# Antikonception och Abort i ett globalt och historiskt perspektiv

Kristina Gemzell Danielsson Kvinnokliniken/ WHO center Karolinska Universitetssjukhuset/ Karolinska Institutet



Disclosures of Financial Relationships

Gemzell-Danielsson has received honorarium as an advisory board member and/or invited speaker at Merck (MSD), Bayer, Exelgyn, Actavis, Gedeon Richter, Exeltis, Mithra and HRA-Pharma

# Effektiva preventivmedel och säkra abortmetoder är en förutsättning för Reproduktiv Hälsa

Sexual and reproductive health and rights constitute fundamental human rights, form a vital aspect of the women's empowerment and are a key to the achievment of gender equality





# 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.

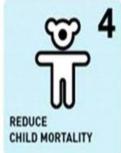
Measuring maternal mortality—death resulting from the complications of pregnancy or childbirth—is challenging at best. Systematic underreporting and misreporting are common, and estimates lie within large ranges of uncertainty. Nevertheless, an acceleration in the provision of maternal and reproductive 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.

Millenium development goals, MDG 5 Target: To reduce by three quarters, 1990 -2015, the MMR New goals; SDGs























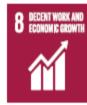






























**K.Gemzell Danielsson** 

https://sustainabledevelopment.un.org/

# **Unsafe abortion**

## **Annually**

- Nearly 22 million unsafe abortions
- 98% in the developing world
- 47,000 women die, 91% in Africa & South-Central Asia
- @ 8-15% of maternal mortality
- 7 million women suffer long-term disability
- Young women face the greatest risks





Abortion rates at all-time low in developed countries but remain unchanged in developing countries

#### Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends





Gilda Sedgh, Jonathan Bearak, Susheela Singh, Akinrinola Bankole, Anna Popinchalk, Bela Ganatra, Clémentine Rossier, Caitlin Gerdts, Özge Tunçalp, Brooke Ronald Johnson Jr, Heidi Bart Johnston, Leontine Alkema

Background Information about the incidence of induced abortion is needed to motivate and inform efforts to help women avoid unintended pregnancies and to monitor progress toward that end. We estimate subregional, regional, and global levels and trends in abortion incidence for 1990 to 2014, and abortion rates in subgroups of women. We use the results to estimate the proportion of pregnancies that end in abortion and examine whether abortion rates vary in countries grouped by the legal status of abortion.

Methods We requested abortion data from government agencies and compiled data from international sources and nationally representative studies. With data for 1069 country-years, we estimated incidence using a Bayesian hierarchical time series model whereby the overall abortion rate is a function of the modelled rates in subgroups of women of reproductive age defined by their marital status and contraceptive need and use, and the sizes of these

Findings We estimated that 35 abortions (90% uncertainty interval [UI] 33 to 44) occurred annually per 1000 women aged 15-44 years worldwide in 2010-14, which was 5 points less than 40 (39-48) in 1990-94 (90% UI for decline -11 to 0). Because of population growth, the annual number of abortions worldwide increased by 5.9 million (90% UI -1·3 to 15·4), from 50·4 million in 1990-94 (48·6 to 59·9) to 56·3 million (52·4 to 70·0) in 2010-14. In the developed world, the abortion rate declined 19 points (-26 to -14), from 46 (41 to 59) to 27 (24 to 37). In the developing world, we found a non-significant 2 point decline (90% UI -9 to 4) in the rate from 39 (37 to 47) to 37 (34 to 46). Some 25% (90% UI 23 to 29) of pregnancies ended in abortion in 2010-14. Globally, 73% (90% UI 59 to 82) of abortions were obtained by married women in 2010-14 compared with 27% (18 to 41) obtained by unmarried women. We did not observe an association between the abortion rates for 2010-14 and the grounds under which abortion is legally allowed.

Interpretation Abortion rates have declined significantly since 1990 in the developed world but not in the developing world. Ensuring access to sexual and reproductive health care could help millions of women avoid unintended pregnancies and ensure access to safe abortion.

Funding UK Government, Dutch Ministry of Foreign Affairs, Norwegian Agency for Development Cooperation, The David and Lucile Packard Foundation, UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction.

Copyright © 2016. World Health Organization. Published by Elsevier Ltd/Inc/BV. All rights reserved.

#### Introduction

Periodic estimates of the incidence of induced abortion (hereafter referred to as abortion) are needed to monitor progress towards reducing the unmet need for effective contraception and the incidence of unintended pregnancy. These estimates can also motivate investments in helping

published.46 These estimates, and their association with abortion incidence,78 make possible a systematic, model-based approach to estimating abortion incidence. This is in line with methods used recently to estimate other global health indicators, such as causes of maternal death9 and the incidence of anaemia10 and maternal and

http://dx.doi.org/10.1016/ 50140-6736(16)30380-4 See Online/Commer

http://dx.doi.org/10.1016/ 50140-6736(16)30452-4 Guttmacher Institute New

York NY USA (G Sedah Sch J Bearak PhD, S Singh PhD, A Popinchalk MPH): Department of Reproductiv Health and Research, World Health Organization, Geneva Switzerland (B Ganatra MD, Ö Tunçalp MD,

B R Johnson ir PhD): University of Geneva, Geneva, Switzerland (C Rossier PhD): Ibis Reproductive Health, Oakland CA. USA (C Gerdts PhD): Independent Consultant Geneva Switzerland (H B Johnston PhD); and University of Massac Amherst, Amherst, MA, USA (LAlkema PhD)

Correspondence to: Dr Gilda Sedoh. Guttmache Institute, New York, NY 10038

# Causes of maternal deaths in developing regions (%)



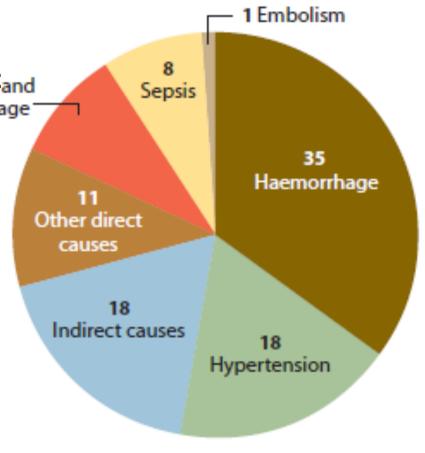
47 000 women's deaths

~ 7 million temporary or permanent and disabilities

 Higher neonatal death ratio, more children withdrawn from school

- Huge financial and social costs to women, their families, and health systems
- ~ 300 million USD spent each year on treating the complications

(Shah, 2009; Vlassoff, 2008, A price to high to bear 2014, WHO 2016)



The vast majority of these deaths are avoidable

# **Humanitarian settings**



- Unintended pregnancy and unsafe abortion increased:
  - interruptions to health services and supplies
  - disrupted family and social structures
  - loss of livelihoods and assets
- 25% 50% of maternal deaths in refugee settings due to unsafe abortion
- Mixed response from the global community



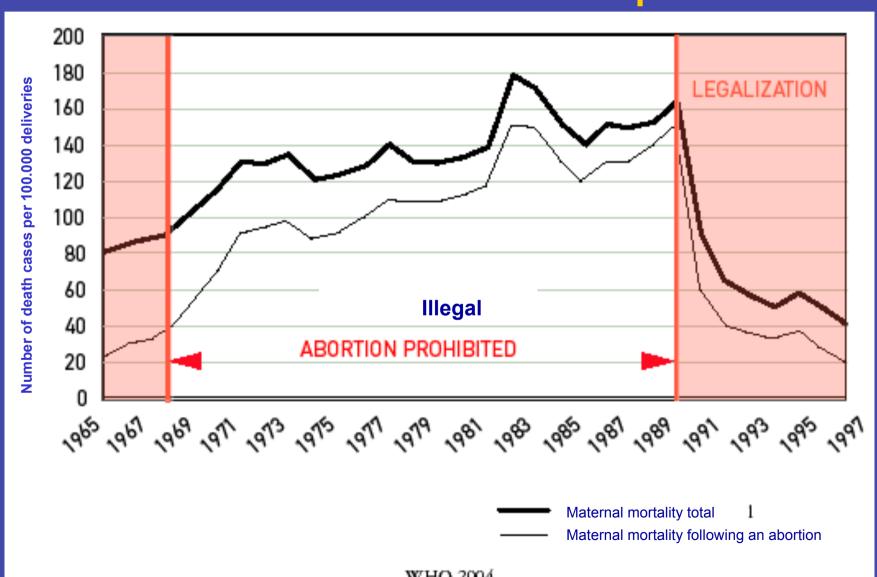
- Recognize abortion as a major contributer to maternal mortality
  - → Politicians, doctors, nurses (FIGO), the Church etc.
- Increase access to safe abortion methods and stop outdated methods Vacuum aspiration (MVA), medical abortion, misoprostol, "menstrual regulation", PAC
- Increase emergency service f
   ör abortion related complications
  - → Midlevel providers, doctors, MVA, drugs
- Contraceptive councelling and contraception also for young/unmarried women
- Information on sexual and reproductive health and rights
- Empower women!

"Women are not dying because of diseases we cannot treat. They are dying because societies have yet to make the decision that their lives are worth saving."

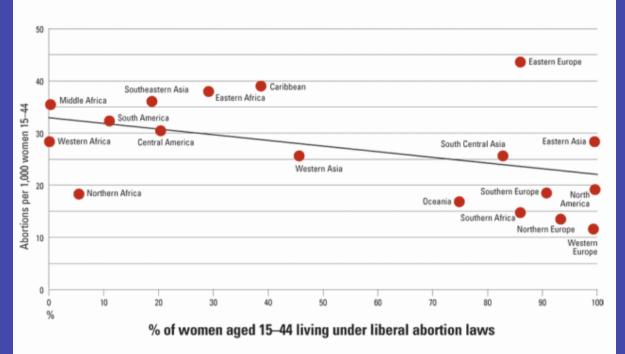
Professor M.F. Fathalla

Former President of the International Federation of Gynaecology and Obstetrics Professor of Obstetrics and Gynaecology, Assiut University, Egypt

# Legal abortion and maternal mortality: the Romanian example



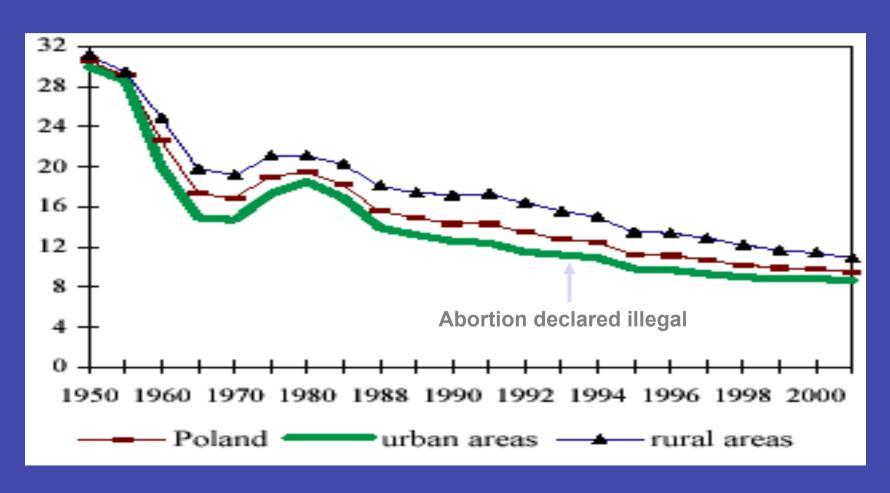
#### Abortion rates tend to be lower in subregions that have liberal abortion laws.



Source: Sedgh G et al., Induced abortion: incidence and trends worldwide from 1995 to 2008, Lancet, 2012 (forthcoming).

# Making Abortion Illegal Does Not Increase the Birth Rate

Birth rates Poland 1950-2001 (births/1 000 population)



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



# Percentages of abortions in relation to pregnancy week

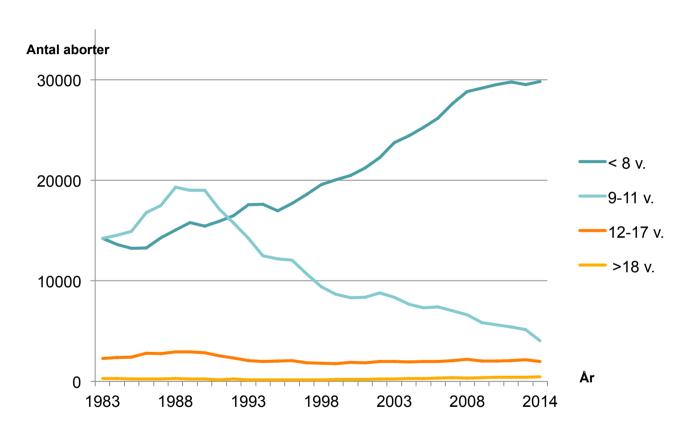
| Year<br>1964 | Pregnancy length (weeks) |        |       |        | Mean       |
|--------------|--------------------------|--------|-------|--------|------------|
|              | -12                      | 13 -16 | 17-20 | 21- 24 |            |
|              | 10%                      | 27,9%  | 54,9% | 7.4%   | 17.0 weeks |
|              | -11                      | 12-17  | 18+   |        |            |
| 2002         | 93,3%                    | 6.0%   | 0,7%  |        | 8,1 weeks  |

Källa: Rätten till abort SOU 1971:58 och EPC Socialstyrelsen

## Impact of reducing barriers in access

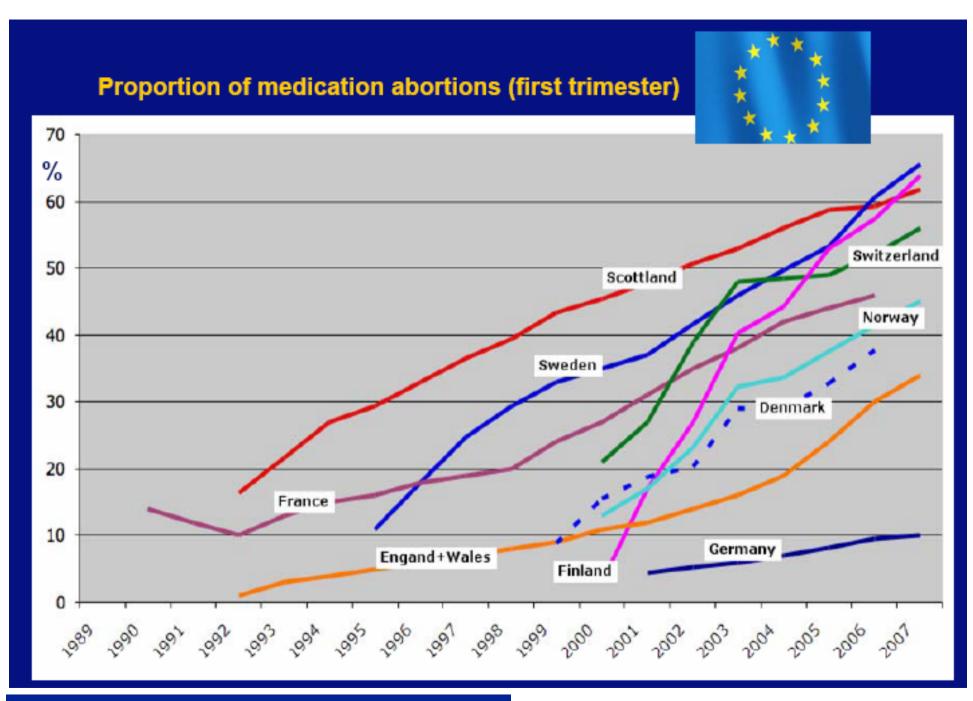


#### **Abortions 1983 - 2014**



2014; 50% innan v 7, 82% innan v 9, > 93%; I trim, <1%; II trim

Källa: Socialstyrelsens abortstatistik



# www.womenonweb.org

# I need an abortion



Do you have an unwanted pregnancy? Click here. This online medical abortion service helps women gain access to a safe abortion with pills in order to reduce the number of deaths due

# I had an abortion



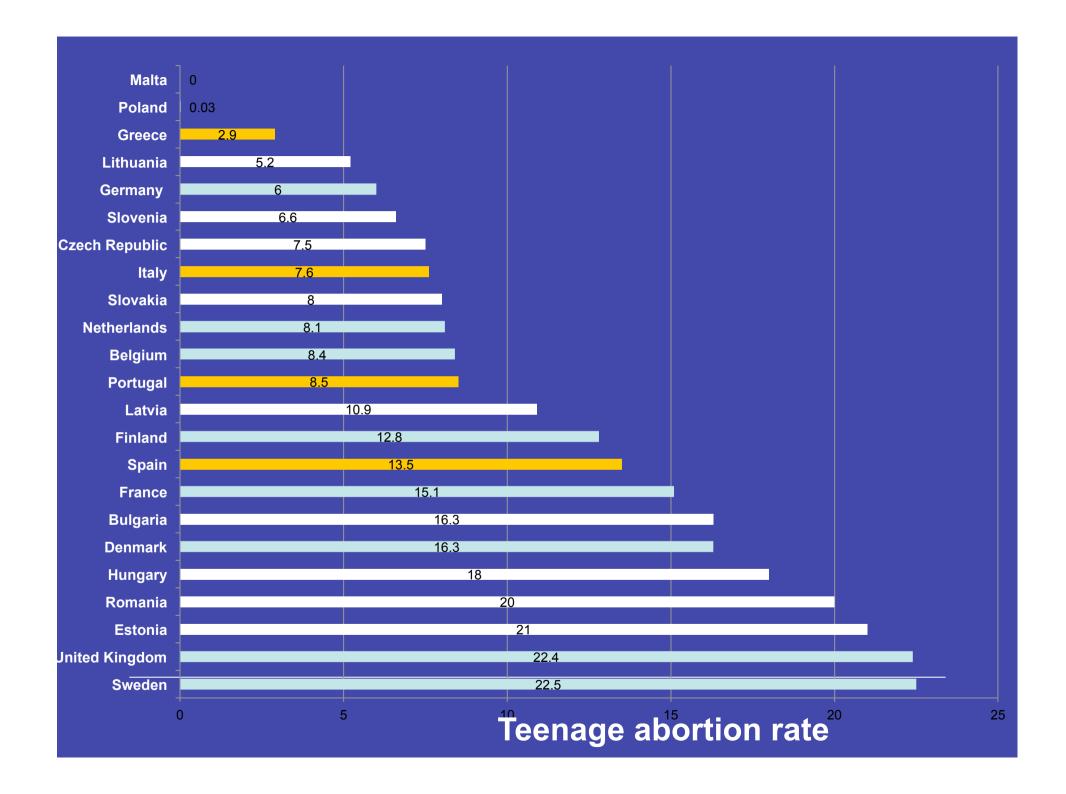
Every year 42 million women have an abortion. Every 7 minutes a woman dies unnecessarily from an illegal abortion. Show your face, share your story, donate your money and help women around the world get access to safe abortions. Discuss and share information with others. Look for support if you are considering an abortion. Participate to support abortion rights, also if you did not have an abortion. Click on one of the portraits to find our more....



### 2012 Update of Updated WHO guidance on safe abortion

- Emphasizes the simplifying or streamlining of abortion care,
- Notes a high value on research to demedicalize abortion care
- Affirms that home use of misoprostol is a safe option for women
- The Guidance suggests the evaluation of internet provision and telemedicine, as further alternative service delivery channels of safe abortion, as a subject for future research

Simplifying medical abortion →
Increasing Access to Safe Abortion Services



# Unintended Pregnancy Is a Particular Concern in Adolescents Worldwide<sup>1</sup>

Around the world, about 16 million girls and women aged 15 to 19 years give birth each year.

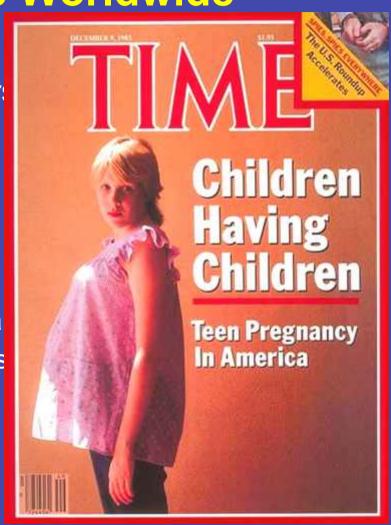
Most of these pregnancies are unintended.

Risk of maternal mortality is highest in girls aged <15 years.<sup>2</sup>

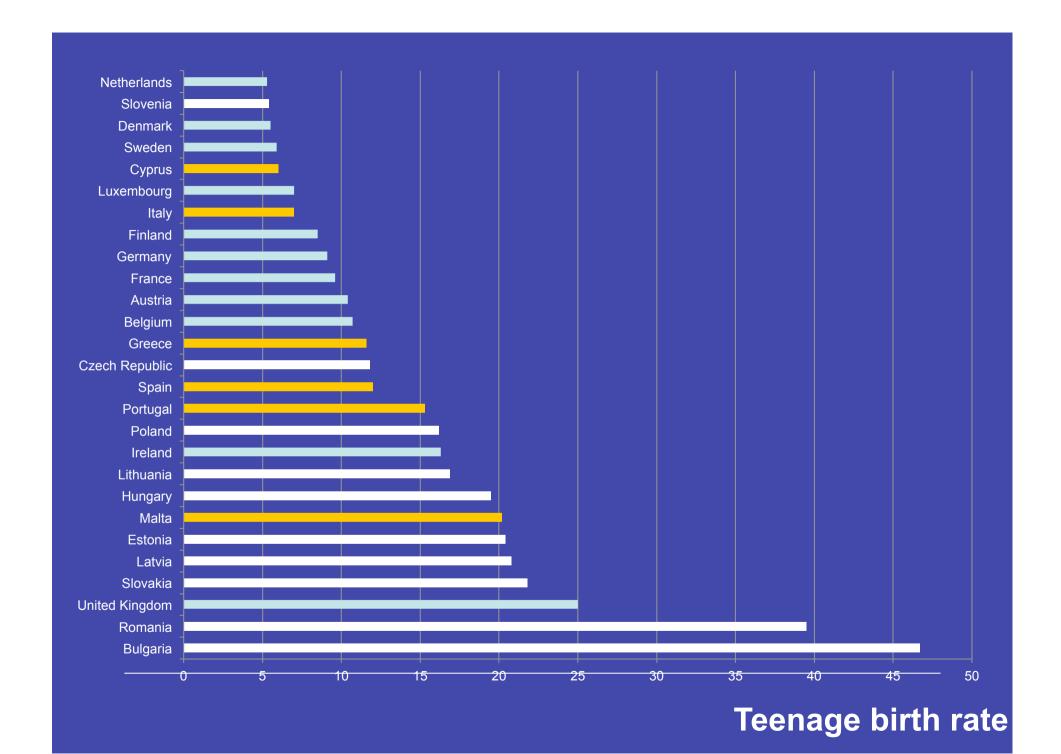
Complications of pregnancy and childbirth a The major cause of death in adolescent girls in most developing countries.<sup>2</sup>

Teenage pregnany /mothers.

High risk for another pregnancy/ abortion



World Health Organization. Making pregnancy safer. Adolescent pregnancy. www.who.int/making\_pregnancy\_safer/topics/ adolescent\_pregnancy/en/index.html.
 K.Gemzell Danielsson



## **Unintended pregnancies**

compared with intended pregnancies are associated with:

- higher odds of negative neonatal outcomes
   e.g. low birth weight and preterm birth
- negative prenatal care behaviors
   e.g. inadequate folic acid use, cigarette use, alcohol use
- postpartum depression and lower measures of psychological well-being

# Access to abortion in Europe

- Abortion legally accessible in almost all countries in Europe, BUT all incl. restrictions
- No evidence that
  - obligatory counselling
  - waiting periods
  - two doctor signatures have any positive effects
- These restrictions run counter to human rights and selfdetermination and
  - lead to delay in the provision of abortion and have
  - negative effects on the physical and psychological experience of those affected.

# Access to abortion in Europe

- 'Obligatory counseling' is in fact instruction to women to continue an unwanted pregnancy'
- Waiting periods, frequently called 'reflection periods',
- 'Conscientious objection' refusal to treat, undermines democratically-decided laws and harms women

### **Current trends**

In recent years we have seen two developments:

1. An increasing activity from the right wing/conservative spectrum trying to restrict women's self-determination in sexuality and reproductive health by turning the wheel back.

#### 2. At the same time:

successful examples of defeating most of these initiatives and overcoming some of the existing restrictions.

Examples; France, Spain, Portugal

## Central and Eastern Europe, former communist countries

- First in Europe to legalise abortion in the 1950s by the former Soviet Union.
- legal, done in all hospitals, free of charge.
- Pope Johannes 2<sup>nd</sup> played a major role; "telling the polish parliament that Poland owed him a favour for his help to overcome Communism.
   In return he asked that abortion would be made illegal."
- Since 1993 abortion is legal only in case of risk to life or serious risk to health of the woman if confirmed by 3 doctors, rape or other sexual crime (has to be confirmed crime by a prosecutor)
- The number of abortions dropped from 200.000 per year to officially around 400 per year.

#### **Current situation in Poland**

- Prime Minister Beata Szydlo asked the church to make suggestions for an even more restrictive law.
- a total ban on abortion is being discussed in the polish parliament.
- In addition a new category into the criminal code is suggested –
   "prenatal murder", a penalty of 3 to 5 years in prison for women,
   doctors and anyone helping a woman to perform an abortion.
- Result; Illegal (unsafe) abortions, women travelling for abortion

## Hungary

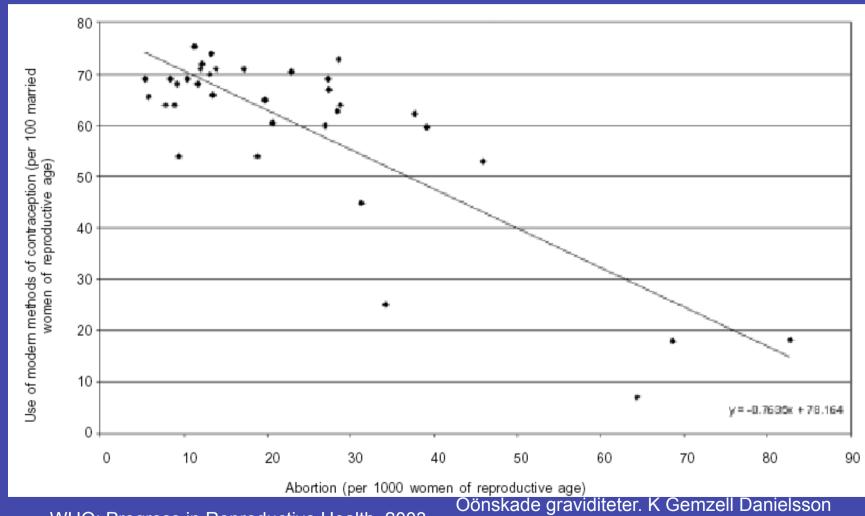
- Two obligatory 'counselling' sessions within a few days.
- Abortion only legal for residents and not including foreign students.
- Conservative political development over the last yrs Restrictions executed in a rigid way,
  - progress coming from the EU is blocked; ex. Mifegyne®,
     ellaOne OTC, not approved although this was done in a
     EU wide harmonized approval process.
- New constitution (2012):
   "Every person has the right to life and dignity, the life of the foetus deserves protection from the moment of conception".

## **Positive developments**

- France lifted the requirement for 'obligatory counselling', the oneweek waiting period, and midlevel provision allowed
- Switzerland ended the requirement for a psychiatric diagnosis,
   Spain deleted the need for a medical indication.
- Canada; the long-established view is that the termination of an unwanted pregnancy is a medical treatment and requires no legal interference.
- In 1988, after a long legal battle, the Supreme Court of Canada declared the abortion law unconstitutional and abolished it.

#### 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.



## DitchThePill.org

**Empowerment for Women** 











Dangers of Birth Control Pills



Migraine Headaches

Third Generation BCP's

Match the Pill

Neutralize BCP Toxins

Blood Clots

Heart Disease

Heart Attacks

High Blood Pressure



**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.

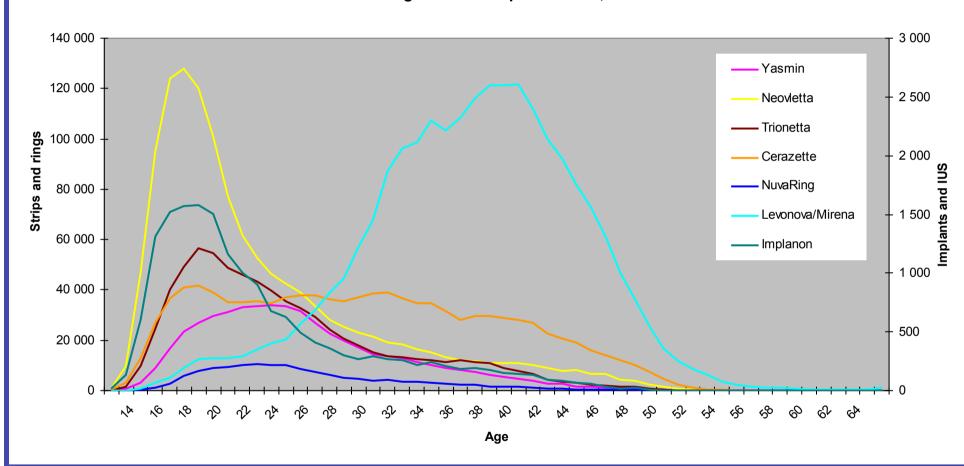
You Were Right All Along





# Contraception, sales figures

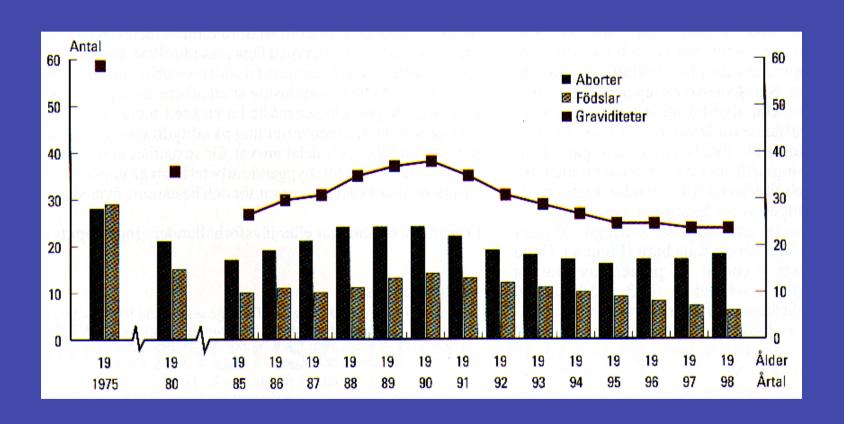
#### User age in contraceptive market, 2006



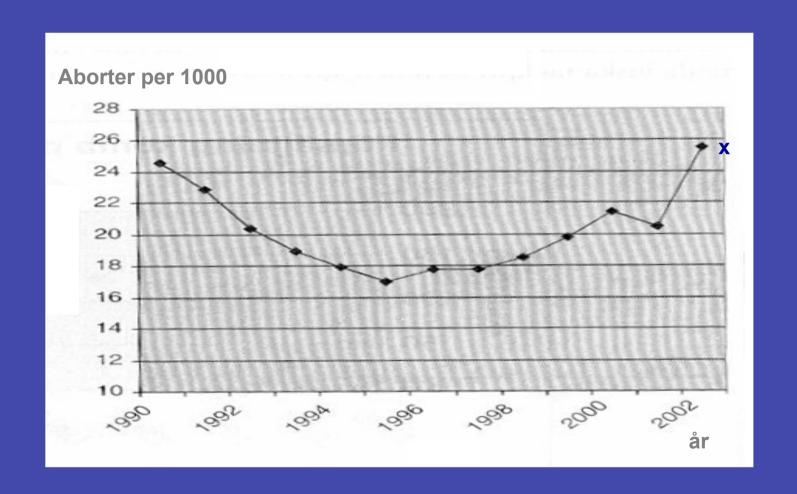
# Reproduktivhälsa och sexualundervisning Sverige fram till 1990-talet

- Sexual undervisning
  - Karolina Widerström 1890ies,
  - "Lex Hinke" 1911-1938
  - Elise Ottesen Jensen "Ottar", RFSU (1933)
  - Sexualundervisning i skolan: 1942 rekommenderat, 1955 obligatoriskt. Först i världen!
- 1975 "fri abort", minskande tonårsaborter:
   30 →18/1000 (-85),
- ungdomsmottagningar, fri preventivmedels- rådgivning, barnmorskornas förskrivningsrätt

# Tonårsgraviditeter födslar och aborter



# Tonårsaborter 1990-2002



## Komplikationer till oönskad graviditet och abort bland unga

- Komplikationer till den oönskade graviditeten
   (Tromboemboli ökar även under tidig grav, Mola vanligare bland unga, ektopisk grav)
- Unga söker abort senare, söker senare vid komplikation
- Komplikationer vanligare bland unga och vid senabort:
  - 5 % tot men blödn, inf, inkompl vanligare bland unga
  - Ut perforation, tarm skada (1-4/1000, UK),
  - Cervix skada 3:1 unga (tot 0.5-1)

56 117 1980-1994, Zhou et al., 2002

Kommer ej på FU, sämre prev rådgivning!

#### **Fertility**

| "Natural"                       | Today  |
|---------------------------------|--|
| Age at 1st child 18-20          | 29   |
| 12-15 pregnancies               | 1-2 pregnancies  |
| 10 live deliveries              | 1-2 live deliveries  |
| 7-8 surviving children          | all children survive   |
| Breastfeeding 2 years           | Breastfeeding 0-4 months   |
| 160 ovulations in a<br>lifetime | 450 ovulations in a lifetime (Effective contraception needed for most) |

Preventivmedel / K Gemzell Danielsson

#### "How it used to be"

"It would be one of the greatest triumphs of humanity ... if the act responsible for procreation could be raised to the level of a voluntary and intentional behaviour in order to separate it from the imperative to satisfy a natural urge"

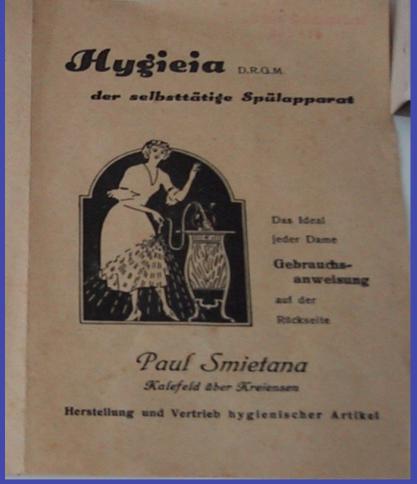
Siegmund Freud, 1898

"the woman ought, in the moment during coitus when the man ejaculates his sperm, to hold her breath, draw her body back a little so that the semen cannot penetrate into the os uteri, then immediately get up and sit down with bent knees, and in this position, provoke sneezes. She should then wipe out the vagina carefully or drink cold water in addition"

Soranos of Ephesus 98-138 A.D.

#### Vaginalsköljningar





# Beste Fishiblasen Sound Sound Sound Sound Sound Sound Sound Street Stree

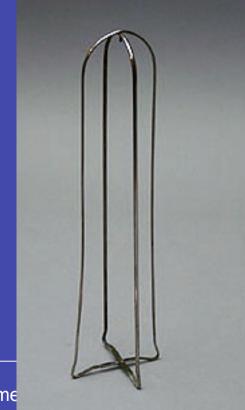
Fischblasen, bas beitbewährte Fabrikat, zuverläffig und unfühlbar, in hygienischer Cellophan-Umhüllung.



Ravau-Condom (ber oftmale benütbare Dauer-Condom), das ficherfte hygienische Schutmittel. Jedes Stud in Cellophan-Bulle.

#### **Kondom**

- •Simblåsor från fisk
- Lamm cekum (ingen appendix)
- •"the French letter"
- •"la Capute Anglaise"
- •Gummi, Goodyear

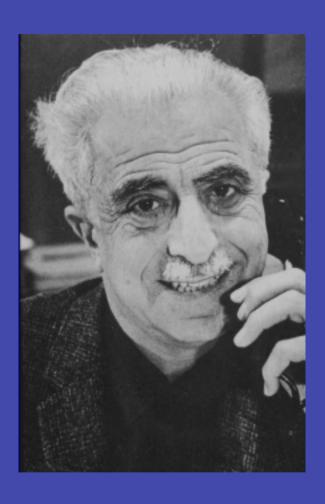


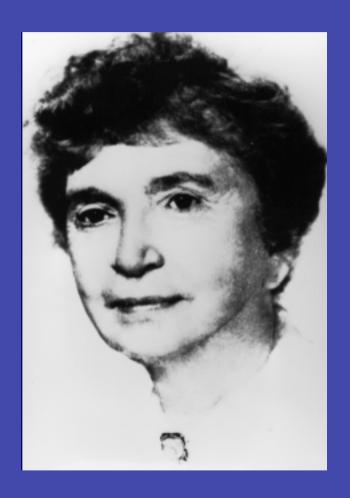
Preventivme

"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 kneebends while the man turns around and sleeps!"

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

#### The Pill





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.



#### Vad har hänt sedan 60-talet?

Reducerade hormondoser

Etinyl estradiol 50-35/30-20-15-10  $\mu$ g, Estradiol, Estetrol

- Nya mer selektiva gestagener
- Alternativa administrationsvägar

P-stavar, P-sprutor, P-ring, P-plåster, P-spray, long cycle

- Intrauterina metoder; -koppar-, -levonorgestrel
- Akutpreventivmedel etc.

#### Is there still a 'medical need' in contraception?

A staggering 225 million women lack effective and acceptable

contraception







Investment in education Probability of working

Level of income

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

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

Women must be able to plan their pregnancies "in order to have the best opportunity to achieve their education, employment and economic goals" as their reproductive years overlap with their time in school and entrance into the workforce.



### Family Planning Has Multiple Benefits for Women

- Reducing risk of complications during pregnancy<sup>1</sup>
- Saving lives of women and children<sup>2</sup>
- Reducing risk of sexually transmitted diseases<sup>2,3</sup>
- Enabling women to prepare for a healthy pregnancy and delivery<sup>4</sup>
- Promoting gender equality/empowerment of women and families<sup>3</sup>
- Reducing poverty and hunger<sup>3</sup>

Accessed 20 September 2011. **3.** World Health Organization. whqlibdoc.who.int/hq/2010/WHO\_FCH\_10.06\_eng.pdf. Accessed 20 September 2011. **4.** Frost JJ et al. *In Brief*. Guttmacher Institute; 2008; No. 1.

**<sup>1.</sup>** Mesce D et al. www.prb.org/pdf06/UnsafeAbortion2006.pdf. Accessed 20 September 2011. **2.** Smith R et al. www.prb.org/pdf09/familyplanningsaveslives.pdf.

# Use of Effective Contraception Projected to Kard Institute Reduce Unsafe Abortions and Complications in Developing Countries<sup>1</sup>

#### **Guttmacher Institute Projections**

Access to effective contraception could reduce

| 70% | Induced abortions (from 35 million to 11 million)  |
|-----|--|
| 73% | Unsafe abortions (from 20 million to 5.5 million)  |
| 73% | Women needing medical care for complications of unsafe abortions (from 8.5 million to 2.3 million) |
| 66% | Safe and legal abortions (from 15 million to 5.1 million)  |

<sup>1.</sup> Singh S et al. Guttmacher Institute and United Nations Population Fund; 2009. www.guttmacher.org/pubs/AddingltUp2009.pdf. Accessed 21

November 2011.
K.Gemzell Danielsson

#### LV rekommendationer

Kombinerade hormonella metoder Gestagena metoder Spiraler

# Guidance based on evidence and kept up-to-date

Monitoring all new evidence



Systematic review on selected issues

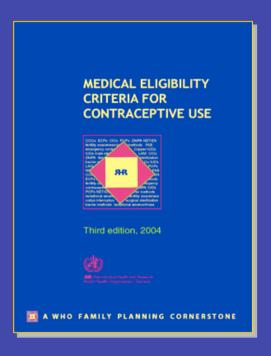
**Expert Working Groups** 

Electronic Updates

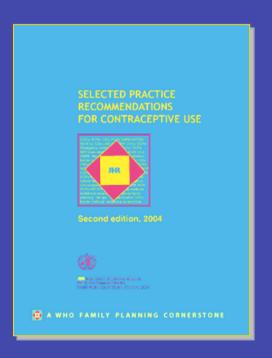
K Gemzell Danielsson

#### The Evidence-Based Guidelines

Mål: rekommendationer att använda för utveckling av nationella guidelines



Who can use contraceptive methods



How to use contraceptive methods



#### Our goal

- We need to increase contraceptive choice:
  - → Make it possible for all women, at different stages of life and with different needs, to find a contraceptive method
  - → To make it worth the effort!
  - → To make a difference to women themselves in their lives
    - their relations, the possibility to achieve education & for the benefit of their children
- Consider the efficacy of agents and what we can do to minimise their risks & side effects
- Aim to bring a positive health impact & to improve patient motivation and compliance