

UPV EHU Osakidetza

Should LARC be the first choice for women of all ages?

Iñaki Lete
 Prof. Obstetrics and Gynaecology, Basque Country University
 Head of Gynaecology Department, University Hospital Araba-Santiago
 Vitoria, Basque Country, Spain

SARC (short acting reversible contraception) v/s LARC (long acting reversible contraception)

What makes the actual difference?

The estrogen compound

SARC (short acting reversible contraception) v/s LARC (long acting reversible contraception)

Other differences

SARC	LARC
<ul style="list-style-type: none"> Designed to be used <ul style="list-style-type: none"> Daily Weekly Monthly Provide acceptable cycle control Users controlled Efficacy related to compliance 	<ul style="list-style-type: none"> Designed to be used <ul style="list-style-type: none"> Every three months Every 3-5 years Every 10 years Specific bleeding pattern Provider's controlled Efficacy not related to compliance

Role of the estrogen

“Early on, it was discovered that an estrogen was needed to ensure proper cycle control, ensure contraceptive reliability and counteract the androgenic effects of early progestins”

“This led to the concept of combined estrogen and progestin oral contraceptives”

Dhoot M. Eur J Contracept Reprod Health Care, 2010, 15(Suppl 2):S12-8

Role of the estrogen

Estrogen

- Anti-androgenic effect
- Enhances the antigonadotropic effect of progestins (by FSH suppression)
- Substitutive effect (compensates ovarian blockade)
- Counterbalances the effect of progestins on the endometrium

THROMBOEMBOLISM
 Number of reported adverse reactions per 100000 users.

Fig. 8—Thromboembolic episodes reported to the Swedish Adverse Drug Reaction Committee, 1965–77, and calculated per 100 000 users of oral contraceptives.
 Mean numbers for the periods 1966–70 and 1974–77 are indicated by broken lines.

Dhoot M. Eur J Contracept Reprod Health Care 2010, 15(Suppl 2):S12-8 Böttiger LE et al. Lancet 1980;1(8178):1097-101

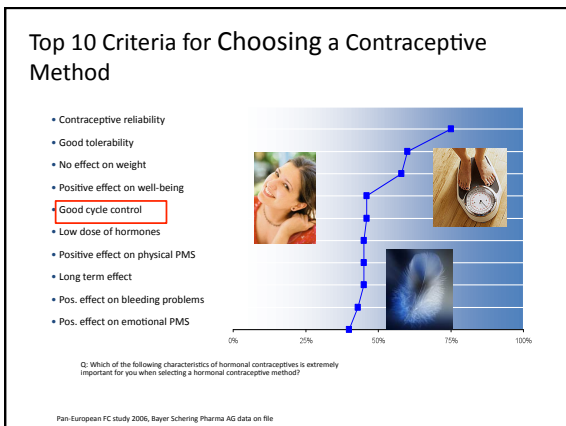
Challenges of providing contraception – attributes desired by women

Very desirable/essential (dark blue), Somewhat desirable (red), Not at all/slightly desirable (green)

Attribute	Very desirable/essential	Somewhat desirable	Not at all/slightly desirable
Taken daily	16	24	60
Taken weekly	37	36	27
Taken monthly	66	20	14
Clears acne	59	25	16
Steady constant delivery	67	20	13
Effective with low-dose hormones	72	16	12
Not taken daily	75	15	10
Regulates cycle	78	14	8
Discreet	80	14	6
Few side effects	86	6	8
Affordable	92	5	3

N = 1117 (US women)

Thompson MM. Sexuality, Reproduction and Menopause. 2006;4:74–79.

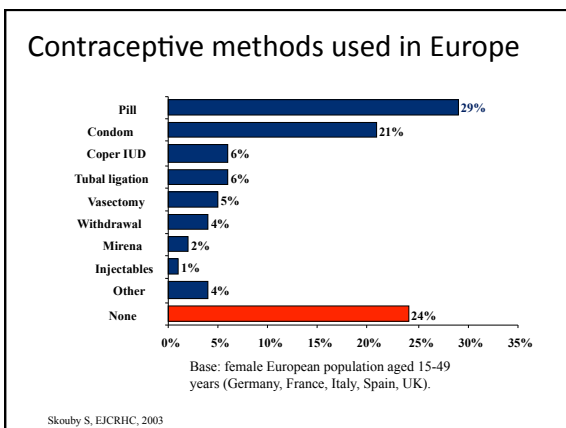


Failure rates in perfect use versus typical use

Method	% of unintended pregnancies within first year	
	Typical use	Perfect use
Withdrawal	27	4
Condom	15	2
COC	9	0.3
Patch	9	0.3
Ring	9	0.3
3-Month Injectable	3	0.3
Copper IUD	0.8	0.6
Levonorgestrel IUS	0.2	0.2
3-Year Implant	0.05	0.05

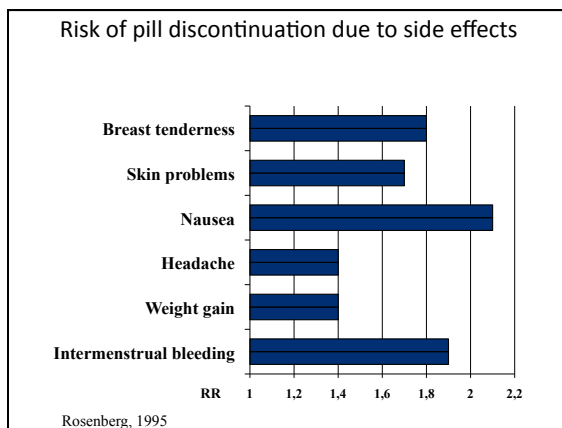
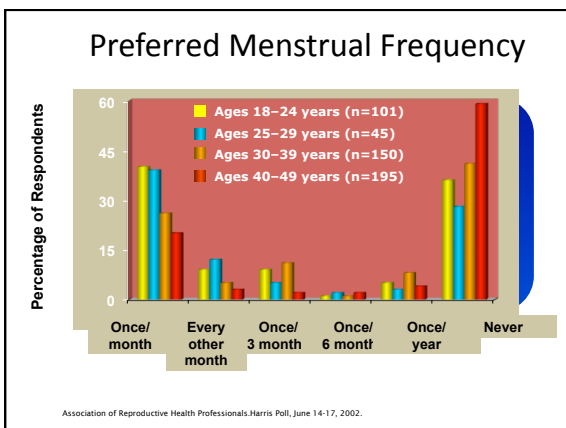
COC=combined oral contraceptives, including combined pill and progestin-only pill;
IUD=intrauterine device; IUS= intrauterine system

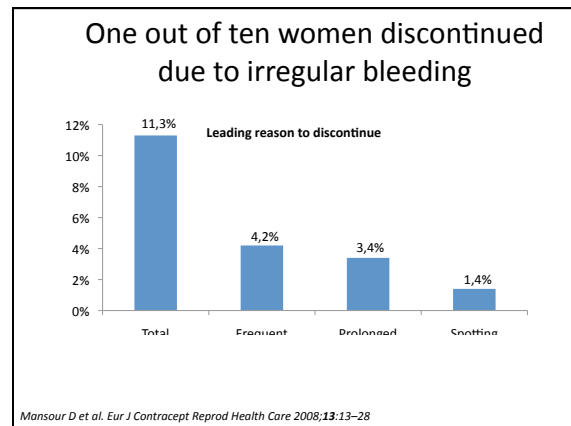
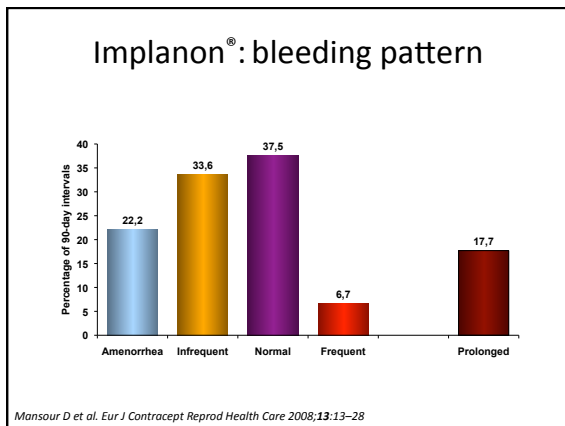
Trussell J. Contraception, 2011.



To be considered

- Efficacy is not the only request for a contraceptive method
- Considering the efficacy as the only factor affecting the election of a contraceptive method implants and IUDs should be the most used methods
- There are other factors besides the efficacy that women want





IUD and IUS: bleeding pattern

Side effect	3 months		60 months	
	IUS	IUD	IUS	IUD
None	49.8	64.5	84.9	74.1
Back pain	3.1	1.9	1.0	0.3
Pelvic pain	10.5	1.8	2.0	2.7
Headache	2.8	0.8	1.6	1.0
Depression	2.5	0.4	0.6	0.3
Irregular bleeding	32.1	22.2	6.3	18.8
Acne	3.5	0.4	1.8	0.3
Breast tenderness	3.1	0.2	1.0	0.7
Other	8.7	6.1	3.6	4.8

Andersson, 1994

OCs: There is more than Contraception...

Contraceptive Benefits	Additional Benefits
<ul style="list-style-type: none"> Unwanted pregnancies ↓ Abortions (Induced/spontaneous) ↓ Ectopic pregnancies ↓ Morbidity/Mortality in pregnancy 	<ul style="list-style-type: none"> „Cycle“ control ~50% Dysmenorrhea ~60% Anemia ~25% Acne, Seborrhea ~80% PCO ~50% Premenstrual Syndrome ~25% Pelvic inflammatory disease ~50% Benign ovarian tumors ~80% Benign breast tumors ~50% Endometriosis ~50% Ovarian-Ca. ~50% Endometrium-Ca. ~50%

SARC (short acting reversible contraception)

Advantages	Disadvantages
<ul style="list-style-type: none"> Users controlled <ul style="list-style-type: none"> Responsibility Self-care Empowerment More accessible worldwide Demonstrated benefits Cycle control 	<ul style="list-style-type: none"> Need compliance Effectiveness related to compliance Estrogen related concerns

LARC (long acting reversible contraception)

Advantages	Disadvantages
<ul style="list-style-type: none"> Do not need compliance Higher effectiveness Estrogen free contraception Some additional benefits 	<ul style="list-style-type: none"> Provider dependent <ul style="list-style-type: none"> Myths In some countries accessibility barriers Poorer cycle control

