- In contrast to abortions, where there is a rising trend in the past 7 years, the number of births is reduced.

We would especially like to draw attention to the importance of health-care and sexual education, which in our society is still not on the necessary level. Preventive work, which would include pupils in elementary and high schools, would contribute considerably to a reduction of unwanted pregnancies among adolescents, thus reducing the number of occurring complications. On the other side, pregnant adolescents need adequate psychological and social help, with the necessary health-care protection and adequate follow-up of the pregnancy.

P027

Artificial abortions across three decades at the obstetrics and gynecology clinic in Banja Luka

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Although there are numerous methods and techniques of birth control acceptable from the medical and the social points of view nowadays, voluntary termination of pregnancy is the most frequently used method in our country, despite all the risks that it imposes on women's reproductive health. Voluntary termination of pregnancy is a very sensitive topic of huge social and medical importance and therefore it requires a good legislative regulation. In the Republic of Srpska, artificial abortion is defined as the woman's right to free choice in family planning. In this study, we did a retrospective analysis of the total number of artificial abortions (AA) and births (B) at the Obstetrics and Gynecology Clinic (OGC) Banja Luka from 1981 through 2008. We reviewed the number of AA, the number of B, and the ratio of AA and B during two 12-year-long periods: from 1981 to 1992 and from 1993 to 2004; as well during three 5-year-long periods: from 1983 to 1987, from 1993 to 1997, and from 2003 to 2007.

There are two clinical centers and eight general hospitals that have obstetrics and gynecology sectors in the Republic of Srpska. From 1993 to 2008, there were 148254 B and 50820 AA, out of which 52296 (35,3%) B and 23 978 (47,2%) AA took place at the OGC Banja Luka. From 1981 to 1992 54728 B and 62113 AA were performed at our Clinic. Obviously, the number of AA was 11,8% higher than the number of B, that is, there were 113 AA on every 100 B, or 1 AA on every 0,9 B on the average. When we compare this period with the subsequent 12-year period, a significant decrease in the number of B (25,9%) and the number of AA (64,7%) is found in the period from 1993 to 2004. The decrease in the number of births, and particularly in the number of artificial abortions becomes more interesting if we analyze the 5-year periods during these three decades. From 1983 to 1987 there were 23014 B and 27339AA, which is 119 AA on every 100 B, or 1 AA on every 0,8 B. There were on the average 5468 AA performed per year. From 1993 to 1997 the number of B decreased by 19,1% and the number of AA decreased by 51,3% when compared to the period 1983-1987. There were on the average 2665 AA performed per year. From 2003 to 2007

the number of B decreased by 37,7%, and the number of AA decreased by 90,5% when compared to the period 1993-1997. There were 23% less B, and 80,5% less AA. From 2003 to 2007, only 520 AA on the average were performed per year. There were 18 AA on every 100 B which is 111 (84,8%) less than the AA rate for the period 1983-1987. The ratio between the number of births and the number of artificial abortions has kept growing during the past three decades: there were 1 AA on every 0,8% B in the 1983-1987 period; 1AA on every 1,4 B in the 1994-1997 period; and 1 AA on every 5,5 B in the 2003-2007. In the last decade of the XX century, due to numerous changes in the society, particularly the war and the chaos it brought along, there was a significant decrease in the number of births, but also in the number of registered artificial abortions. Artificial abortion is situated outside legal, professional, and moral criteria. The drastic decrease in the number of artificial abortions at our Clinic in this period unfortunately does not represent the total number of abortions performed in Banja Luka during that time. A huge number of abortions were performed in numerous private clinics, without appropriate registration or declaration. For this reason, we cannot even approximately talk about the correct number of abortions that get done in Banja Luka on a yearly basis, although this number is certainly high, and represents a significant depopulation factor. We expect that new laws on abortion that have recently been passed will contribute to a better understanding of the role of artificial abortion in the family planning and of the harm it can cause to the reproductive health of women in our region.

P028

Contraception in birth control

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Contraception as the most important, and medically the most acceptable segment of birth control, is the basis of good family planning. It allows couples and individuals to freely choose the number of children, the time of their lives when they wish to have children, and the time to elapse between two pregnancies. There are two important factors in individual family planning and contraception: the first one is motivation, depending on different factors such as education, life style, tradition, religion; the second one is the choice and the right use of the contraceptive method.

Our prospective study comprised 840 patients who came to our Clinic to have an artificial abortion in the period from 2004 to 2008. In this study we included age, education level, previous births, previous abortions, and patients' knowledge on artificial abortion and contraception methods, all this in order to make the picture about our patients' past, present, and future attitudes toward contraception more complete. About a half of our participants, or 408 of them (49%), were 26-35 years old. Most of them, or 208 (25%) were between 31 and 35. 329 (39%) of the participants had their first artificial abortion performed sometime between 21 and 25 years of age. All the participants received at least some formal education, 456 (54%) finished high school, and 182 (22%) finished elementary school. 731 (87 %) of the participants had already given one or more births (total of 1521 births), whereas 109 (13 %) of them had not given birth before. When previous artificial abortions are taken into account, we find that 594 (71%) of the participants had already had one or more artificial abortions, (total of 1085 abortions). Together with the present 840 cases, this gives us a total of 1925 artificial abortions, which is 404 (21%) more abortions than births. Less than one third of our participants, or 246 of them (29%) had never gone through this traumatic experience before, and came for the first time to have this type of intervention. An analysis of our participants' attitudes toward contraception explains this situation. Indeed, as much as 60% of these women had never used any contraceptive method. Out of the remaining 40% who claim to have used contraception in some form, most used unreliable traditional methods of contraception. Coitus interruptus was the preferred method for 40,5% of the participants, whereas for 30% of them the method used was calculation of fertile and non-fertile periods. Barrier methods of contraception, such as condoms, were used by only 14% of our participants. Secure methods of contraception, such as IUD, were used by only 8,6% of the participants, while oral hormonal contraceptives were used by 6,2%. Nonetheless, none of our participants used contraception on regular basis or long enough. 73% of them did not use contraception on regular basis, whereas 17% used it only for limited time periods within their reproductive age. Analyzing the answers to our question whether or not they would opt for an artificial abortion again in the case of another unwanted pregnancy, we find very little knowledge, irresponsible behavior and negative attitudes toward protection from unwanted pregnancy. 435 (52%) of the participants replied affirmatively to this question, 159 (19%) said they didn't know, and only 246

(29%) answered that they would not opt again for an artificial abortion in the case of another unwanted pregnancy.

The reasons for such negative attitudes toward contraception are: misconceptions and prejudices about contraception, very little knowledge on family planning, lack of interest and neglectfulness toward one's own health. Together, these reasons are responsible for a huge number of unwanted pregnancies, which in most cases end by artificial abortions, while patients get exposed to a number of risks, complications, and consequences that this intervention can bring along. The fact that none of our participants had learned anything about contraception or reproductive health in school, and only a small number of them had learned certain things within family, points out a necessity of serious involvement of the state in taking care of this problem. Solutions should be proposed through modernization of the education system, and through promotion of a family in which these problems are communicated and discussed with all members, without the traditional attitudes and taboo that usually go with this topic.

P029

Perspectives and understanding of law professionals towards the abortion law and women rights to safe abortion in Pakistan - a qualitative study

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Objective: To obtain understanding of law professionals towards the abortion law and women rights to safe abortion in Pakistan

Methodology: Through purposive convenience sample and using semi-structured questionnaire, 29 in-depth interviews were conducted from 8 practicing lawyers and law enforcement officers each; 4 judges and medico-legal officers (MLO) each and 5 law students.

Findings: All of the respondents knew the abortion law since it was part of the law curriculum and felt abortion was not allowed according to Islam with a few exceptions, such as saving the mothers life. Almost none were aware of the current rate of abortion in Pakistan - rough estimation was 3 to 5 cases a year. All agreed that rising abortions is an indication of immorality and most abortion clients were unmarried women recognizing health hazards of abortion such as unsafe abortion and recommended use of contraception to avoid unwanted pregnancy. Almost all of them stated that abortion cases were underreported and mostly settled outside the court where an estimate of 2 to 3 abortion cases formally reach the court every year, mostly related to divorce or domestic violence issues. Judges, MLO and law enforcers felt that the government needs to remove the ambiguity in the abortion law to make it more severe and crack down on safe abortion providers to discourage immorality. Most of the lawyers and students felt that the NGOs are playing a positive role to discourage abortion.

Conclusion: Irrespective of the diverse respondent sample, different groups of respondents had similar thoughts on abortion related issues. They largely misunderstood practices of abortion - underestimating the number of abortions, discouraging safe abortion providers as a measure to reduce abortion, and assumed most abortion seekers are unmarried immoral women. However it is evident that despite unfavorable law, few cases are formally taken to the court. The ground realities call for liberalization of abortion laws and this will not be possible without the support of law professionals.

P030

Oral mifepristone and misoprostol induced early first trimester medical abortion: Prospective audit of 322 cases

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Objective: To assess efficacy, safety of oral mifepristone followed by oral misoprostol for early first trimester medical abortion.

Methods: Prospective, convenience case audit of 362 women for a period of 30 days from April to May 2009 presenting for early first trimester (5-9 weeks) termination of pregnancy in private health services clinics in Karachi, Pakistan. Each client received first dose of 200 mg mifepristone orally on the day one. A second dose of 800mcg misoprostol orally was administered on the day two. Data collection included age, religion, education, number of children, previous pregnancies and terminations,

gestational age, side effects and complications. The process of abortion was monitored to assess the outcome measures. Data were entered into Visual FoxPro 6.0 and analyze into SPSS 16.0.

Results: Data on completed abortion were available for 329 women – 90.9% (33 cases were due to with incomplete information). Approximately, 60.4% clients had no previous abortion history. Women of ages 25-29 has the highest proportion of clients of 36% followed by 20-25 years with 26.4%. The mean time to expulsion were 3.8 hours (std. dev. 3.5). The proportion of women who aborted successfully was 95.4%. A total of 11 (3.3%) clients had failure of method for the induction of abortion and had either opted for a repeat dose of misoprostol after 24 hours (6 clients) or other methods of induction such as surgical evacuation (5 clients) and all of them fully aborted. Number of cases with side effects included nausea and vomiting (18), fever (1), diarrhea (1) and weakness (4). No significant association was found between expulsion with client's age, gestational age, education, number of children, and history of previous abortion.

Conclusions: Orally administered 200 mg Mifepristone and 800 mcg Misoprostol are safe and efficacious drugs for induction of the early first trimester medical abortion without any major side effects or complications.

P031

Is abortion followed by acute and post-traumatic stress disorder?

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Objective: Induced abortion as a final solution in resolving unwanted pregnancies can be the cause of major physical and psychological consequences on women's health. Diverse opinions on psychological sequelae of induced abortion can be found in literature.

Design and methods: Prospective study was performed in order to predict acute stress disorder ASD after the induced abortion and the possibility of post-traumatic stress disorder PTSD. Seven days after the induced abortion, 40 women had to fill in: 1. a special questionnaire made for this research, with questions linked to some risk factors that induce stress, 2. Likert's emotional scale and 3. Bryant's acute stress reaction scale.

Results: After the induced abortion 52,5% of the women had ASD and 32,5% of the women had PTSD. After the abortion, women with ASD develop more sense of guilt, irritability, shame, self-judgement, fear from God and self-hatred. They are less educated, have lower income, they are more religious, do not approve of abortion and have worse relationship with their partners after the abortion in comparison to women without ASD. Age, number of previous abortions and decision to abort do not differ between the two groups.

Conclusion: Induced abortion represents a predisposed factor for ASD and PTSD in women. Some psycho-social factors contribute to the development of stress after abortion. Serbia has a task to reduce the number of abortions, which is very high, in order to preserve reproductive and psychological health of women.

P032

Recurrence of voluntary interruption of pregnancy

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Background: Abortion before 10th week gestation has been a legal procedure in Portugal since July 2007. Induced abortions could be reduced through the provision of good family planning services that should be an integral part of women healthcare but still, some women undergo voluntary abortion more than once. Information on incidence and circumstances of repeated induced abortion is crucial to identify its causes and to define strategies in order to reduced unintended pregnancy and abortion related risks.

Objectives: To determine the rate of repeated induced abortion and describe social-demographic characteristics among women seeking another interruption of pregnancy. Design & Methods: Retrospective study of voluntary interruption of pregnancy requests made between July 2007 and April 2009 by women who have already underwent an induced abortion, mostly before

legalization. Clinical records were reviewed and the following parameters were analyzed: social environment, age, parity, family status, number of previous induced abortions, contraceptive use before the abortion, gestational age at abortion, reasons given for interrupting pregnancy, post-abortion contraceptive method and technical procedures.

Results: Of the 580 women seeking an abortion, 67 (11.5%) reported at least one previous voluntary termination. Portuguese women accounted for 86.6% of the cases. The majority of the women were married (52.2%), multiparous (68.6%) and belonged to median-high cultural groups (45%). The use of a contraceptive method was reported by 71.6% (although a consistent and correct use was made only by 27% of women) and 28.4% of the current pregnancies were associated with non-use of any contraceptive. Proeminent reasons given for the terminations were economical factors (27%) and number of children (27%). A non-surgical abortion was performed in 95% of women with only 4 minor complications. Ten women did not interrupt their pregnancies. After abortion 95% of women (n=54) had a contraceptive method: hormonal contraception (HC) in 65% (n=35), intrauterine device in 28% (n=15), condom in 6% (n=3) and tubal ligation in 4% (n=2).

Conclusions: Women who undergo a repeated abortion represent a target population for contraceptive advice. Family planning is crucial and information/counselling as well as better access to effective contraception are determinant to reduce the need for abortion.

P033

Socio-economic features of women applying for legal termination of pregnancy

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Objectives: The purpose of this study was to analyse socio-economic characteristics of women who presented for legal abortion and to establish a comparison between contraception users and non-users aiming at identifying risk groups that need more close intervention.

Material and Methods: Retrospective case review of 580 attenders of reproductive counselling in our clinical unit, from July 2007 to March 2009, taking into account their age, nationality, marital status, educational grade, employment position, parity and contraceptive use. Eight cases were excluded because these women were either on a break from OCs use or in a contraceptive method transition.

Results: Considering all women (n=572), the mean age was $28,2 \pm 7,6$ [13-48]. The majority of women (90%, n= 515) were Portuguese and only 0,8% (n=40) of the immigrants were not European. Half of the women (50%) were single, 40% were married and 10% were divorced. Considering the educational grade, 25% (n=143) had taken a degree, 31% had high school education, and the other ones had the third cycle or lower. Thirteen percent of women were unemployed, 23% were students, 6% were housewives, and 28% were unskilled workers. Only 1% of them had a high skilled job. More than half of the women had 1 or more children. Most women (73%, n=416) were using contraception at the time they became pregnant, and 27% were not using any contraceptive method despite being sexually active. Comparing users vs. non-users, the mean age was similar (28,2 vs 28,3). As far as nationality was concerned, 92% (n=381) of users were Portuguese as well as 86% (n=134) of non-users (p=ns). There was no significant difference between user/non-users taking into consideration marital status (p=ns). Higher educational rate and better employment position were not associated with contraception usage in these women (p=ns). Parity did not influence contraceptive practices (p=ns).

Conclusions: Socio-economic status, nationality, education, marital status, age and parity do not seem to influence contraceptive use/non-use of the women in our study. Contraceptive counselling is essential, no matter what socio-demographic characteristics women have, and family planning providers should be aware of these circumstances.

P034

Oral mifepriston and misoprostol use for medical abortion until 42nd amenorrhea day

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There are various methods for pregnancy interruption in gynaecological practice. The most of them are invasive. The alternative method of abortion without surgical intervention is use of mifepriston (synthetic steroid antagonist of progesterone) which enhances uterus sensitivity with some prostaglandin analogues including misoprostol (synthetic prostaglandin E1 analog). Mifepriston realizes its abortion effect in 24-48 hours after oral application. Misoprostol is orally entered in 36-48 hours after mifepristone application to intensify abortion performance.

Objective: To assess efficacy and safety of combined using of mifepriston and misoprostol for medical abortion implementation until the 42nd amenorrhea day.

Methods: In the study were included 30 women of the age 20 - 35 (on the average $31,3 \pm 3,8$ years old) with confirmed uterine pregnancy who applied to outpatient department to interrupt their pregnancy until the 42nd amenorrhea day.

There were performed gynaecological and ultrasound examination, blood plasma chorionic gonadotropin (B subunit) measuring, general medical examination in the study. The tablet-form mifepriston was applied orally in a doze of 600 mg (3 tablets contained 200 mg everyone) in combination with the oral tablet-form misoprostol in a doze of 800 mg (4 tablets contained 200 mcg everyone).

Results: Medical abortion had been performed in everyone out of the all 30 women. Interruption of pregnancy proceeded as a menstruation-like hemorrhage, which appeared in 24-58 hours (on the average $38,7 \pm 2,3$ hours) after mifepriston oral application. The continuation of the bleeding was 7 - 14 days (on the average $12,5 \pm 1,3$ days). In the first 3-4 days it was more plentiful, than usual menstruation, so additional hemostatic therapy was added for 4 patients. 16 (53,3%) patients had moderate pain in abdomen but no additional therapy have been demanded. Another adverse effects such as insignificant nausea, easy dizziness and weakness have been noted in 14 women (46,6%) during the first 2-3 days after abortion and passed without any treatment. There were no serious adverse effects in the study. According to the observation data during the next 3 menstrual cycles after medical abortion there were no any dysfunctions of reproductive system in the women. Restored ovulatory menstrual cycles have been noticed in 90% of women.

Conclusions: Combination of mifepriston and misoprostol is effective and safe method for interruption of pregnancy until the 42nd amenorrhea day and may be performed in out-patient department conditions under the medical control

TOPIC 8: MISCELLANEOUS

P035

Evaluation of university students' knowledge and training needs on HIV/AIDS

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Objectives: Students tend to become sexually active during their university years and they may experience high risk behavior. This study was carried out to find out the level of knowledge and attitude on HIV/AIDS and to draw results to direct trainers on the subject.

Design and Methods: In the academic year 2007-2008, 1542 first year students of Eskisehir Osmangazi University were asked to fill in a questionnaire with 32 questions in two parts. The first part contained questions on personal data and the second on HIV/AIDS. Each of the 20 questions on HIV/AIDS was assigned 5 points if answered correctly.

Results: Mean age of students was 21 (18-25). 51.2% were males and 48.8 females. Although 91.8% of the students reported they had knowledge on HIV/AIDS, average point they received was 66. Highest points were shared by students of Faculty of Medicine, Higher School of Health, Faculty of Engineering and Architecture and Faculty of Science and Letters. The lowest belonged to the students of Faculty of Economics and Administrative Sciences and Faculty of Education. The difference between the higher and lower point educational units was statistically significant ($F:3.871$; $p:0.004$). The level of knowledge on HIV/AIDS of the students of Faculty of Education was significantly different ($p<0.05$) in comparison to both Faculty of Science and Letters ($t:-2.346$) and Faculty of Engineering and Architecture ($t:2.228$). similar results were found ($p<0.05$) for the students of Faculty of

Economics and Administrative Sciences as compared to Faculty of Science and Letters (t:-3.171) and Faculty of Engineering and Architecture (t:-3.004). Main source of information of students on AIDS was the television (n:1202, 78%).

Conclusions: Although the majority of the students reported they had knowledge on HIV/AIDS, average point they received was not high. Their main source of knowledge was the television. The level of knowledge of the first year students is inadequate and there are significant differences of the level of knowledge among faculties. Starting with the students of faculties with the lowest points, all students should be provided with information on HIV/AIDS and other sexually transmitted diseases.

P036

Is there any risk for chlamydial infection in women who use different type of contraception

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The aim of the study was to evaluate the relation between contraceptive methods and Chlamydia infections.

Methods: The prevalence of contraceptive methods uses in association with Chlamydial pelvic inflammatory disease in 180 hospitalised and outpatient subject was studied. A method of direct immunofluorescence (DIF) was used for detection of Chlamydial infection and the ELISA test for determining IgG antibodies against *C. trachomatis* in the patients' sera.

Results: 153(85%) patients used contraception: 65 (42.48%) -condom (periodically), 50(32.68%) oral contraception and 38(24.84%) patients-IUD. Thirty-eight (21.11%) patients were positive to *C.trachomatis*. Positive *C. trachomatis* was confirmed by DIF method in 27(15.00%) cases, by ELISA 9(5.00%) and by group antigens in 2 (1.11%) cases. Positive *C.trachomatis* was confirmed by DIF method in 6(3.33%) cases, by ELISA 5(2.78%) and by group antigens in 2 (1.11%) cases, where was condom (periodically) method of contraception. Four (2.22%) women were positive for *C.trachomatis* by DIF method in IUD users and 9 (5.00%) by ELISA method. Four (2.22%) patients had positive findings by DIF and 4 (2.22%) by ELISA method in group of oral contraceptive users.

Conclusion: Our data confirmed the importance of detection and treatment of the Chlamydia infections in contraceptive users.

P037

Increasing incidence of human papilloma virus infections among sexually active women

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Objective of this study was to present all possible manifestations, modes of transmission and complications of this viral infections.

Material and methods: Since 1st January 2008 until 1st June 2009 we have evaluated 1473 patients for different diagnosis in our Unit. Among them we detected 237 patients with signs of genital infection with HPV. All patients were offered HPV typing and other needed smears, among them vaginal, cervical smears on bacteriology and mycology examination, search for *Mycoplasma*, *Ureaplasma*, *Chlamydia trachomatis*, herpes simplex typ 2 (genital) and in all cases Papanicolau smear. In all patients with suspicious findings of the cervix we performed colposcopy, and if needed other alternative diagnostic features were added (biopsy, pathohystologic examinations, laboratory testing...)

Results: About 15% of all our patients have manifestations of infection with HPV. In 38,35% of them infection was caused by "high-risk"virus types, in 44,98% with "low-risk" types and in 11,87% with non-classified ones. Suspicious PAP smears were found in 39.72% of patients, and patohystology diagnosed 16,44% different findings in correlation with present infections. In 31,96% co-infection with *Chlamydia trachomatis* was found, in 10,04% co-infection with herpes simplex type 2 (HSV2) and in 9,59% viral infection with HPV, HSV2 and *Chlamydia trachomatis*. Also, in 28,76% different bacterial, protozoal or fungal infections were coincidental with HPV infections. Our analysis revealed that in 19,17% infection was connected with infertility problems, as well

as miscarriages (5,47%), extrauterine pregnancy (2,28%), lymphadenomegalia (1,37%), leukoplakia (5,48%), erythroplakia of the cervix (76,71%!!!) and even tumors of other systems in few patients (0,91%).

Discussion and conclusion: There are more than 130 HPV types (according to some authors even 200) that can infect the genital areas of men and women. Most of the infections stay unrecognized. Genital infection can be caused also by autoinoculation or reinoculation from different manifestations from elsewhere on the skin, or other mucose manifestations. Mechanical modes of contraception such as condoms offer little protection against HPV, since any skin-to-skin contact can result in transmission of the virus.

P038

Sexual behaviour and risk-taking behaviour among adolescent girls In Belgrade

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Introduction: As a result of accelerated sexual development, social factors and media, sexual activity of young girls increases continuously all over the world. Smoking, alcohol and drugs consumption influence their sexuality. Because of these risk factors, they are more exposed to sexually transmitted diseases, unexpected pregnancies and the risk for reproductive health. This study aims to investigate sexual behaviour and risk-taking health behaviour among adolescent females in Belgrade.

Design and Methods: The investigation included 100 sexually active adolescent girls, patients of the Department of Pediatric and Adolescent Gynecology, Mother and Child Health Care Institute of Serbia, Belgrade. The subjects were healthy, non-pregnant and all of them had had last one unprotected sexual intercourse. A questionnaire study observed sexual behaviour and risk-taking behaviour. Differences were statistically analyzed by means of descriptive statistic.

Results: The participants of the study were aged 15-19, the mean age was 17 years. About 48% of the participants smoke. Some of them started when they were twelve years old, and the mean age of start was 16,2 years. 76% of the adolescent girls use alcohol regularly, and 11% of them tried drugs. All of them had had sexual intercourse aged 14-18, the median age of the first sexual intercourse was 16,9 years. Only 46% of the young girls reported contraceptive, condom, use at very first intercourse. 15 participants (15%) always take condoms to prevent pregnancy and sexually transmissible infections and 45% of the subject do it from time to time. Only 7% of the participants take oral hormonal contraceptive pills and 33% of the young girls don't take any measures at all. Among the girls having sexual relations, 35% had one sexual partner, 38% had two partners, 13% three sexual partners and 14% of them four or more than four.

Conclusion: The study confirms the relationship between smoking, drinking, drug consumption and sexual activity. In discussions with adolescents showing one type of risk behaviour health service providers should make an effort to identify other modes of risk-taking. Sexual behavior, contraception choice, smoking, alcohol and drugs take are the reason for more exposed this vulnerable groups of adolescent females to sexually transmitted diseases and unexpected pregnancies. Because of that, we need to educate young people about the effects of risk-taking behaviour on partner choice and the risk of infection with sexually transmitted diseases.

The frequency of sexually-risky behaviour is high due to the infrequently used condoms and modern effective preventive measures and also because of a high number of partners.

P039

Comparison of human papillomavirus DNA testing and repeat Papanicolaou test in women with low-grade cervical cytologic abnormalities

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Background: A Papanicolaou (Pap) test result of atypical squamous cells of undetermined significance (ASCUS) presents a clinical challenge. Only 5% to 10% of women with ASCUS harbor serious cervical disease, but more than one third of the high-

grade squamous intraepithelial lesions (HSILs) in screening populations are identified from ASCUS Pap test results. Results of cervical cytology screening showing atypical squamous cells of undetermined significance (ASCUS) or low-grade squamous intraepithelial lesions (LSIL) indicate risk for high-grade cervical intraepithelial neoplasia (CIN 2 or 3). In a randomized trial we compared the test performance of human papillomavirus (HPV) DNA testing with that of 6-month repeat Papanicolaou (Pap) test in detecting histologically confirmed CIN 2 or 3.

Objective: To determine whether human papillomavirus (HPV) DNA testing of residual material from liquid-based Pap tests and referral of cases found to be HPV-positive directly to colposcopy could provide sensitive detection of underlying HSILs in women with ASCUS Pap results, compared with repeat Pap testing.

Methods: From a cohort of 509 women who had routine cervical examinations, 258 women aged 16-50 years with ASCUS or LSIL on cervical cytology screening to undergo either immediate HPV DNA testing or a repeat Pap test in 6 months. Cervical swabs for the HPV DNA testing and the Pap smears were obtained by our gynecologist. We tested the swabs for oncogenic HPV using the Hybrid Capture II assay. Our pathologists examined the Pap smears. All women were referred for colposcopy. One gynecological pathologist assessed the histology findings. We calculated test performance in women who completed the trial using CIN 2 or 3 as the reference standard.

Results: A total of 180 women completed the study. Compared with HPV DNA testing, which detected 87.5% (7/8) of the cases of CIN 2 or 3, repeat Pap smear showing high-grade intraepithelial neoplasia (HSIL) detected 14.1% (1/8) of cases ($p = 0.004$), and repeat Pap smear showing ASCUS, LSIL or HSIL detected 55.6% (5/9) ($p = 0.16$). Corresponding specificities were 50.9%, 95.2% ($p = 0.002$) and 53.6% ($p = 0.61$). Loss to follow-up was 18.1% in the HPV test group and 30.7% in the repeat Pap group ($p = 0.009$). Given the 10 cases of CIN 2 or 3 detected by HPV testing and the 8 cases detected by the repeat Pap smear.

Conclusions: For women with ASCUS Pap tests, HPV DNA testing of residual specimens collected for routine cervical cytology can help identify those who have underlying HSIL. HPV DNA testing was more costly but was associated with significantly less loss to follow-up. It may detect more cases of CIN 2 or 3 in women with low-grade cytologic abnormalities. By testing the specimen collected at initial screening, the majority of high-risk cases can be identified and referred for colposcopy based on a single screening.

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