Family planning – an European perspective

Kristina Gemzell Danielsson,
Chair Obstetrics & Gynecology,
Department of Women‘s and Children‘s Health,
Director, WHO collaborating centre for
Research & Research Training in Human Reproduction
Karolinska Institutet /Karolinska University Hospital
Stockholm, Sweden

WE CAN END POVERTY 2015 MILLENNIUM DEVELOPMENT GOALS

UNITED NATIONS

Goal 5

Improve maternal health

TARGET
Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Achieving good maternal health requires quality reproductive health services and a series of well-timed interventions to ensure a women's safe passage to motherhood. Failure to provide these results in hundreds of thousands of needless deaths each year—a sad reminder of the low status accorded to women in many societies.

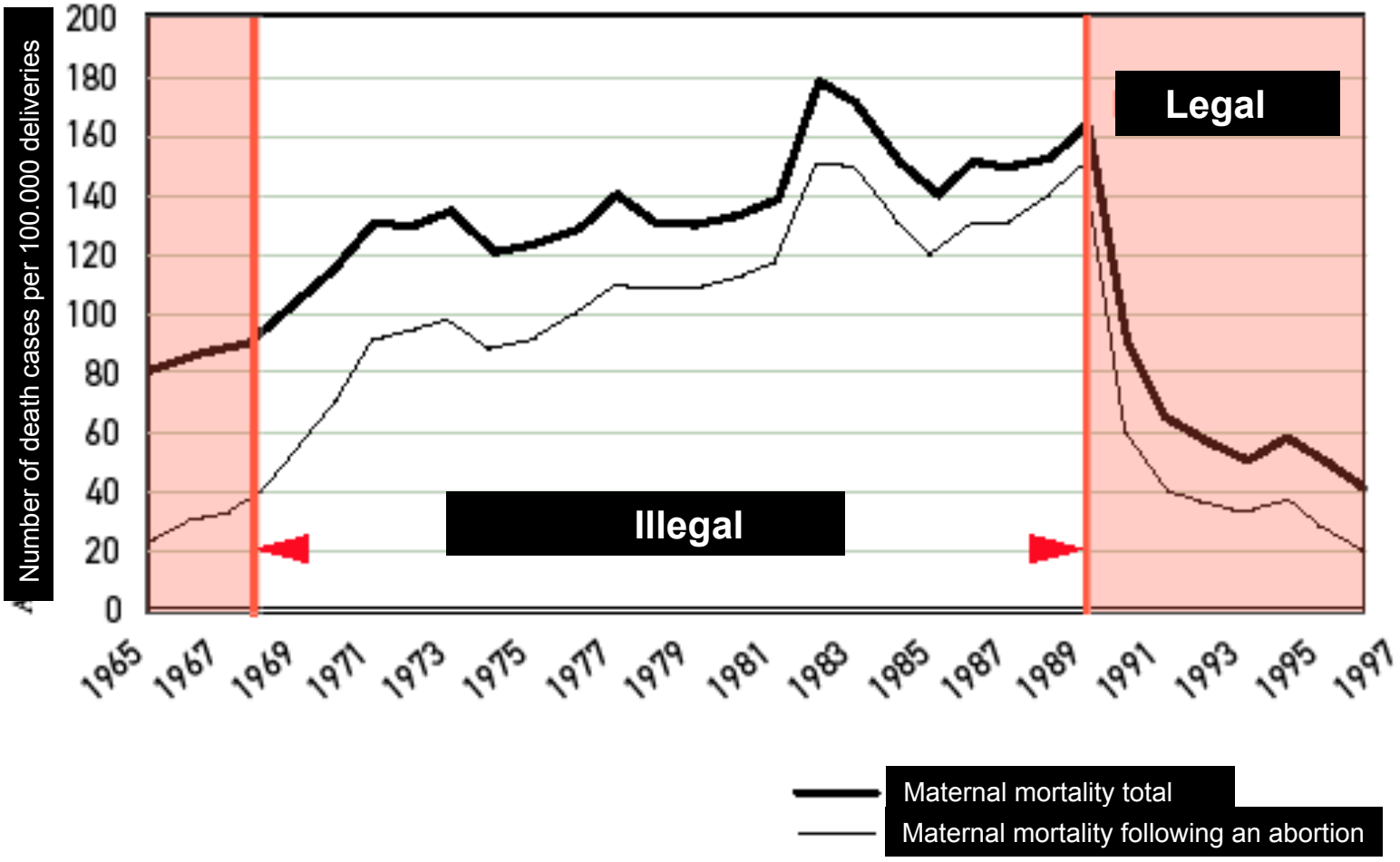
Measuring maternal mortality—death resulting from the complications of pregnancy or childbirth—is challenging at best. Systematic underreporting and misreporting are common, and estimates lie within large ranges of uncertainty. Nevertheless, an acceleration in the provision of maternal and reproductive health services to women in all regions, along with positive trend data on maternal mortality and morbidity, suggest that the world is making some progress on MDG 5.

Contraceptive a key indicator regarding SRH.

Who decides over fertility?

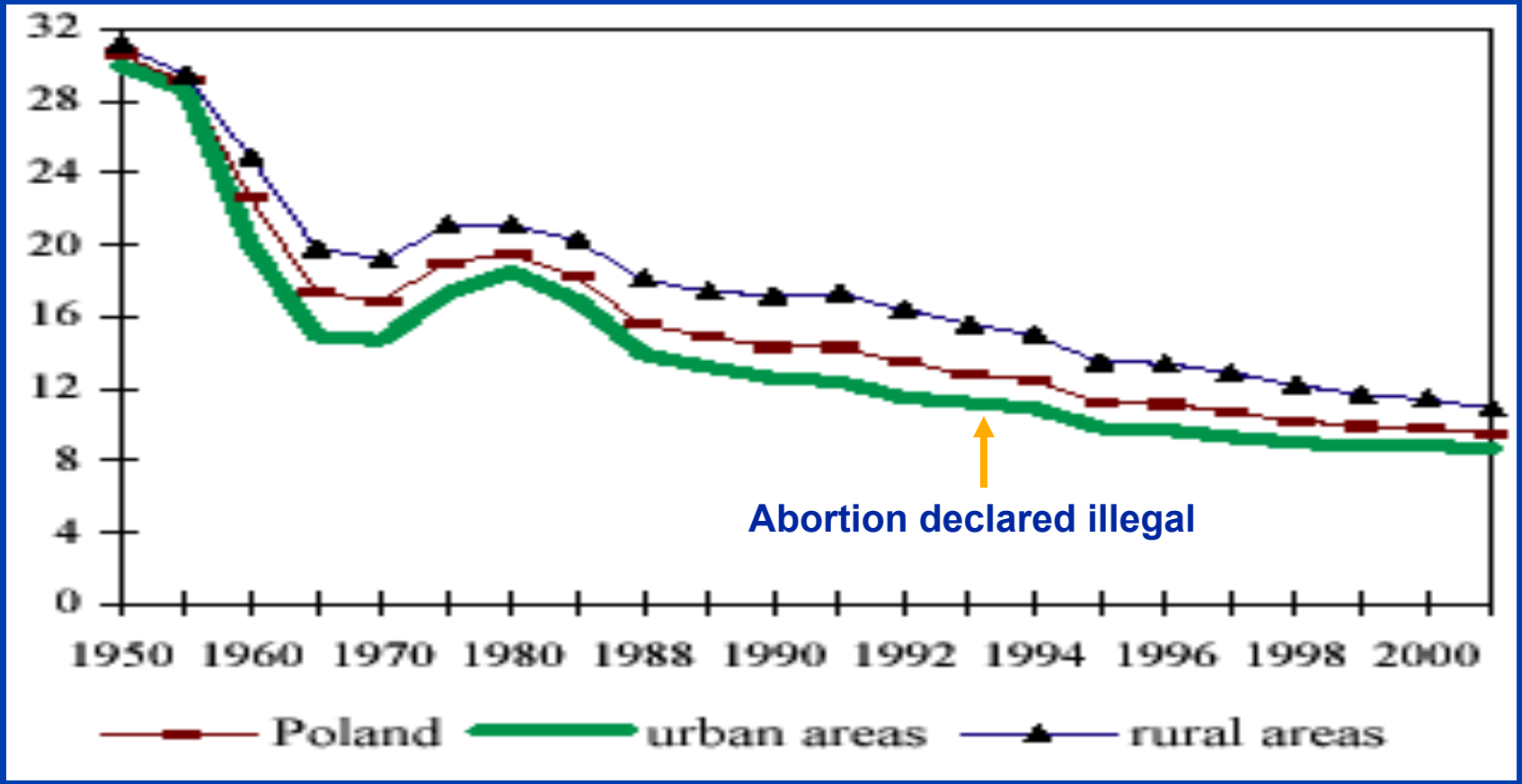
US-president Bush signing a law against late abortions, 2003

Legal abortion and maternal mortality: the Romanian example



Contraceprion in Europe. K Gemzell Danielsson

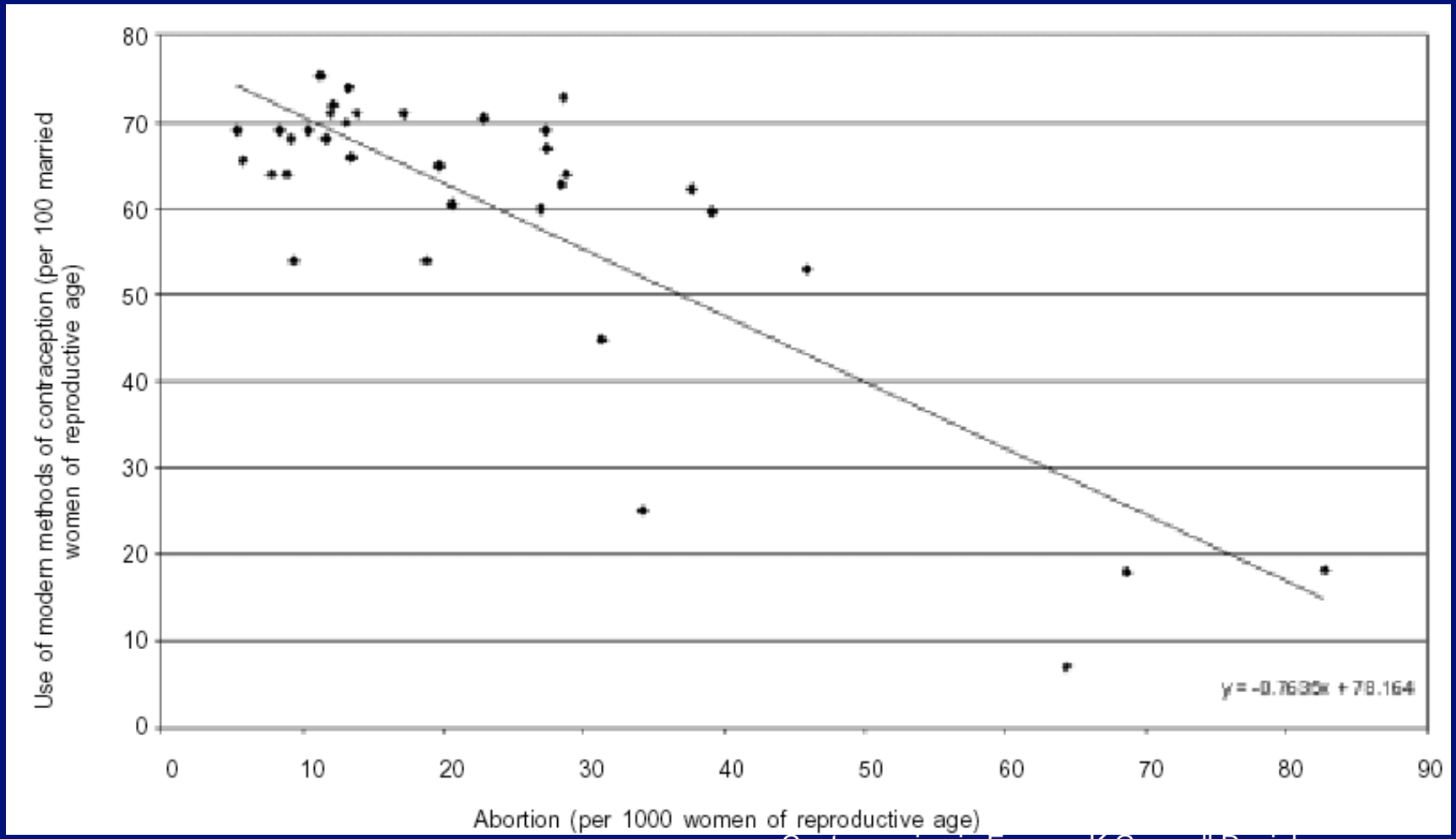
Making Abortion Illegal Does Not Increase the Birth Rate



E. Fràtczak, Institute of Statistics and Demography, Warsaw School of Economics, Poland

The link between contraceptive prevalence and abortion

Levels of use of modern contraception and abortion rates
countries with total fertility rate between 1.7 and 2.2.

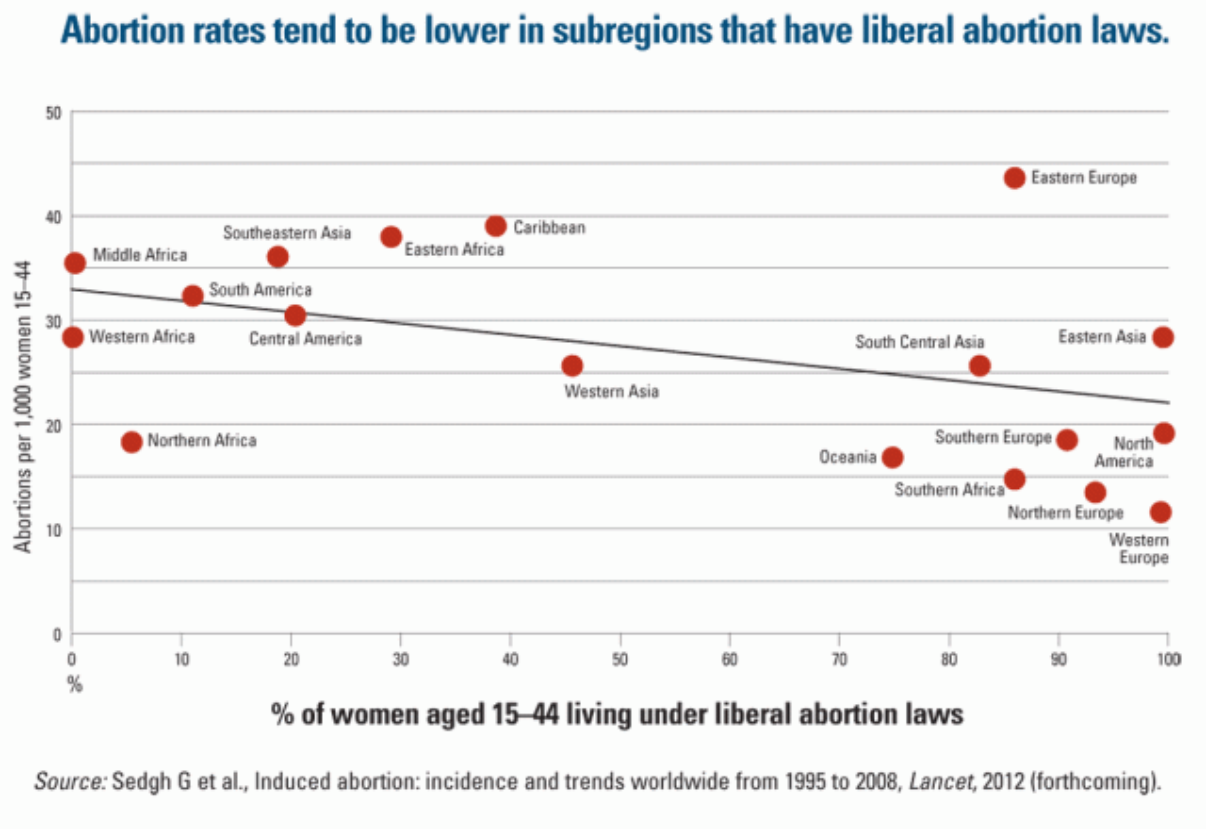


Contraceprion in Europe. K Gemzell Danielsson

WHO; Progress in Reproductive Health, 2003

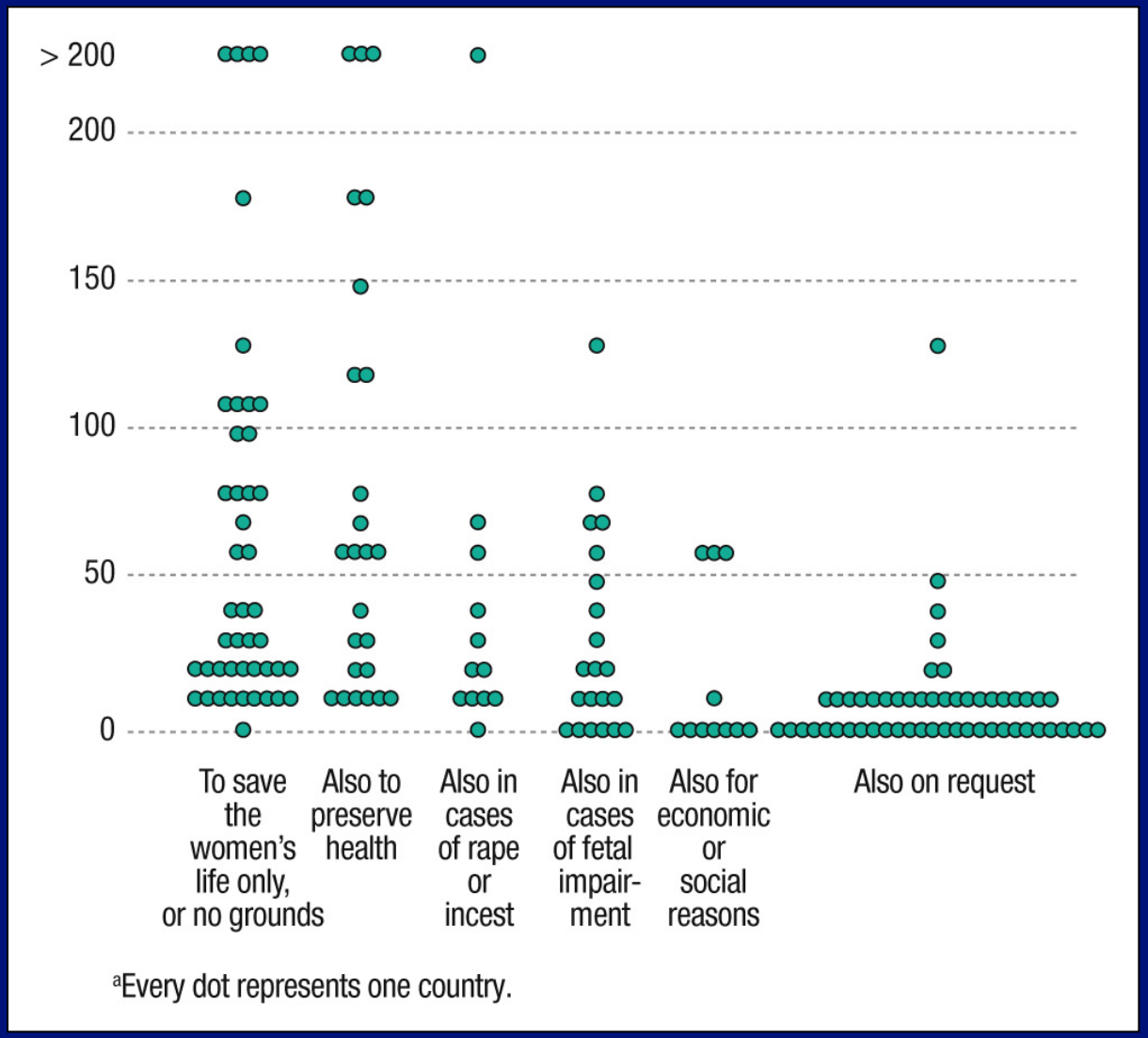
Abortion rates and abortion laws

The "Great Divide" in abortion legislation
Developed vs developing countries



Sedgh G et al., Lancet 2012

Deaths attributable to unsafe abortion per 100 000 live births, by legal grounds for abortion

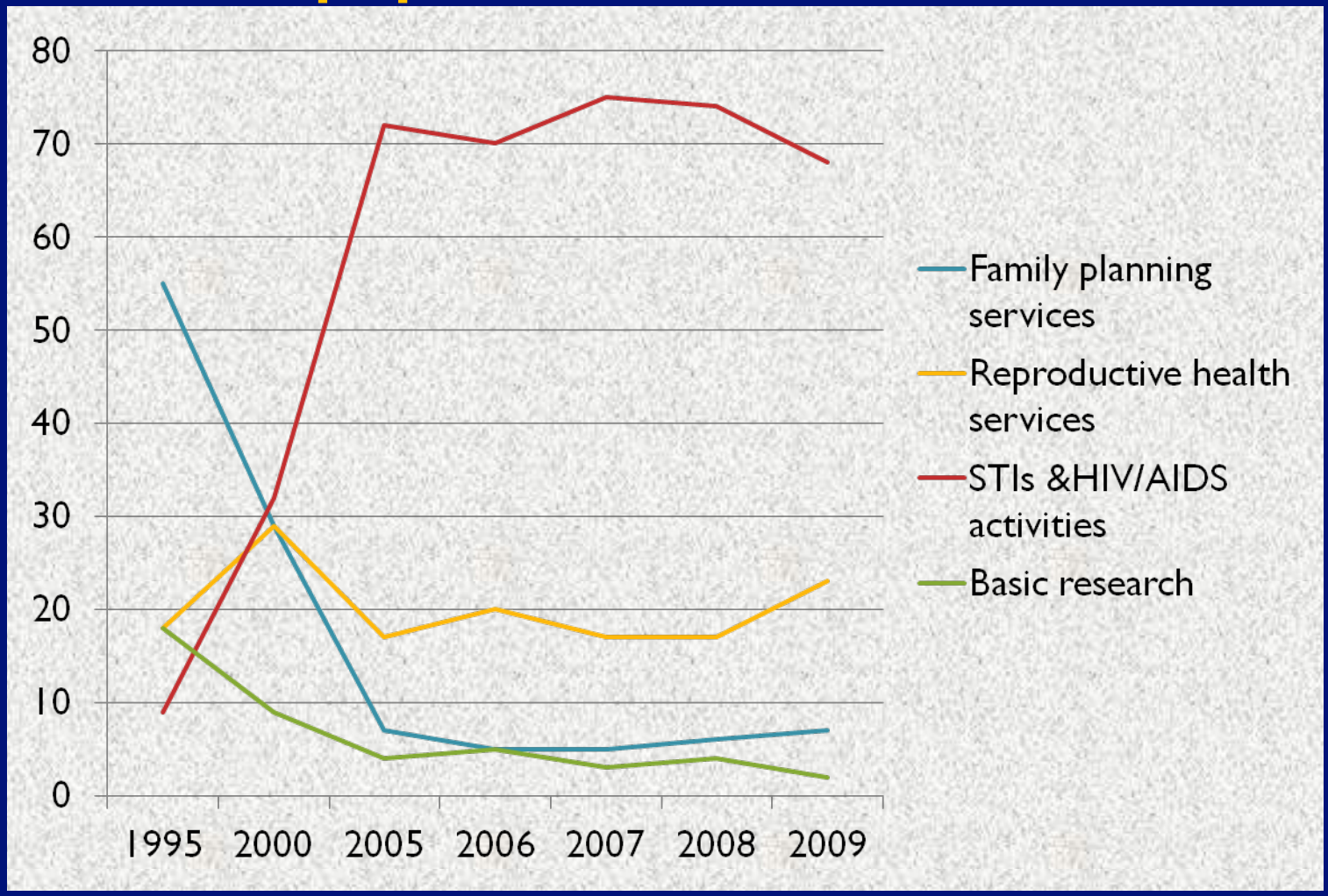


As legal access to safe abortion becomes liberal, unsafe abortion mortality declines.

Source: *World Health Report, 2008*; and

***Women and Health: Today's Evidence, Tomorrow's agenda*, 2009.**

ICPD categories as percentage of total population assistance



1.3 1.8 6.8 7.3 8.8 10.4 10.8 Total assistance (US billion)

Family planning – a political minefield

•250 million women across the world need access to family planning, in the form of information and regular supplies of contraceptives

•Family planning a taboo subject that attracts opposition from an array of opponents

•"A major summit held in London, 2012 to direct money into family planning in the developing world

•The Gates Foundation; Aim : developing more efficient forms of contraception,

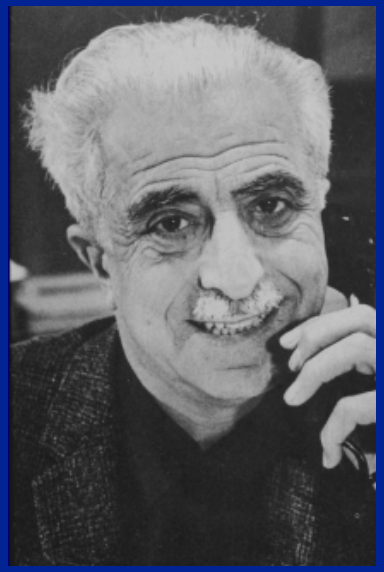
Contraceprion in Europe. K Gemzell Danielsson

‘How it used to be’

‘It is recommended that women after intercourse should first rinse their vagina followed by knee-bends 10 times and then run around the room 3 times. This really is a impertinence to ask from a woman. After intercourse, she is supposed to run around in the room and make knee-bends while the man turns around and sleeps!’

‘ Empfängnisverhütung - Mittel und Methoden’,
Magnus Hirschfeld und Richard Linsert, Berlin, 1928

We have come a long way!



A 1951 dinner party in New York is considered to be the birth of the Anti-Baby Pill

Margaret Sanger in her 70s and her rich friend Katharine McCormick, ask the scientist Gregory Pincus, how much money he would need to develop a method for women

1961: First pill in Europe

Prescribed to married women only with the husband's approval

Contraceprion in Europe. K Gemzell Danielsson

Increased CHOICE in contraception

- Over the past 50 years we have seen significant changes in the contraceptive landscape
- 1960s: introduction of the COC and Cu-IUD
- 1970s: introduction of POPs and depot gestagen
- 1980s: introduction of the first implant
- 1990s: introduction of LNG-IUS
- 2000s: the patch, the vaginal ring, medium dosed POP

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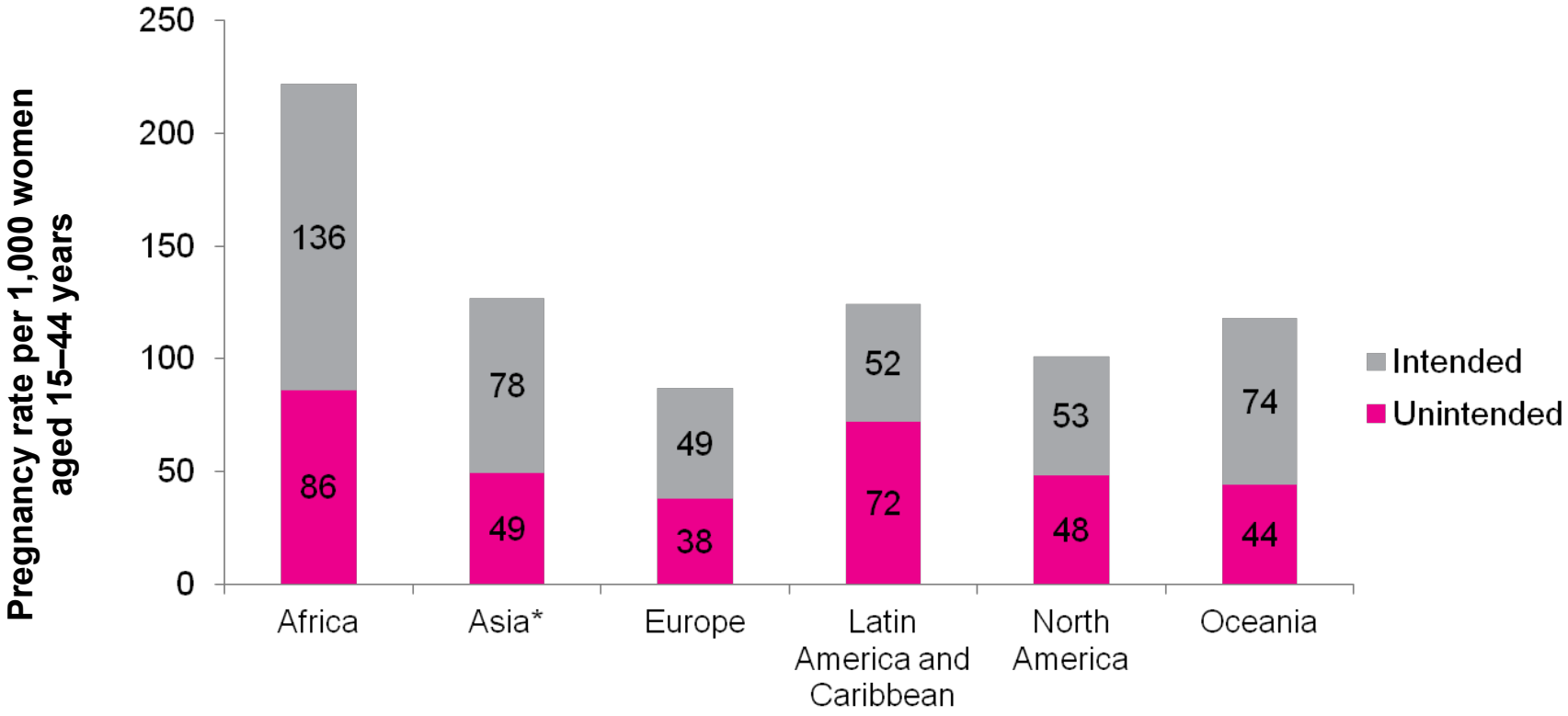
Barriers to increased use of contraception

- Political, cultural and religious influences
- Lack of education on contraception for women
- Economic factors that can lead to poor quality healthcare services and contraceptive access
- Limited choices of contraceptive method reducing acceptability and continuation

Annual rates of unintended and intended pregnancy: variation by continent/region

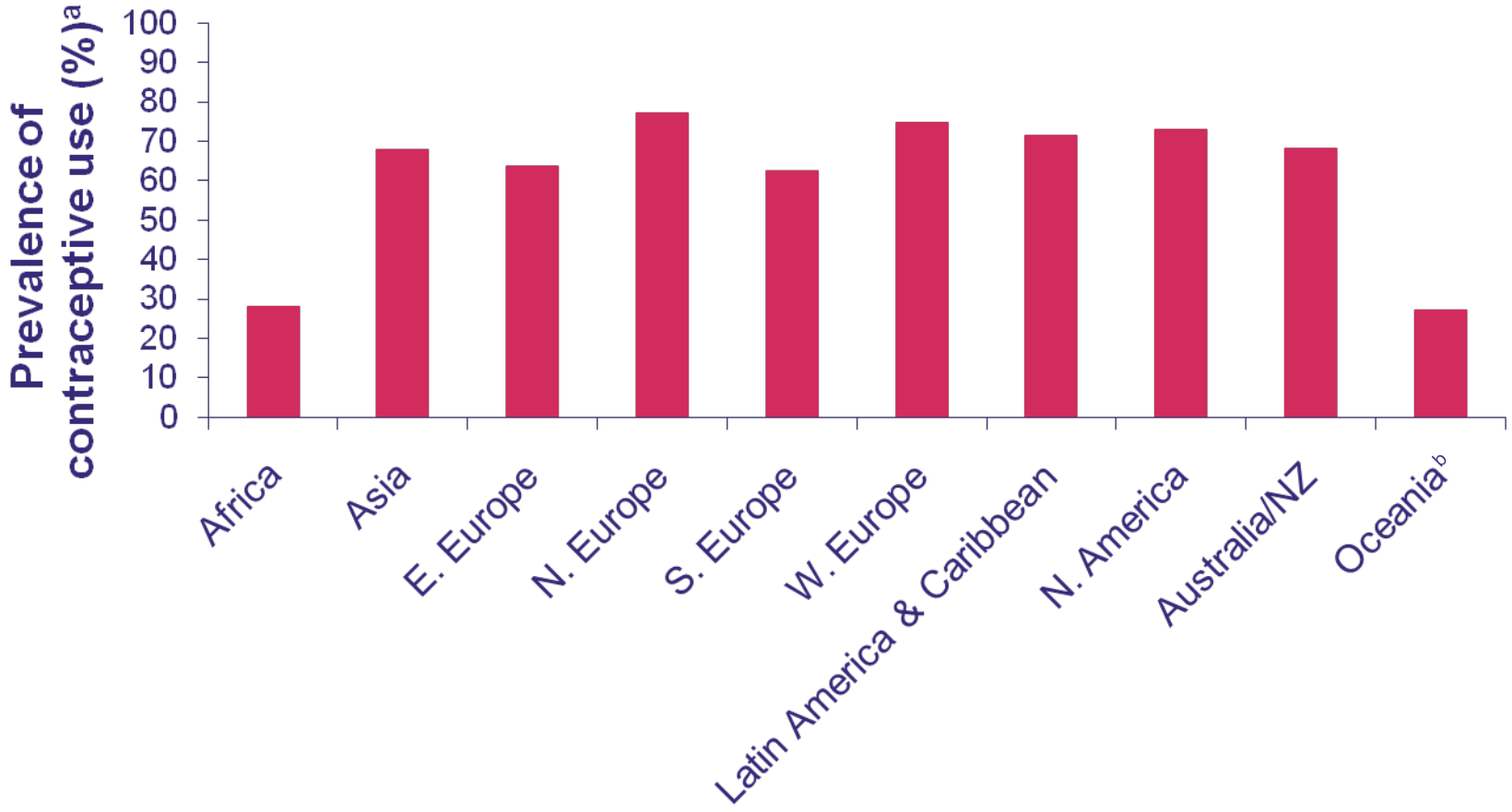
Highest and lowest rates of unintended pregnancy in Africa and Europe, respectively



Data reported for the year 2008
*Excludes Japan

Singh *et al*. 2010

Global contraceptive prevalence by country

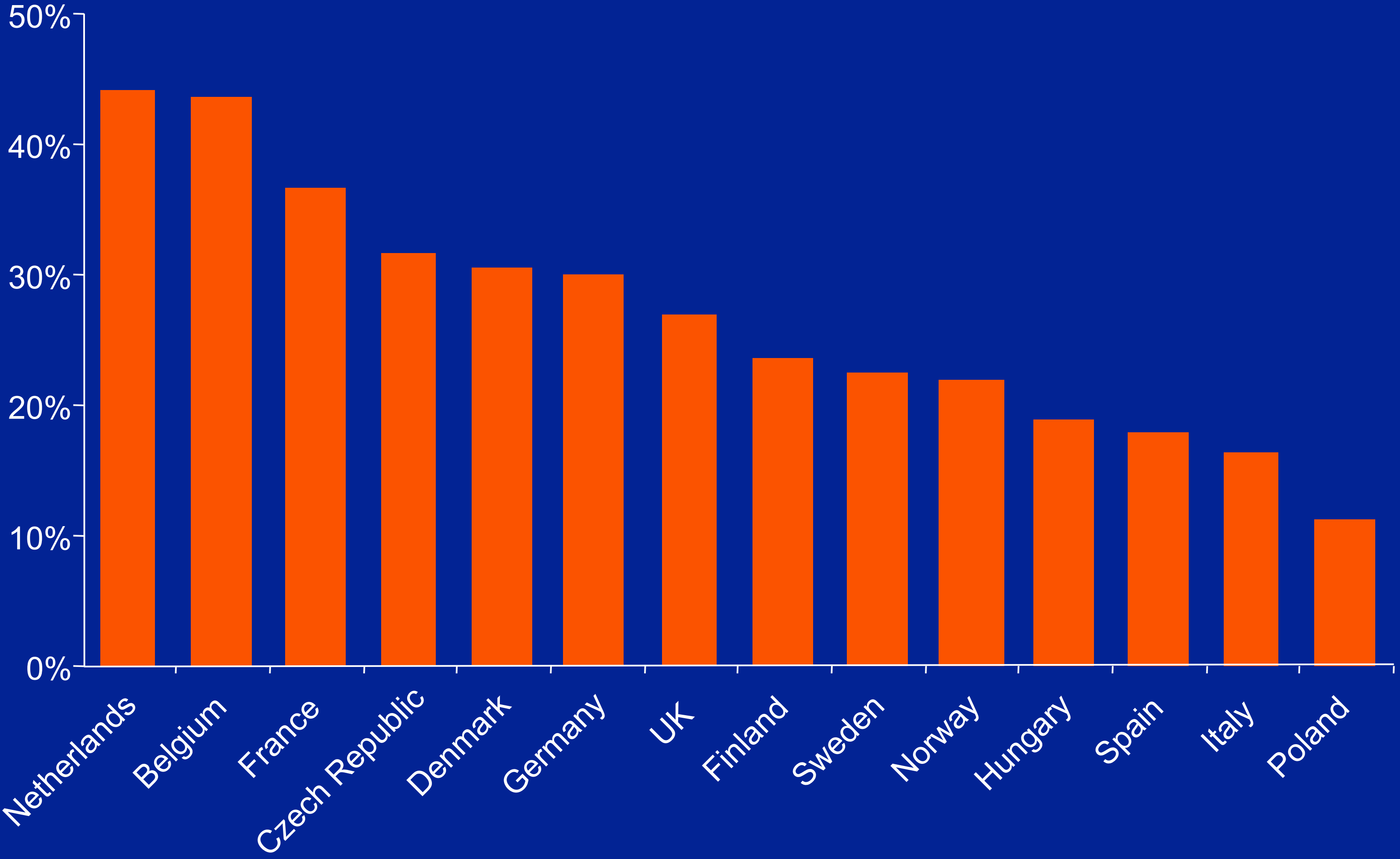


a. % using contraceptives among women who are married or in union (any method)

b. Melanesia/Micronesia/Polynesia

UN, World Contraceptive Use 2007.
Available at http://www.un.org/esa/population/publications/contraceptive2007/contraceptive2007.htm

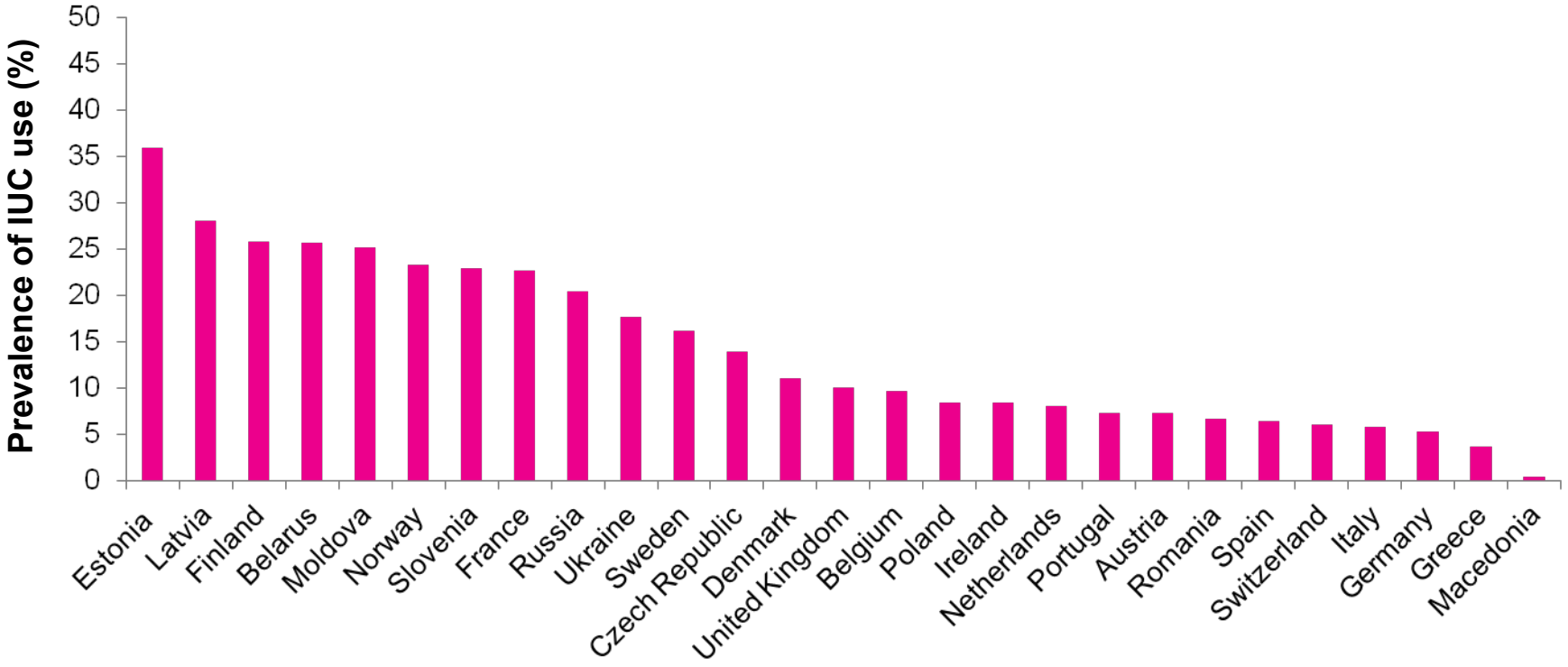
Differences in hormonal contraception utilisation rates, 2007



Source: World Bank

Prevalence of IUC use within Europe*

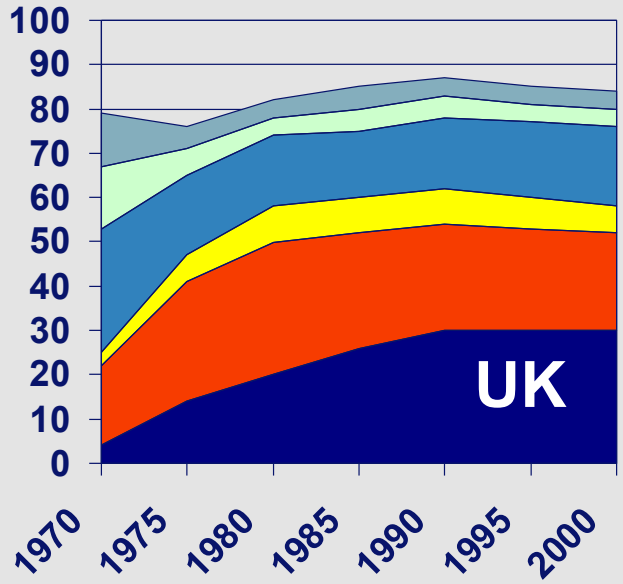
***Prevalence of IUC use among women aged 15−49 years, married, or in a union.**

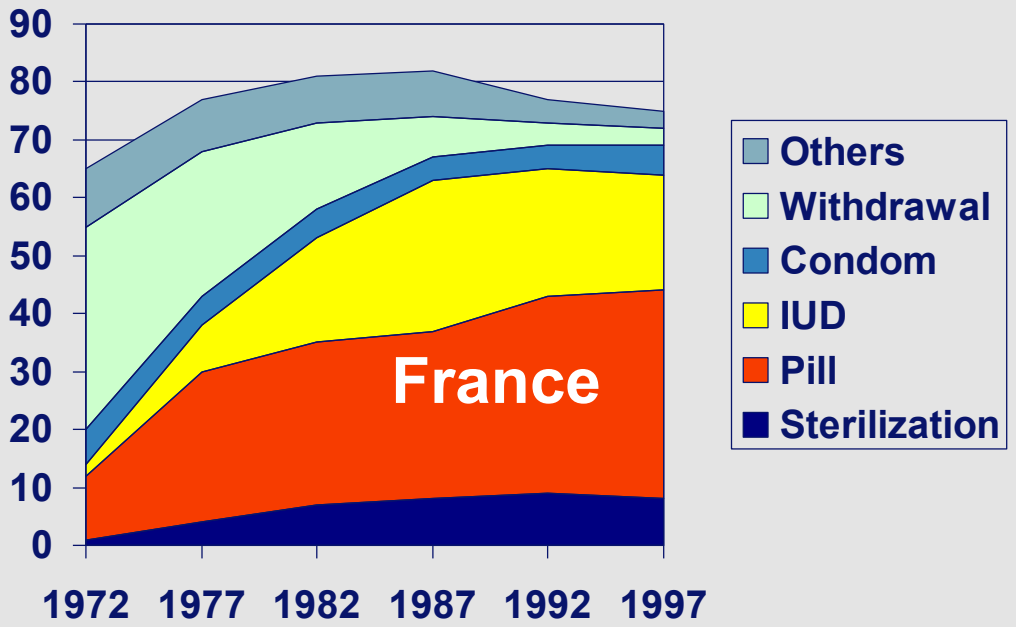


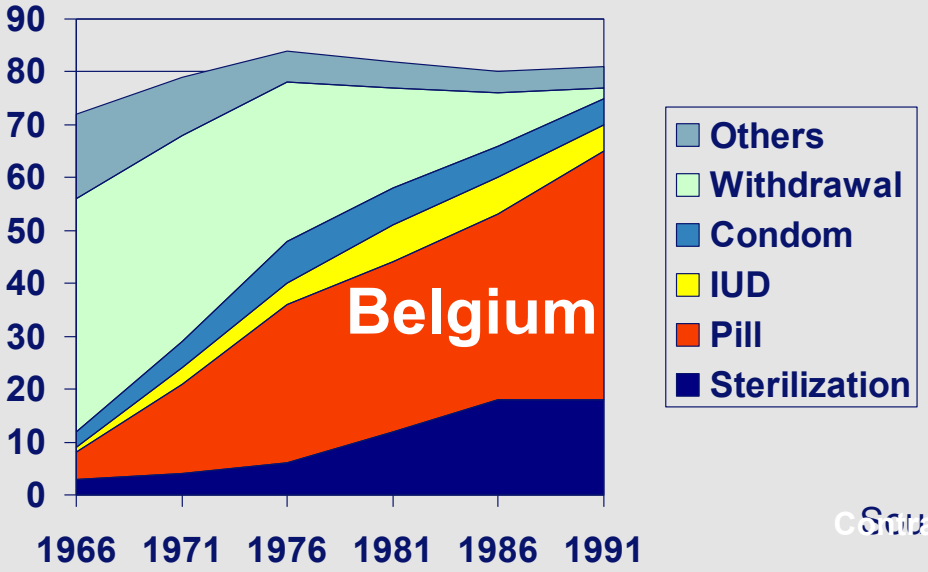
IUC, intrauterine contraception

United Nations, 2011

How do couples contracept?





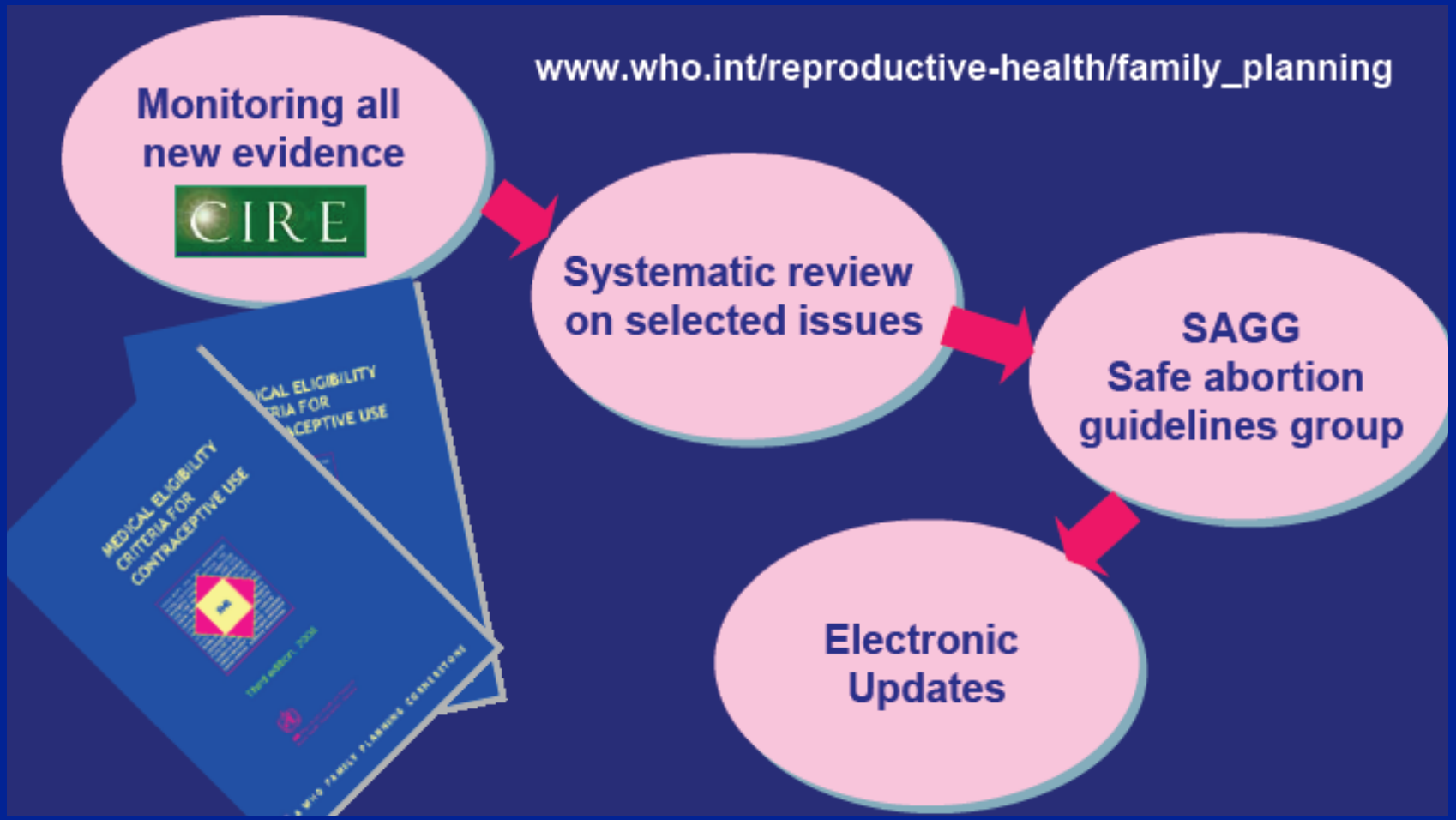


Prevalence of contraceptive use among married women

Source: UN Population Division 2004, NSFG 2002

Contraception in Europe K Oinzel Danielsson

Guidance based on evidence and kept up-to-date



Contraceptive prevalence, EU

- Contraceptive prevalence rate was defined as the percentage of women of reproductive age (usually 15-49 years old)
- *OC th*e most frequent contraceptive method in most countries;
- prevalence of use ranging from 64.5% in Portugal to 17.9% in Spain, 15.6% in Malta, 15.0% in Italy, and 13% in Romania
- IUD use highest in Finland (22.8%), 22.4% in Slovenia ,16.3% in France, 4.9% in Spain and 3.6% in the Netherlands.
- IUD use lowest in Malta
- Estonia highest rate of *withdrawal* 24.3% and France lowest reported rate (0.7%).

Reprostat 2011

Contraceptive prevalence EU

- The ratio *female:male sterilisation* marked variation;
- the Netherlands, 7 % of men sterilised, >than female sterilisation (3%).
- A higher rate of female than male sterilisation was found in most other countries where available.
- Reliable figures for vasectomy not always available, (S-Eur countries)
- The highest prevalence of female sterilisation in Finland (11.5%)
- The highest prevalence of vasectomy in UK (10%).
- Use of the *condom* varied from 50% in Greece and 39.4% in Malta to 9.0% in the Netherlands and 7.8% in France.
- The estimated proportion of couples using *no contraception* ranges from 4.5% (in Finland) to 41.9% (in Romania).
-

Reprostat 2011

Contraceprion in Europe. K Gemzell Danielsson

OC use

- All countries: OC available only on prescription.
- UK, France and Sweden midwives/ trained nurses prescribe the pill,
- All other Member States require a prescription by a physician.
- In two Member States (the Czech Republic and Hungary) the prescriber must be a gynaecologist.
- Pill reimbursement policies vary between countries:
  - costs are fully covered for users in UK and Slovenia,
  - some countries only when provided for therapeutic indications (acne, HMB..)
  - only certain types of OC (fex Poland and Portugal)
  - for certain groups (e.g., younger women in Germany and Sweden, or those with a low socio-economic status in Malta).

Reprostat 2011

Emergency contraception

- LNG-EC available OTC in several countries.
- EC provided totally free of charge in some countries (Luxembourg, Portugal , UK), and
- others (France and Germany) reimburse the costs of certain ECPs or
- for certain groups
- **Hormonal EC not available in Malta!**
- IUDs can be legally inserted in France, Sweden and UK, by trained nurses/ midwives. (“task shifting”)
- In all other countries IUD must be inserted by a physician. (Finland?)

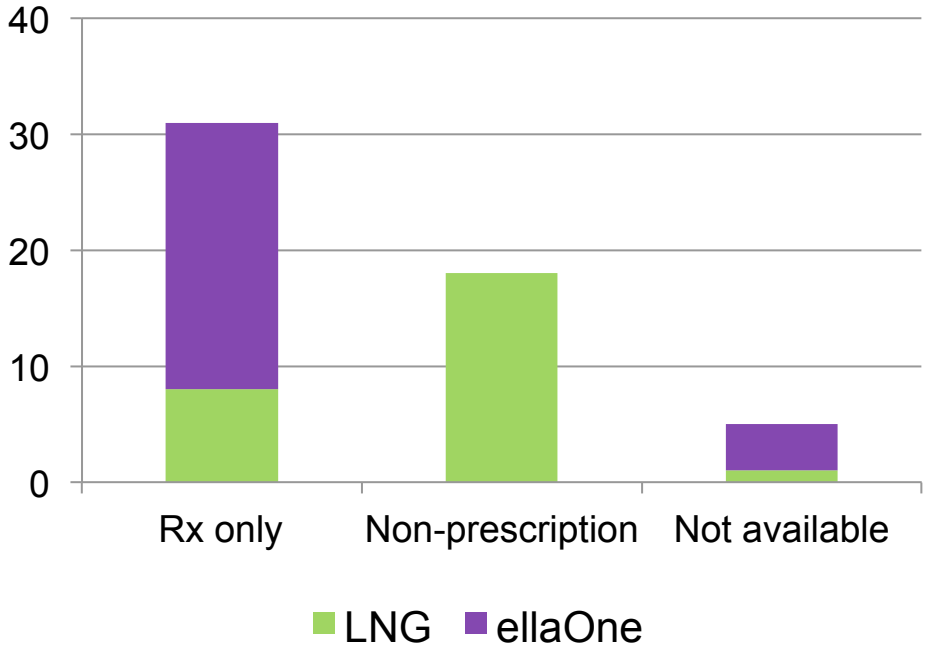
Reprostat 2011

Contraceprion in Europe. K Gemzell Danielsson

EC still requires Rx in many markets but LNG mainly OTC

HRA Pharma

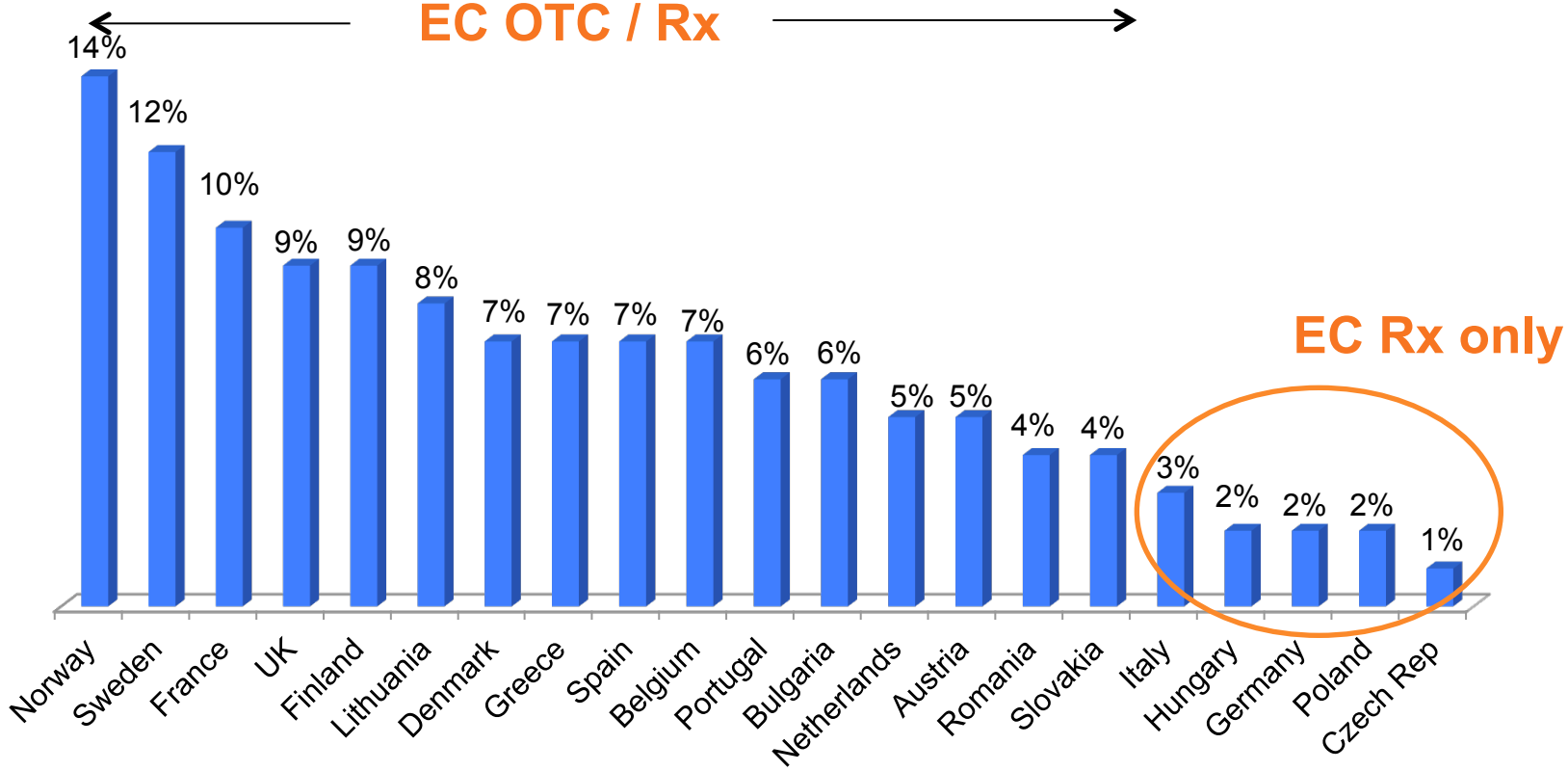
Legal status of EC in the EU
(27 countries)



OTC drives women's EC usage in Europe

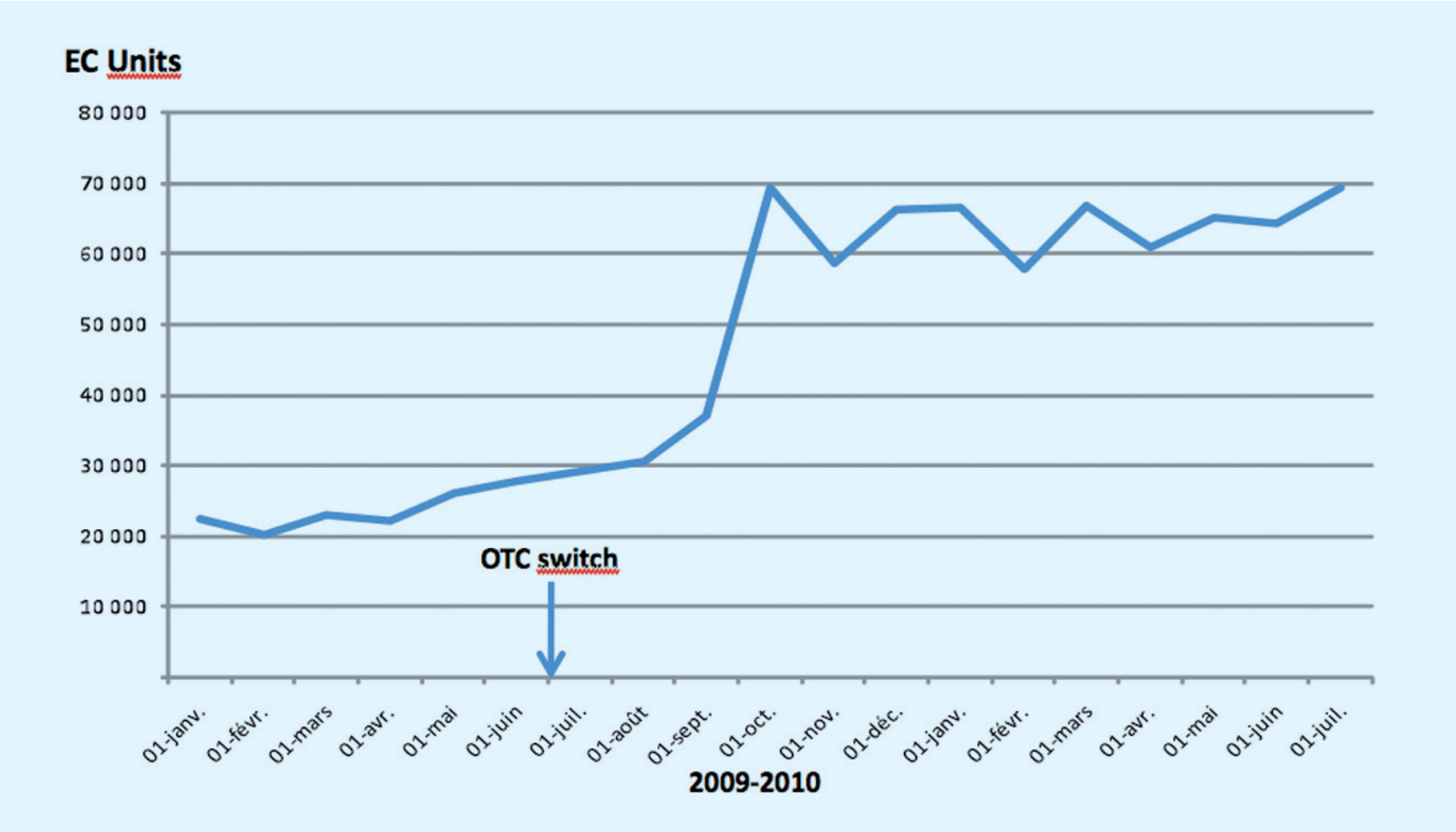
% EC use / women population 15-49 yrs

(EC units sold per year divided per number of women 15-49 yrs)



Source: IMS 2010

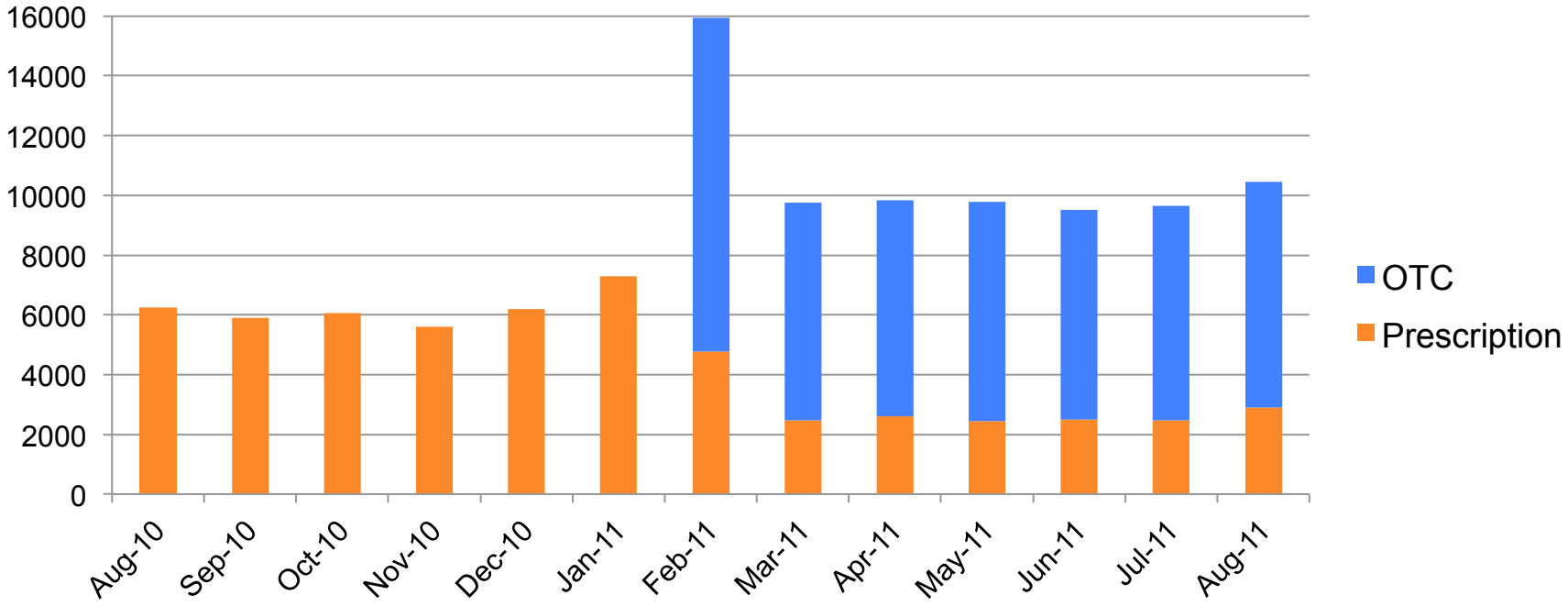
Broader access widens EC use
Spain example



Source: IMS data

Broader access widens EC use
Ireland example

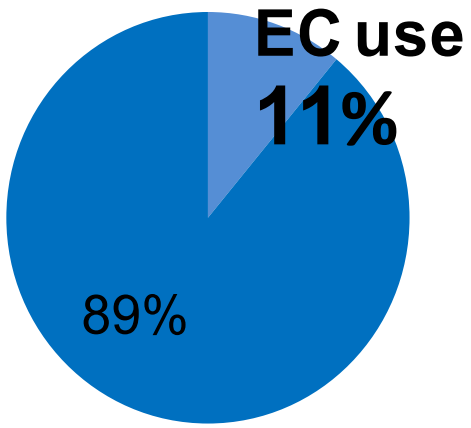
- **7 months after switch**
  - 72% women now purchase EC directly at Pharmacy
  - Market grown by 67%



Source: IMS data

Unawareness of risk is an explanation for underuse

Only 11% of women at risk of unintended pregnancy use EC (survey in women requesting a TOP)



Goulard et al, Contraception 2006

EC use still very low mainly due to unawareness of risk taken

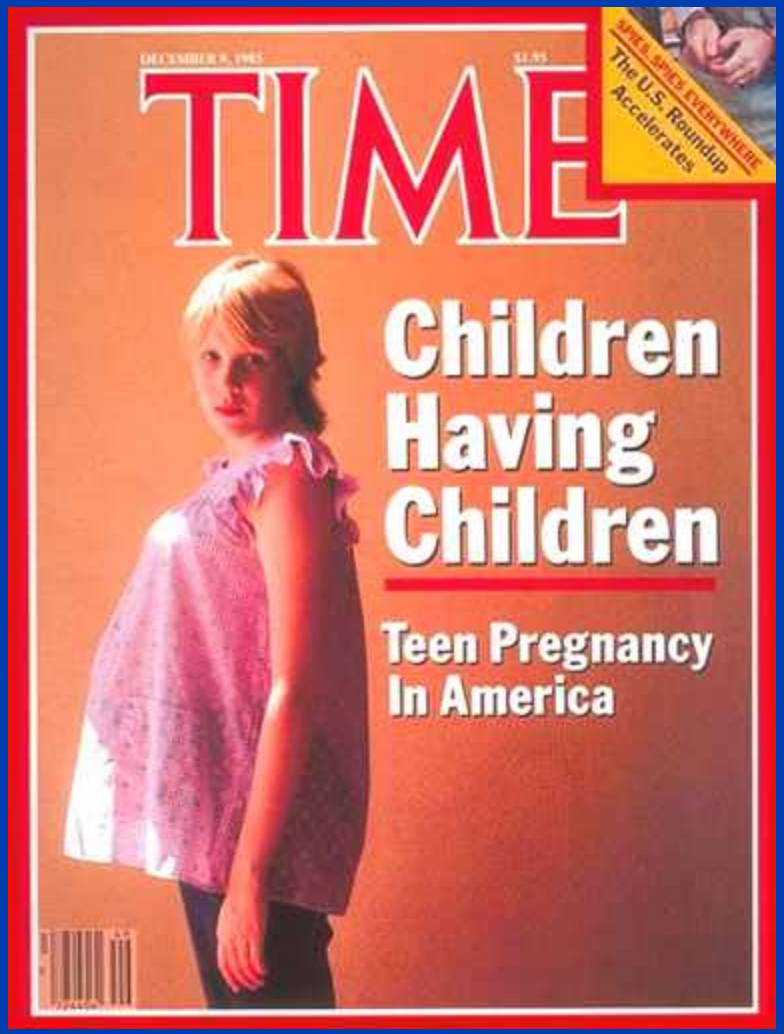
Key actors of EC provision in the EU

- **For LNG: many actors involved in EC provision**
  - Pharmacists
  - Nurses
  - School nurses
  - Family planning organizations
  - Midwives
  - Physicians

- **For ellaOne: still few actors**
  - Physicians (Rx) + pharmacists (dispensation)
  - Family planning organizations
  - In the UK, nurses can be allowed to prescribe
  - Sweden midwives prescribe ellaOne


ECEC
european
consortium
for emergency
contraception

Ambivalence about getting pregnant

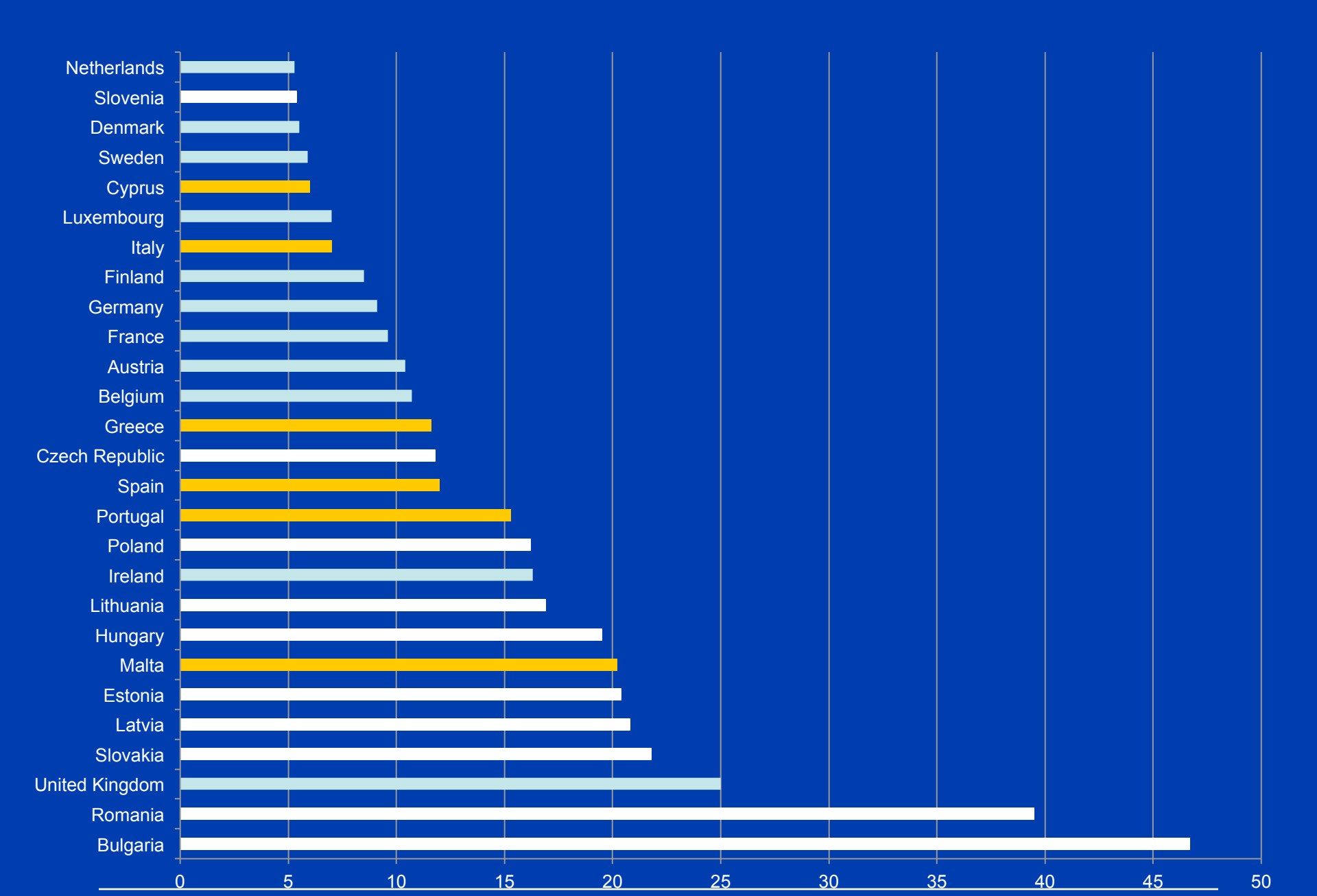


Teenage Pregnancy
–a strange way out?

Teenage pregnancy /mothers.

High risk for another pregnancy/ abortion

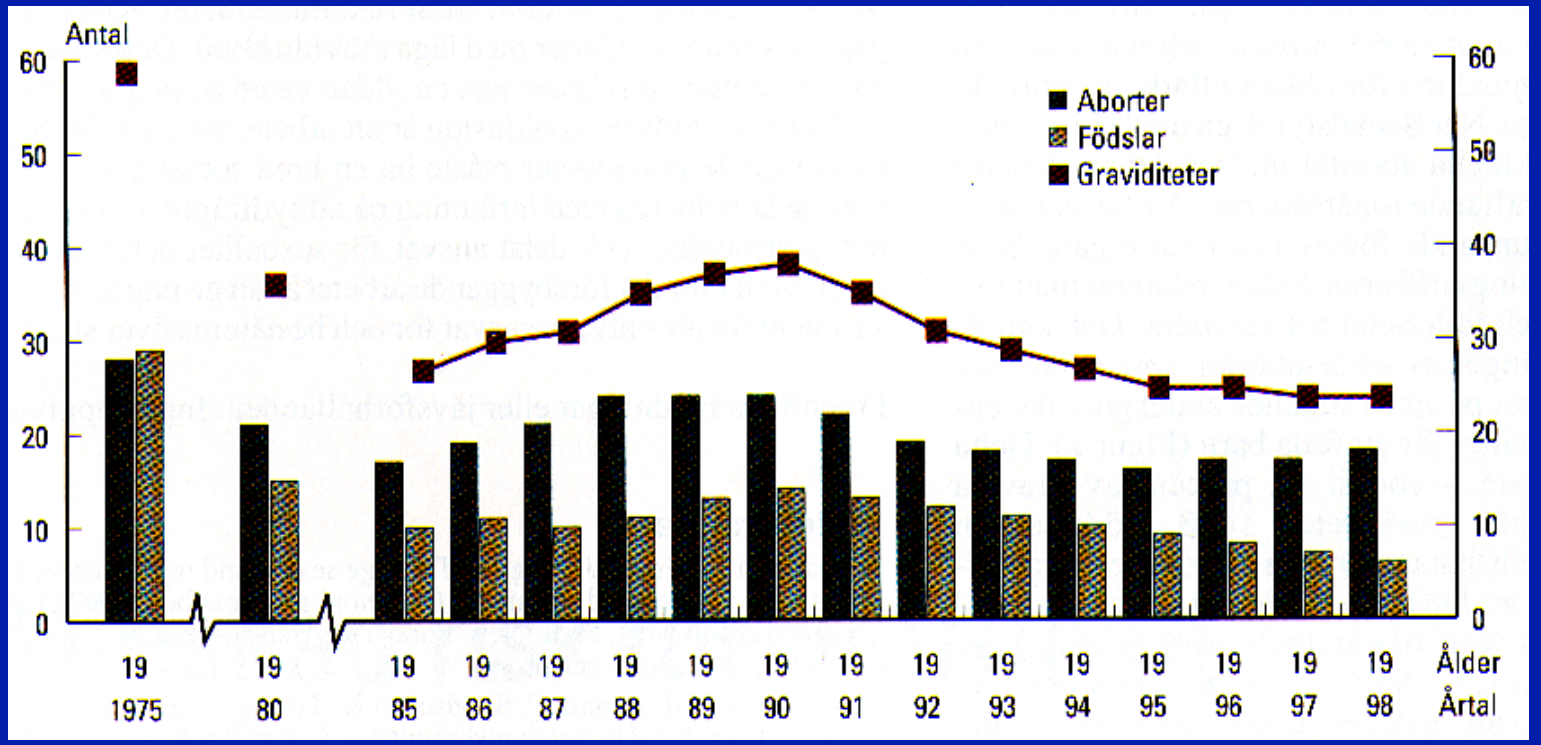
Falk G et al., 2008, Stevens-SimonC et al., 2001, Schelar et al., 2007



Reprostat 2011, Teenage birth rate

K Gemzell Danielsson

Teenage pregnancies
births and induced abortions



DitchThePill.org

Empowerment for Women

- Home
- About Us
- Dr. Jones' Blog
- Dangers of Birth Control Pills
- Birth Control Alternatives
- Migraine Headaches
- Third Generation BCP's
- Match the Pill
- Neutralize BCP Toxins
- Blood Clots
- Strokes
- Heart Disease
- Heart Attacks
- High Blood Pressure

"You're Being Slowly Poisoned… by Birth Control Pills!"

Ever Wonder Where Your Migraine Headaches, PMS and Breast Cancers Come From?

For the Last 50 Years, Big Drug Companies and the FDA Have Deceived You for Greed

But Now, You *Can* Reverse The Pill's Toxic Effects

BREAKING NEWS! …"Public Citizen Petitions FDA to Ban Third-Generation Birth Control Pills." Oral Contraceptives Containing Desogestrel are proven to cause dangerous and sometimes fatal blood clots.

Read Full Release Here

Are you confused about taking birth control pills (BCP's)? Well … you're not alone. Many women have been receiving conflicting advice about them. Perhaps you've taken them some time ago and noticed the negative effects they had on your body – or you're taking them now and wondering if they're doing any damage.

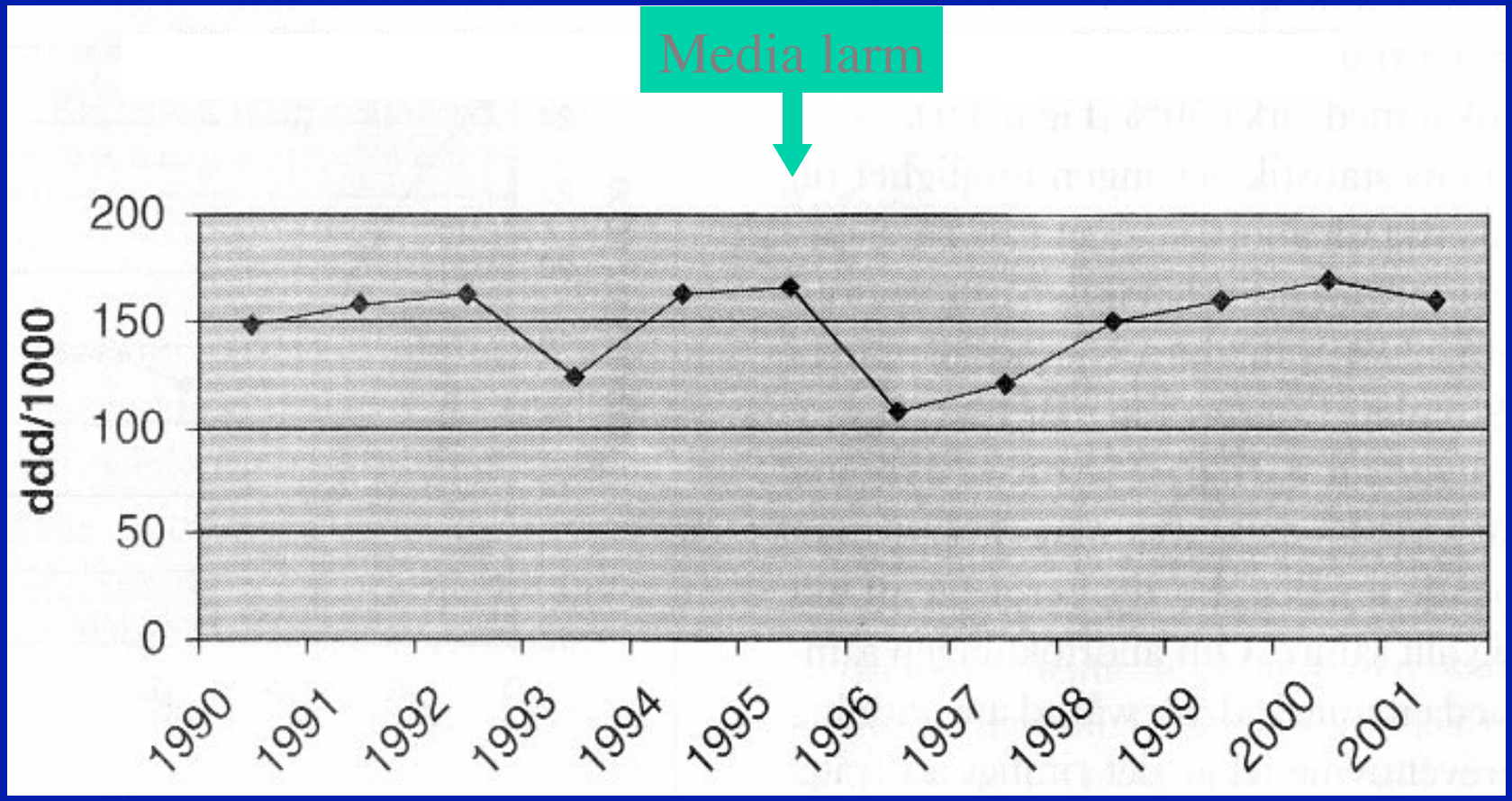
Many of you have long suspected certain health problems like migraine headaches or PMS developed **after** you had taken the Pill. You played the detective and determined that BCP's were indeed the culprit.

But when you talked to your doctor about it, you were probably told BCP's are good for you - and to continue taking them. But deep down inside, you felt this was not the best advice to take.

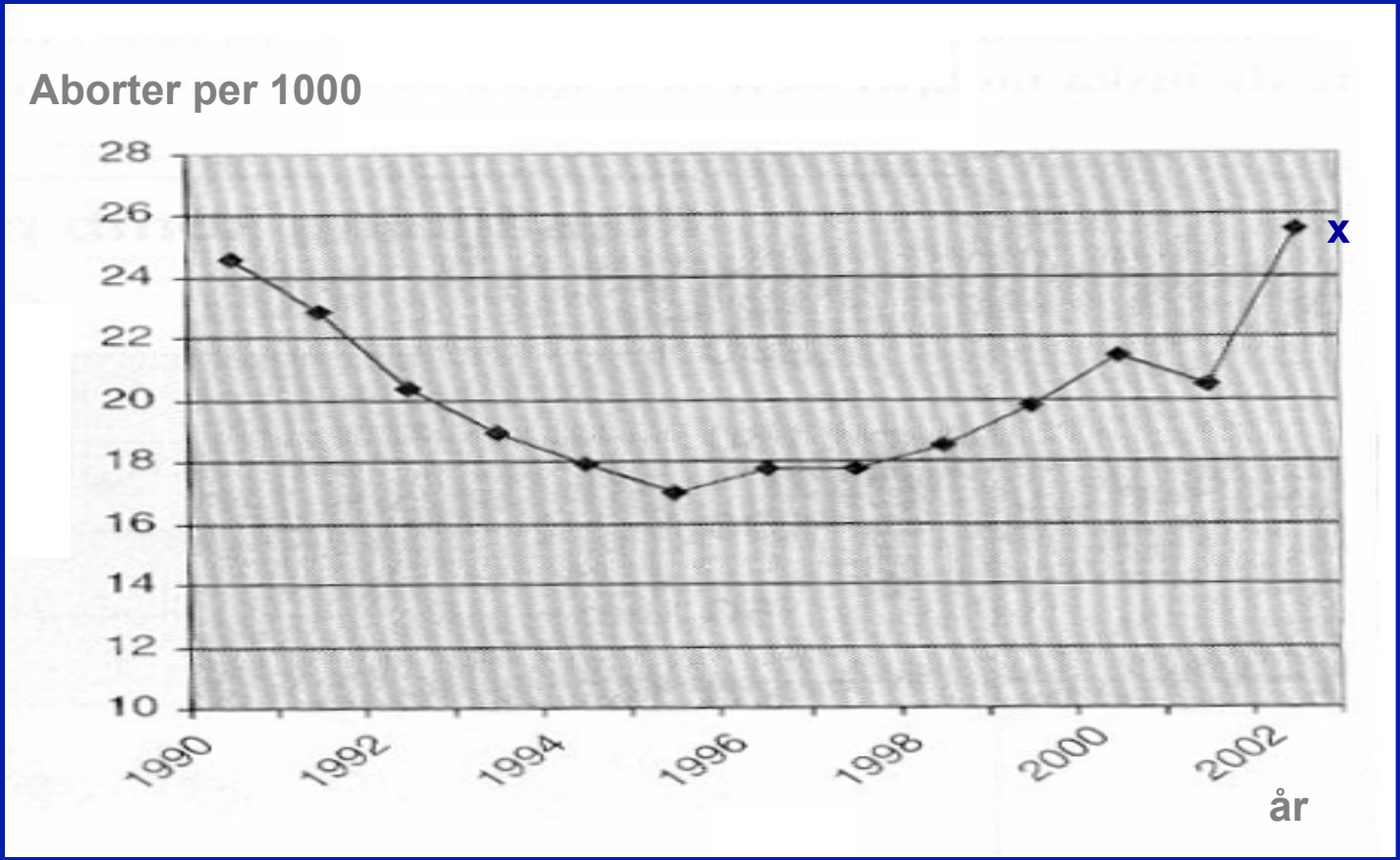
You Were Right All Along

Contraceprion in Europe. K Gemzell Danielsson

P-piller bland tonåringar



Teenage abortions 1990-2002



Sex education

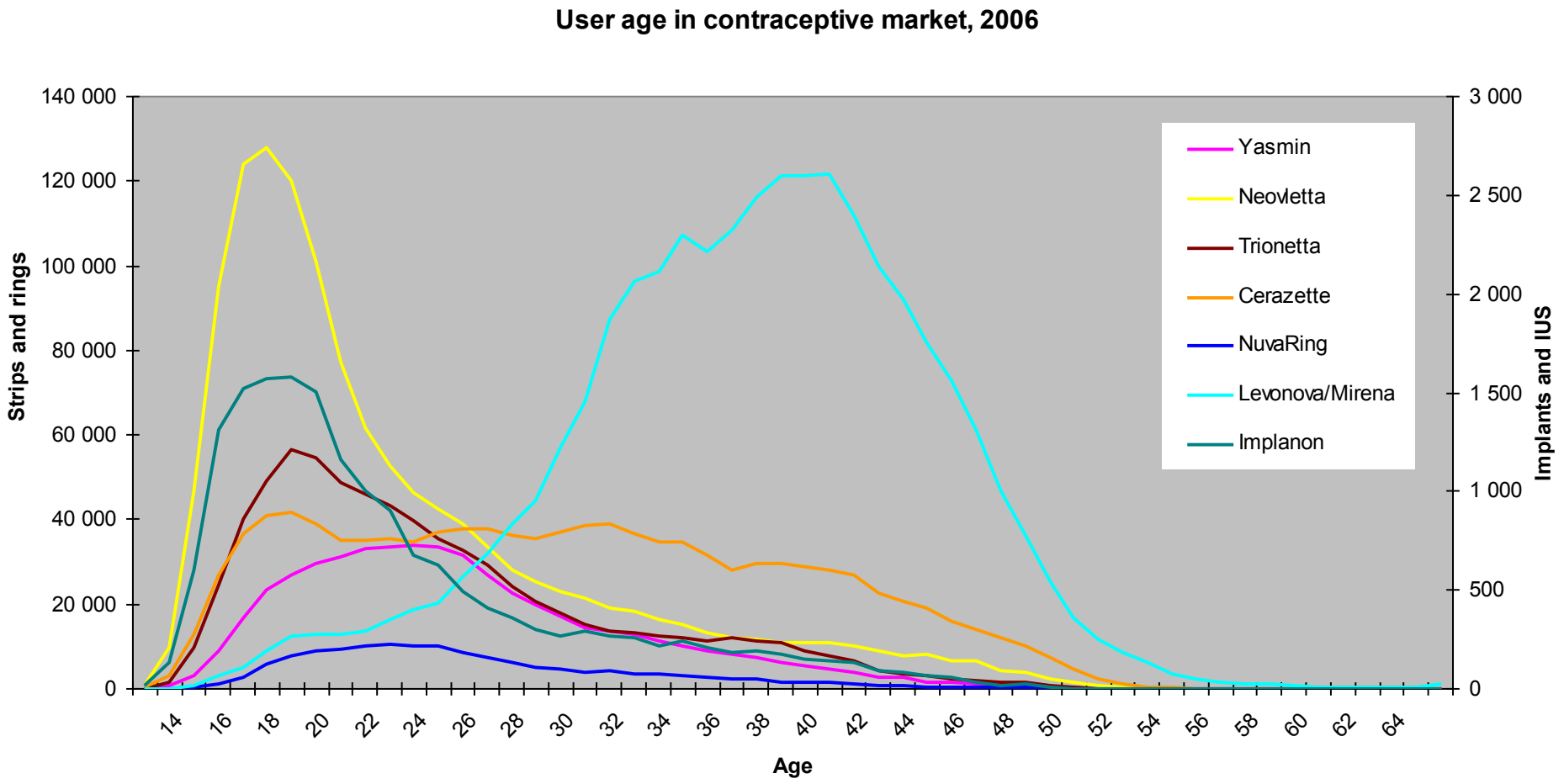
- Does not increase sexual activity
- Does not increase risk behaviour

Kirby DB et al., 2007 J Adolesc Health

- Ineffective strategies:
  - Focus on risks
  - Abstinens only

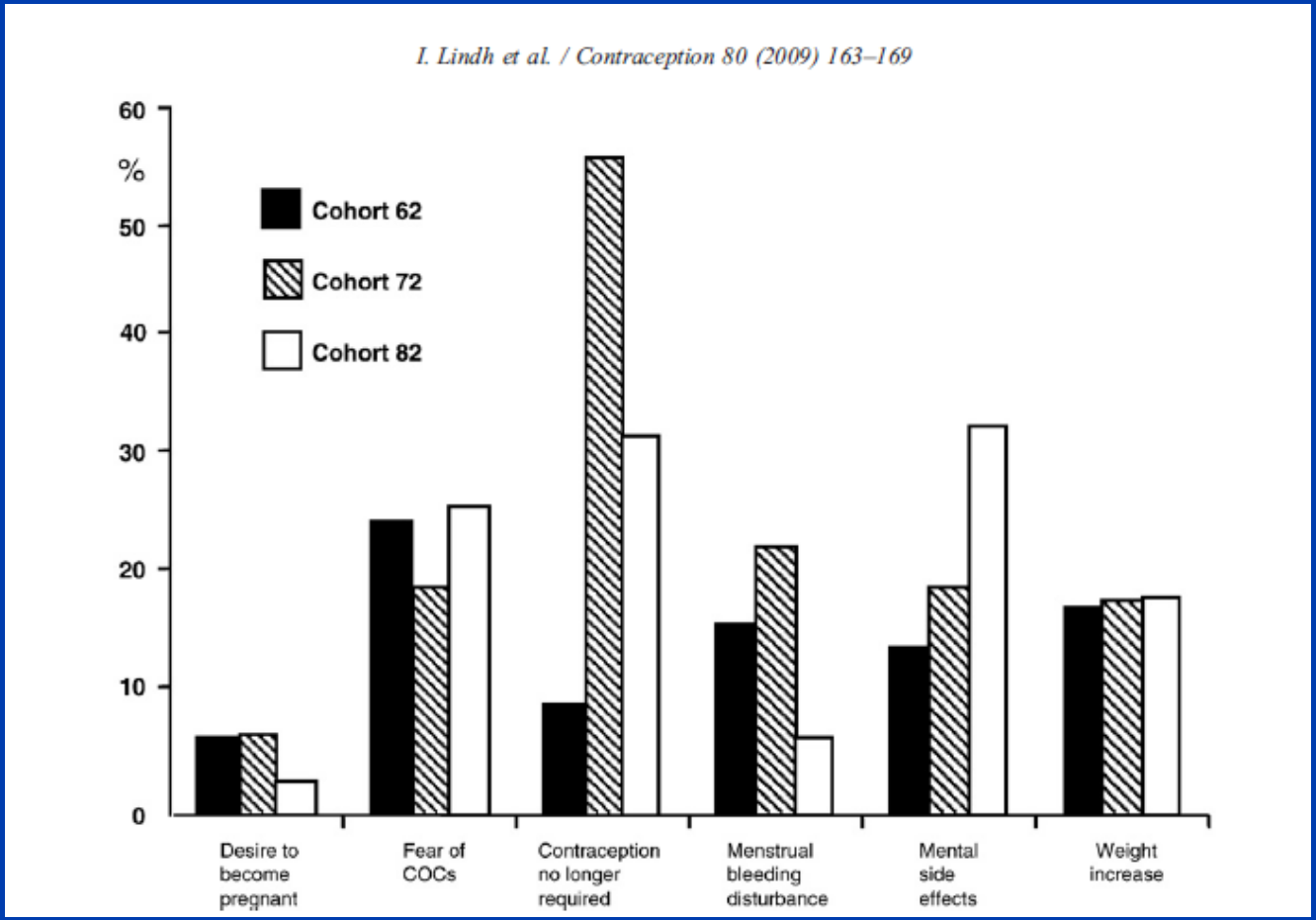
- Oakley et al., BMJ 1985, NHS Centre for Reviews and Dissemination 1997

Sales figures, Sweden



Source: Apoteket AB (Pharmacy), 2006

Why do young women stop taking COC?



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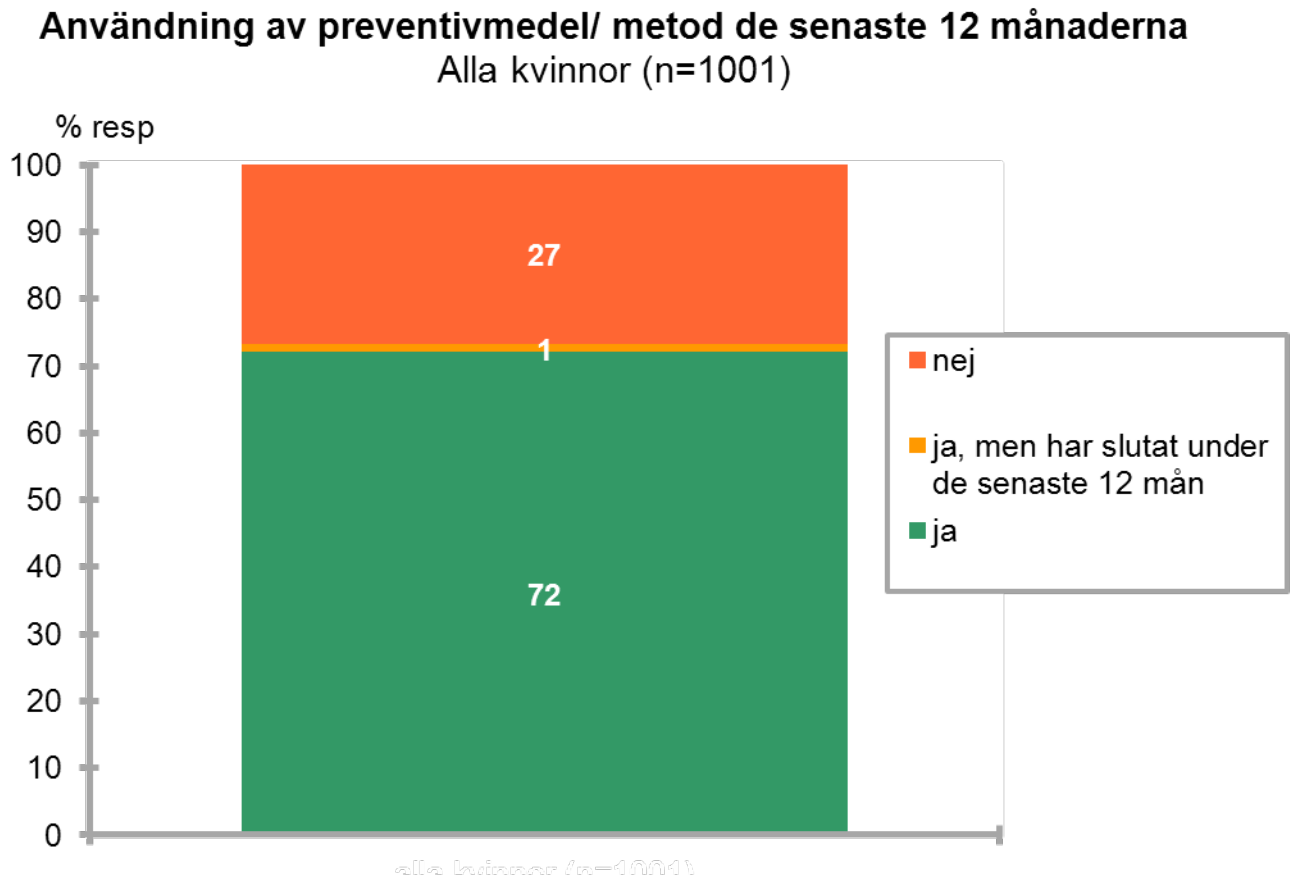
Lindh et al Contraception 2009:80;163-169

Resultat

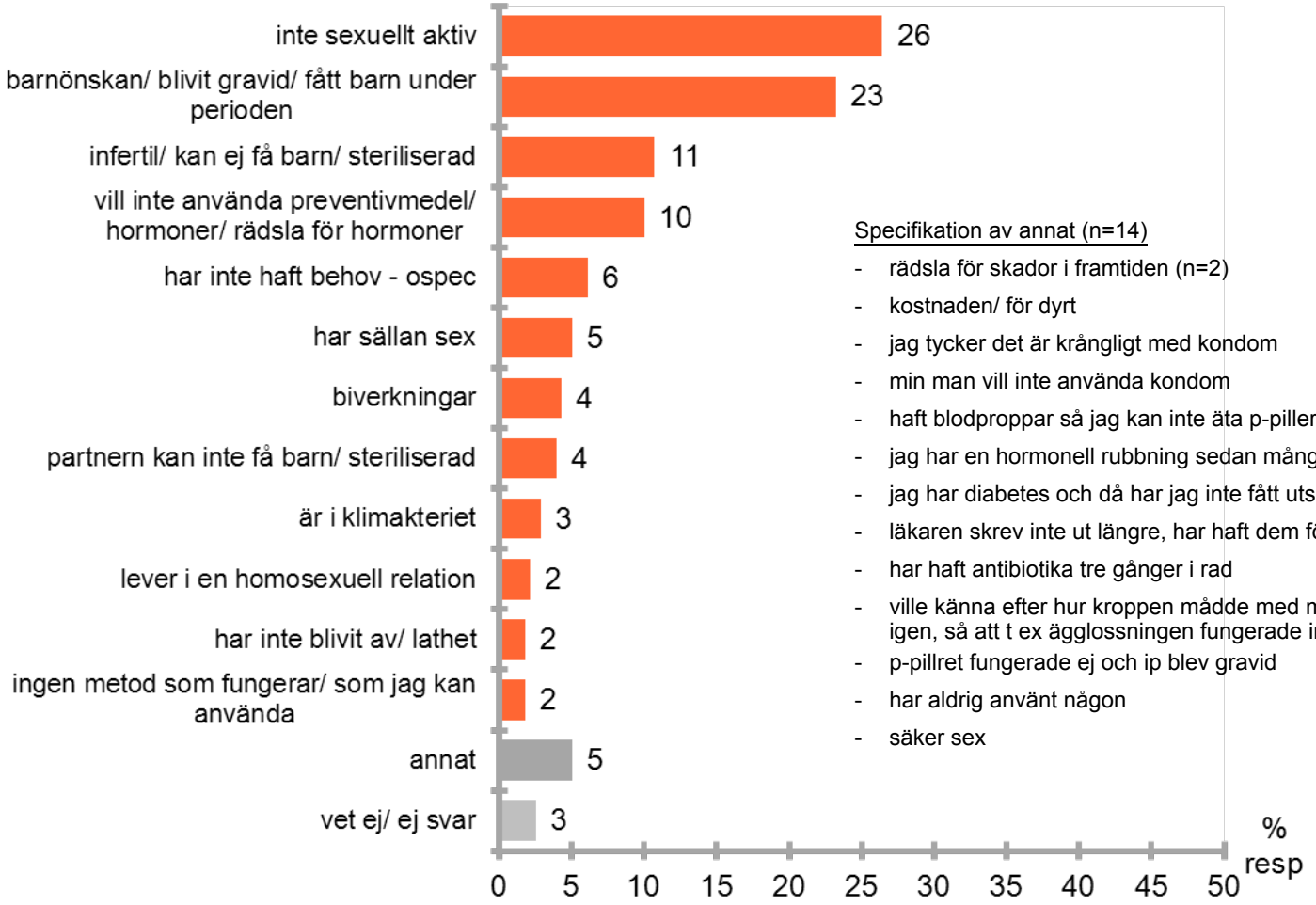


Bas: Alla kvinnor

Fr1. Har du under de senaste 12 månaderna använt dig av något preventivmedel eller annan preventivmetod? Med preventivmetod menar vi: p-piller, spiral, säkra perioder, avbrutet samlag, kondom, sterilisering etc.

Anledning att ej använda preventivmedel / slutat använda preventivmedel

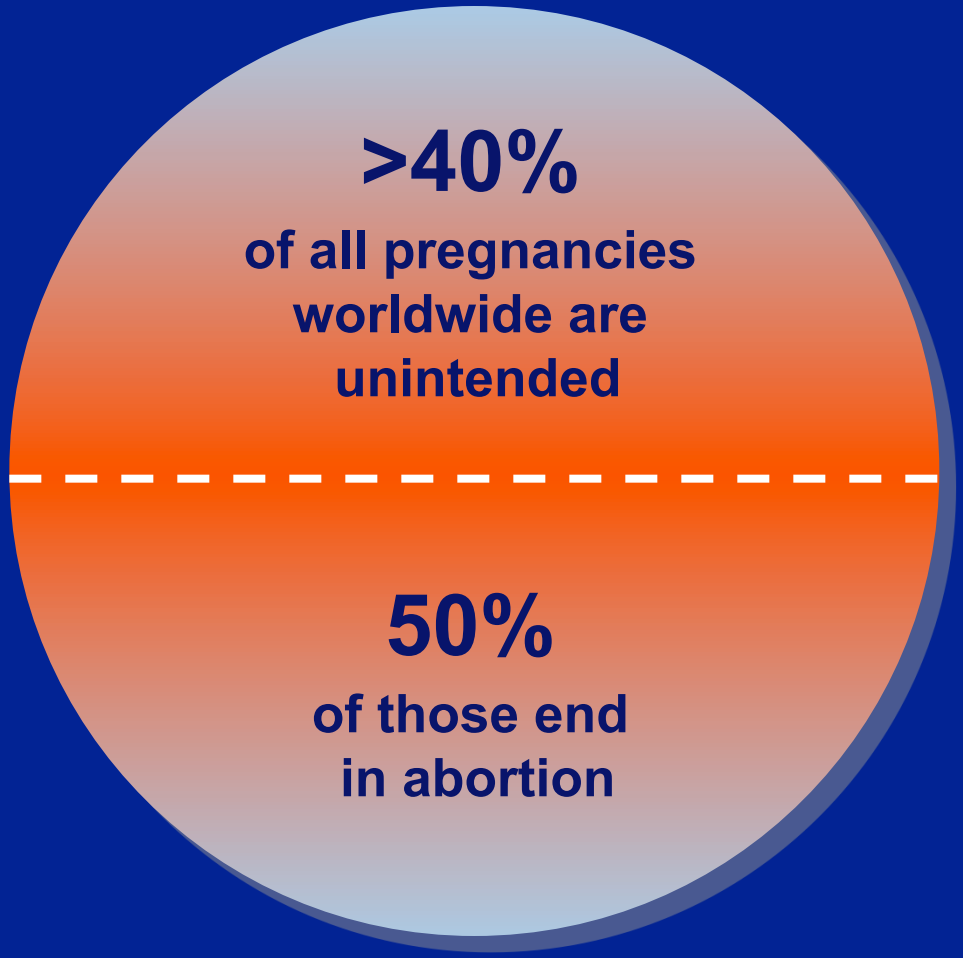
Ej användare av preventivmedel (n=280)



Bas: Kvinnor som inte använder preventivmedel/ har slutat under senaste 12 mån

Fr2. Vad är anledningen till att du inte använt något preventivmedel eller annan preventivmetod de senaste 12 månaderna? Vad är anledningen till att du slutat använda något preventivmedel?

Is there still a ‘medical need’ in contraception?



Singh S et al. Unintended pregnancy: worldwide levels, trends, and outcomes. Stud Fam Plann 2010;41:241–250. Data for 2008

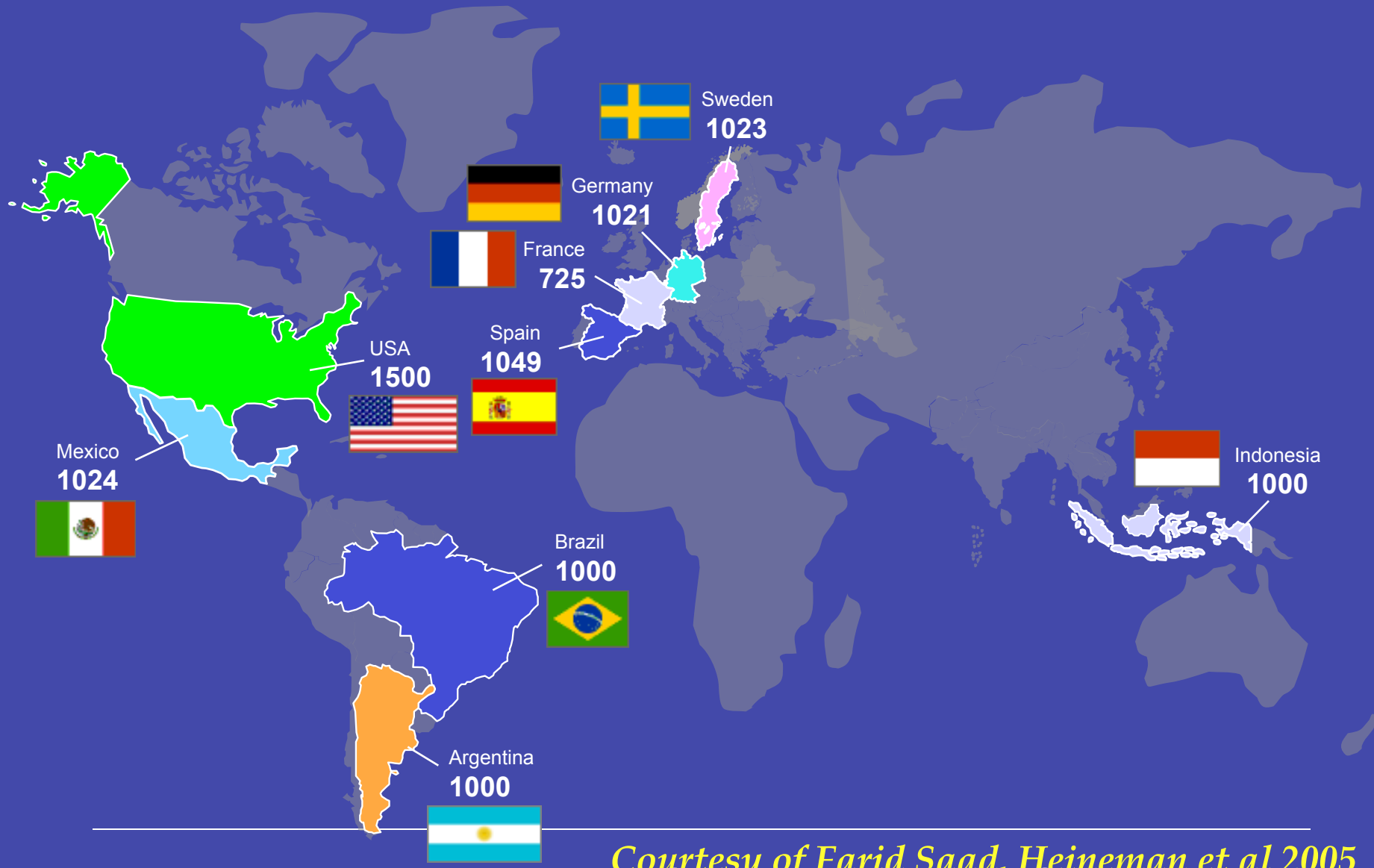
Unmet need in contraception

- Improved methods for EC
- Methods for dual protection
- Reversible methods for men
- Long-acting, non-hormonal methods (immunocontraception)
- Improved access/removed barriers to LARCs
- Methods with added health benefits

Emergency Contraception

Any method used *after* an unprotected intercourse to prevent an unwanted pregnancy

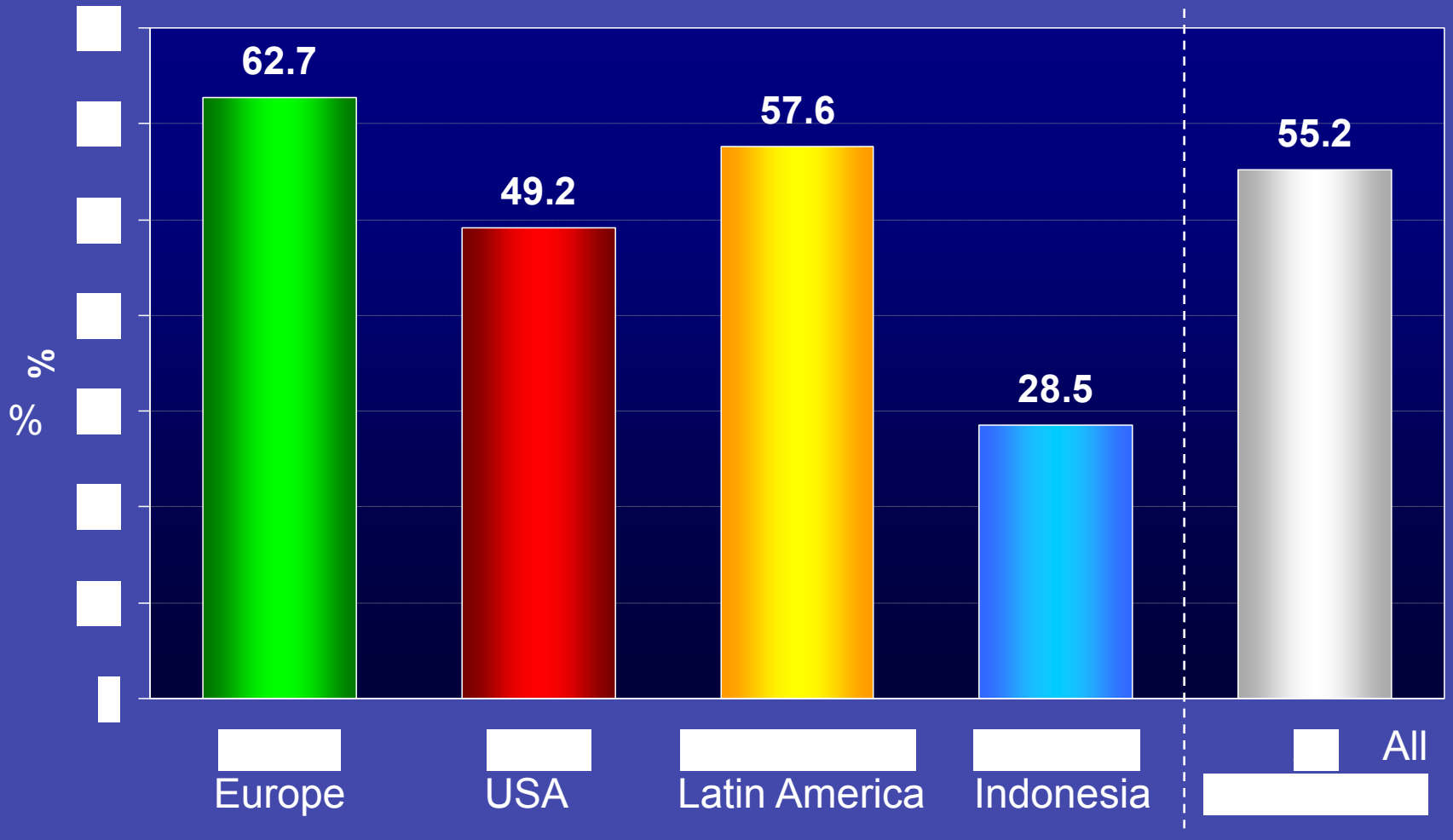
9342 Men



Courtesy of Farid Saad, Heineman et al 2005

Contraception in Europe. K Gemzell Danielsson

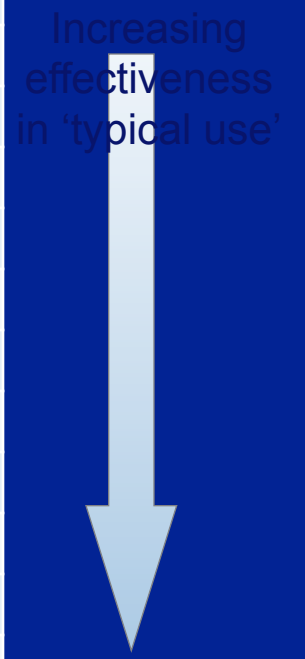
Willingness to Use New Male Method



Heineman et al 2005

Effectiveness of female contraceptive options

Method	% of women experiencing an unintended pregnancy within the first year of use	
	Typical use*	Perfect use†
No method‡	85	85
Female condom§	21	5
Diaphragm‖	12	6
Oral contraceptives: COC/POP	9	0.3
Transdermal patch	9	0.3
Vaginal ring	9	0.3
Injectable	6	0.2
Cu-IUD	0.8	0.6
Female sterilization	0.5	0.5
LNG-IUS: Mirena®	0.2	0.2
Subdermal implant	0.05	0.05



Refer to slide notes for explanatory footnotes *, †, ‡, §and‖
COC, combined oral contraceptive; Cu-IUD, copper intrauterine device;
LNG-IUS, levonorgestrel intrauterine system; POP, progestin-only pill
Trussell, 2011

Mirena®

- Intrauterine System (IUS), Concept invented by Pr T. Luukkainen
- Developed by Population Council
- in collaboration with Leiras Oy,Turku
- Studied since 1983, Approved 1990 in Finland
- Sweden 1992, FDA approval 2001

Risk factors for repeat abortions

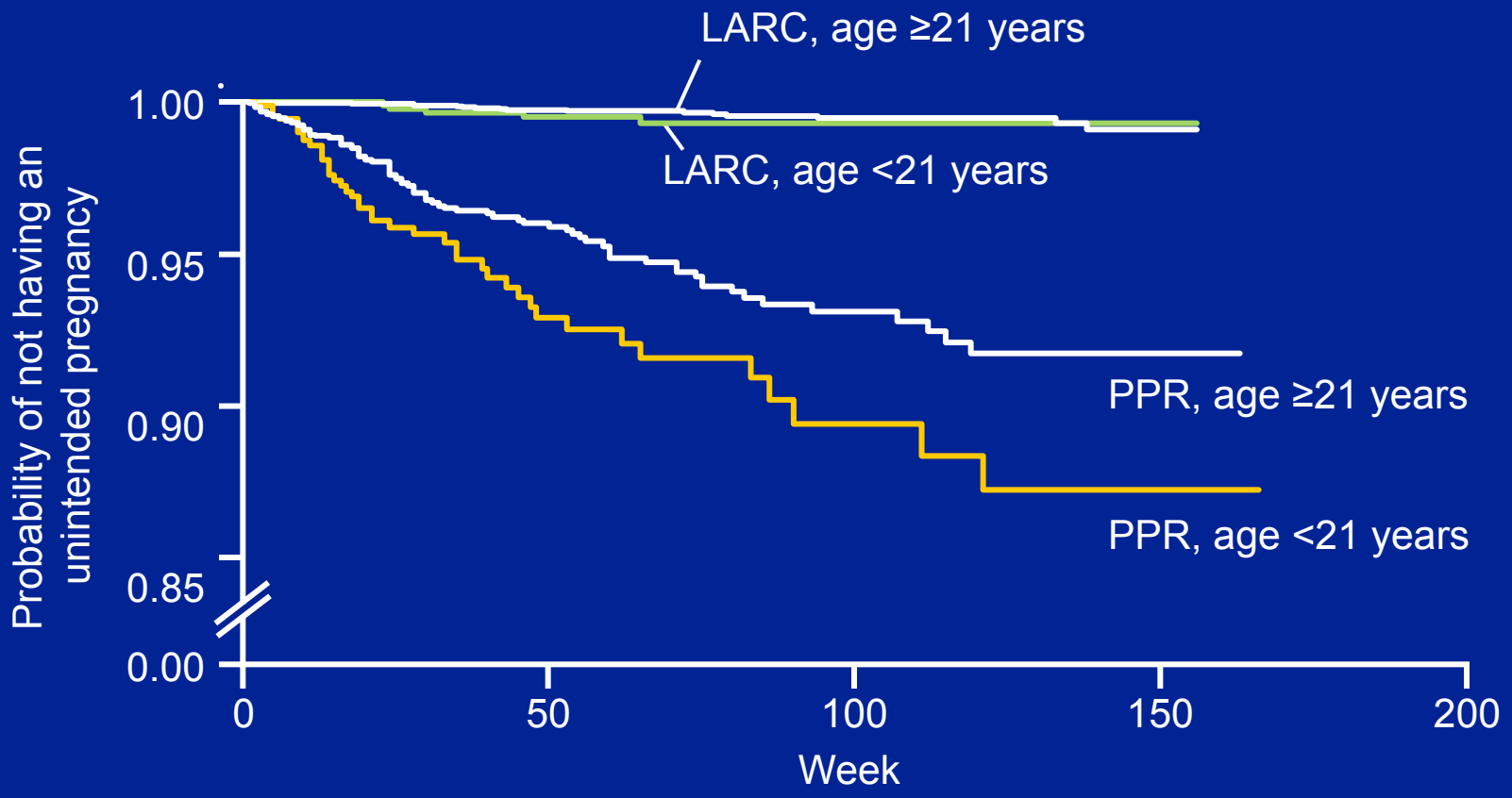
Reduced risk:

- Immediate initiation of contraceptive in contrast to postponed
- LARC more effective vs OC/condom
- IUC most effective to avoid another abortion
- **LNG-IUS lowest cumulative risk at 5yrs**

Heikinheimo et al.,2008

Long Acting Reversible Contraception (LARCs)

Women <21 years of age using pills, patch, or ring had almost twice the risk of unintended pregnancy as older women (hazard ratio 1.9; 95% CI 1.2–2.8; p=0.02)



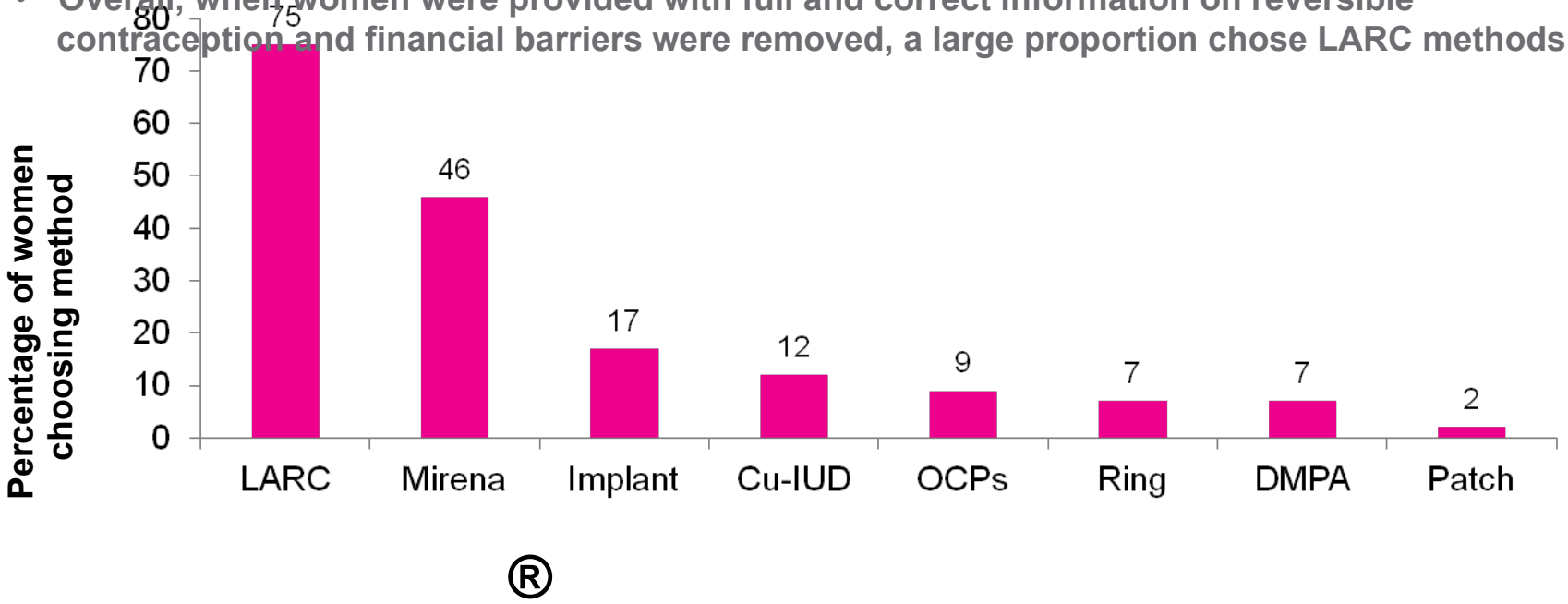
LARC, long-acting reversible contraceptive; PPR, pill patch or ring; 95% CI, 95% confidence interval

1. Winner B, et al. N Engl J Med 2012;366:1998–2007

Acceptability of IUC

Increased information/education increases LARC use

- Data from 9,256 women in the contraceptive CHOICE project
- Overall, when women were provided with full and correct information on reversible contraception and financial barriers were removed, a large proportion chose LARC methods



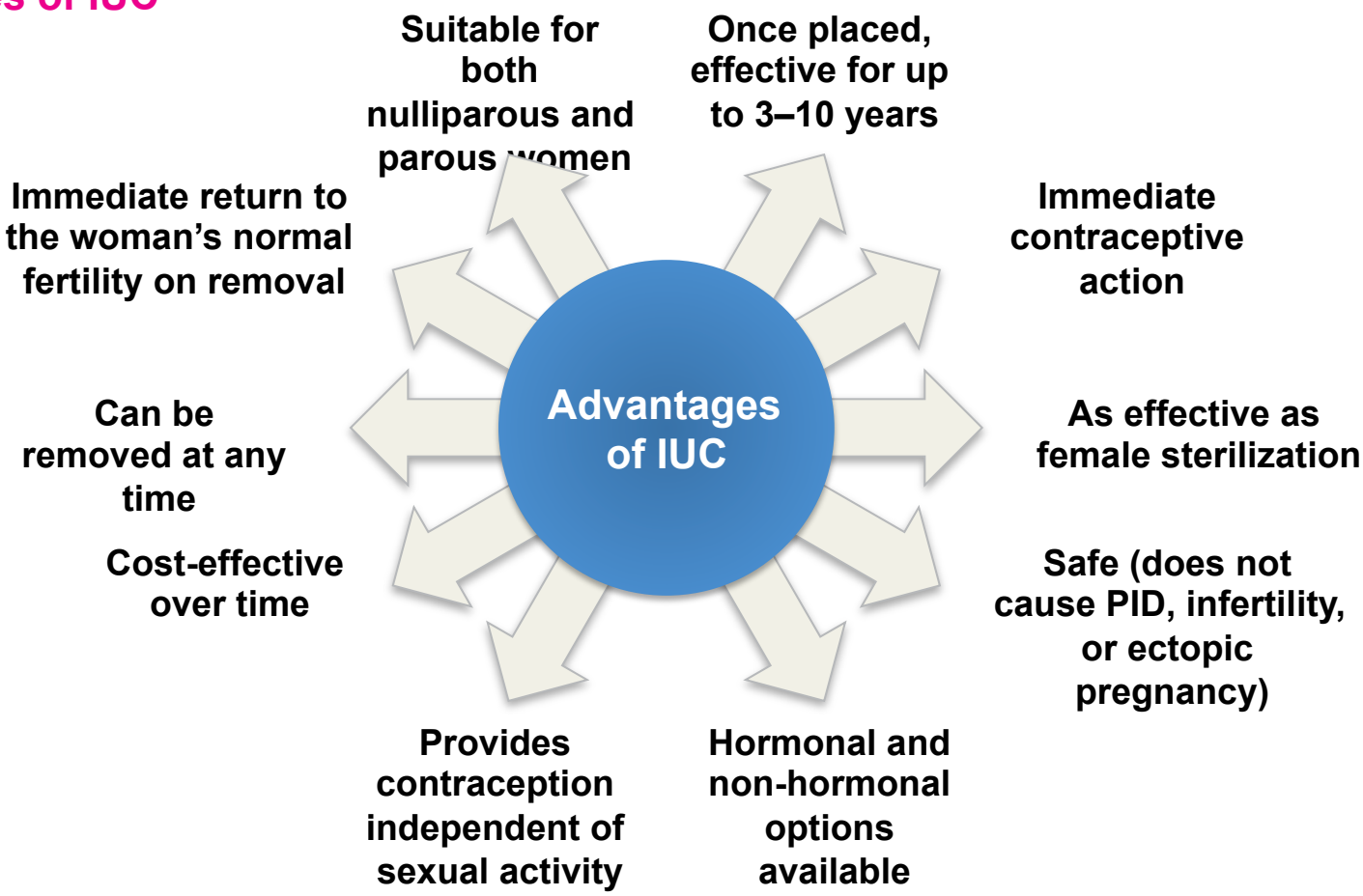
®

Cu-IUD, copper intrauterine device; DMPA, depot medroxyprogesterone acetate; IUC, intrauterine contraception; LARC, long-acting reversible contraception; OCPs, oral contraceptive pills

Peipert *et al*. 2012

Health benefits of IUC

Advantages of IUC



IUC, intrauterine contraception; PID, pelvic inflammatory disease

Factors that influence the prevalence of IUC use: overview

Country/healthcare system level	HCP level	End-user level
• Government policy • Types of HCP authorized • Access to clinics • Funding models • Availability of practical training • Lack of understanding of the value/cost-effectiveness of IUC	• HCPs' misperceptions on the safety of IUC • HCPs' lack of confidence in performing placements, particularly in certain groups of women (in part owing to lack of practical training) • HCPs' misperception that IUC is not suitable for certain groups of women	• Women's low awareness of IUC as an option • Perception of IUC as a foreign body in the uterus • Women's misperceptions on the efficacy and safety of IUC • Misperception that IUC methods are abortifacients • Religious or cultural sensitivities regarding change in bleeding pattern

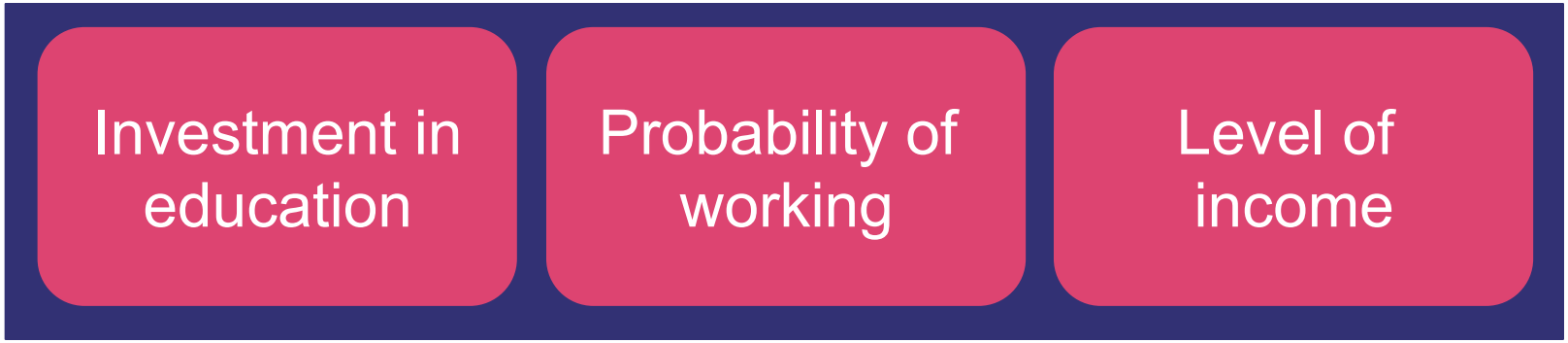
HCP, healthcare provider; IUC, intrauterine contraception

Black *et al*. 2012; INTRA Group, 2012

Contraception improves women's welfare

Data collected in 450,000 women showed that the biggest contributor to an increase in life satisfaction was access to contraception

Because it increases:



All contraceptive methods were cost-effective, because they prevented unintended pregnancies

Pezzini. Economic Journal 2005;115 :C208–C227.

Impact of reduced costs for COC on women and their children

- Abortion legal 1975, COC approved 1964
- COC reduced costs for Young women introduced 1989-1998 (up to 19-24 yrs geographic variation); mean reduction approx 75% of full prize
- Several control groups;
- 1. women of same age w reduced costs vs full cost
- 2, women of same age before vs after cost reduction
- 3. women above the age of reduction

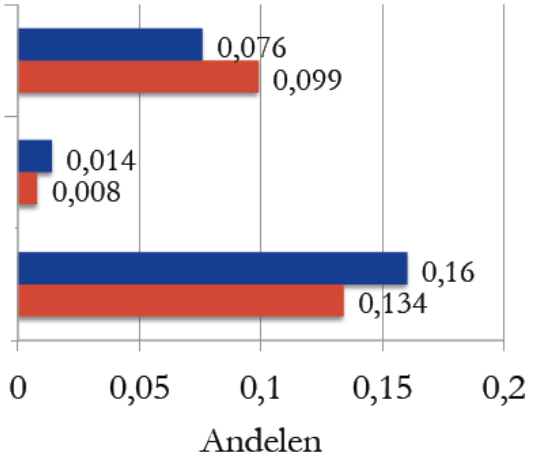
Ass Prof A Madestam, SU

Effects on women

University Degree

Birth certificate without father's name

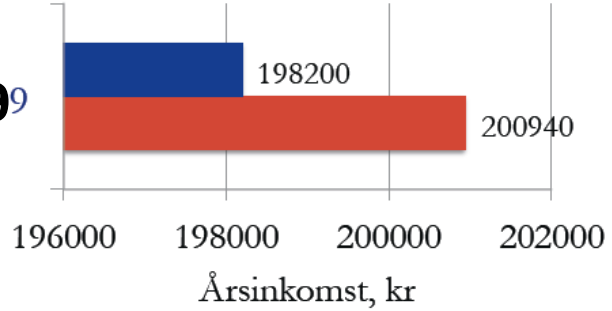
Smoking during pregnancy



Mean value

Women w access to reduced cost contraception

Income 2009

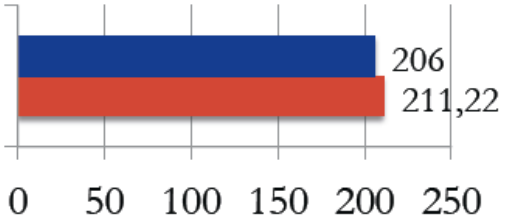


Genomsnittsvärdet

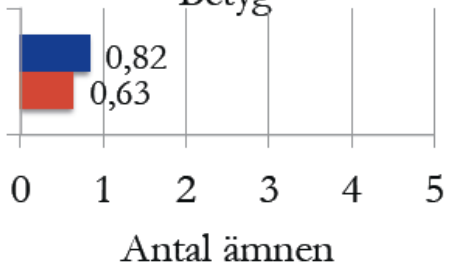
Subventionsberättigade kvinnor

Effects on children

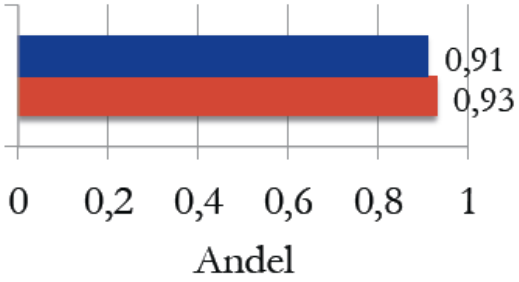
Grades national Test yr 9



No subjects Failed national tests yr 9



Qualified to high school



- **Mean value**
- **Children of women w access to reduced cost contraception**

- Genomsnittsvärdet
- Subventionsberättigade kvinnors barn

- Genomsnittsvärdet
- Subventionsberättigade kvinnors barn

Conclusion

- Contraceptive a key indicator regarding SRH.
- Official standardised data on contraceptive use not routinely collected in Europe
- The prevalence rate of absence of any contraceptive method ranged from 4 to 40%. (Reprostat).
- Can a standard and preferred *contraceptive prevalence pattern* be suggested?
- Reimbursement policies for contraception have important impacts on usage
- As does the legislative framework
- Task shifting/sharing possible in some EU member states

THANK YOU

Kristina Gemzell Danielsson,
Chair Obstetrics & Gynecology,
Department of Women‘s and Children‘s Health,
Director, WHO collaborating centre for
Research & Research Training in Human Reproduction
Karolinska Institutet /Karolinska University Hospital
Stockholm, Sweden


Stockholm, Sweden
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the city – Stockholm Waterfront
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