# How to deal with disinformation about hormonal contraception

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Museum of Contraception and Abortion www.muvs.org

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### You can download the slides



- 1. Hormone scare and the consequences
- 2. Why hormonal contraception
- 3. Romanticisation of fertility: in search of paradise lost
- 4. Strategies to overcome urban legends/myths and help women to find the individually best method

## Examples of media driven pill scare – "Bad news is good news"

WHICH BIRTH CONTROL METHODS DON'T HAVE HORMONES?

"57% of German women think OC is bad for their health in long term use." Wege zu einer natürlichen und sicheren Verhütungsmethode

Und tschüss,

Hormone ?

Ein Dokumentarfilm

Natural hormone inspires new contraceptive pill

Natural Family Planning International, Inc. (NFPI)



### Welcome! This is the place to learn NFP!

What is natural family planning (NFP)?

- NFP is a way of following God's plan for achieving and/or avoiding pregnancy. It consists of ways to achieve or to avoid pregnancy using the physical means that God has built into human nature.
- · NFP consists of two distinct forms:
  - Ecological breastfeeding. This is a form of child care that normally spaces babies about two years apart on the average.
  - Systematic NFP. This is a system that uses a woman's signs of fertility to determine the fertile and infertile times of her cycle.
- Couples seeking to avoid pregnancy practice chaste abstinence during the fertile time of her cycle.

You can teach yourself how to practice both forms of NFP by using the short and easy-to-read manual, Natural Family Planning: The Complete Approach.



Feministisches Frauen Gesundheits Zentrum e.V. Berlin





verändert den natürlichen Zyklus nicht.

Pill scare, C. Fiala

## Biased scientific information: Correlation is not proof of causation

Goal	Conclusions	reference
assessed <b>associations</b> between HC use and suicide attempt and suicide	these little-recognized potential <b>side effects</b> of HC, health professionals and women starting hormonal contraceptives should be informed about them	Association of HC with Suicide attempts and suicides. Skovlund et al. Am J Psychiatry. 2018
assessed <b>associations</b> between the use of HC and the risk of invasive breast cancer	Our data showed a <b>higher risk</b> of breast cancer with a longer duration of use of combined products we found that <b>risks</b> among women who used HC for less than 5 years rapidly decreased after discontinuation of hormonal contraception	Contemporary HC and the Risk of Breast Cancer. Mørch et al. N Engl J Med. 2017
whether use of HC is positively <b>associated</b> with subsequent use of antidepressants and diagnosis of depression	Use of HC was <b>associated</b> with subsequent antidepressant use and first diagnosis of depression at a psychiatric hospital among women living in Denmark. Adolescents seemed <b>more vulnerable to this risk</b> than women 20 to 34 years old.	Association of HC Depression.Skovlun d et al. JAMA Psychiatry. 2016

"Assuming that the demonstrated associations are causal"

## Biased scientific information: Correlation is not proof of causation

"First-time use of an LNG-IUS was positively associated with incident depression .... Although the observational design of the study does not permit causal inference"

"In women without psychiatric history, current HC use especially ethinylestradiol-containing preparations was associated with a lower risk of attempted suicide" "Current use of progestin-only preparations was not associated with attempted suicide."

Toffol et al. 2024

Larsen et al. 2024

### Problems of the debate: biased medical information

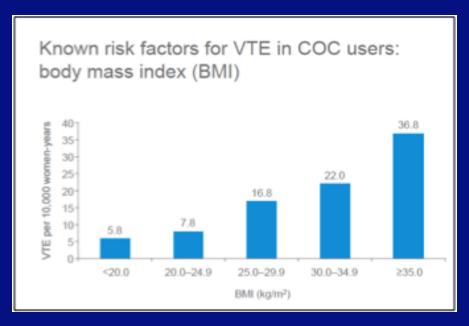
- 1. Comparator is virtual
- 2. Correlation is taken as proof for causation
- 3. Other risk factors ignored
- 4. Very low risk presented out of proportion
- 5. Consequences of unwanted pregnancies are ignored

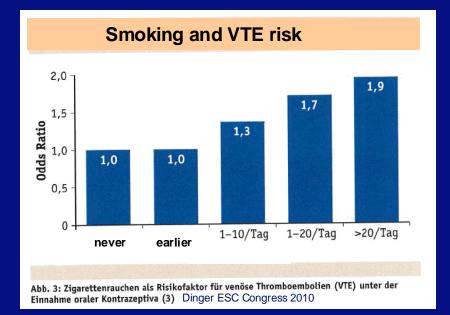
Product information updated to help women make informed decisions about their choice of contraception

Risk of developing a blood clot (VTE) in a year				
women <b>not using</b> a combined hormonal pill/patch/ring and are not pregnant	About 2 out of 10,000 women			
Women using a CHC containing levonorgestrel, norethisterone or norgestimate	About 5-7 out of 10,000 women			
Women using a CHC containing etonogestrel or norelgestromin	About 6-12 out of 10,000 women			
Women using a CHC containing drospirenone, gestodene or desogestrel	About 9-12 out of 10,000 women			



### Problems of the debate: Other risk factors ignored





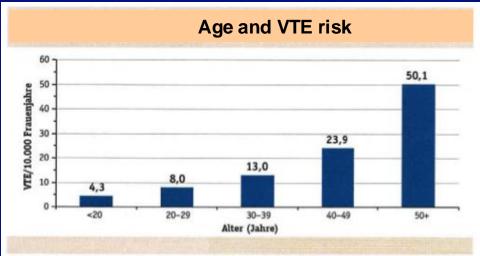
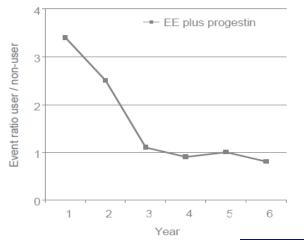


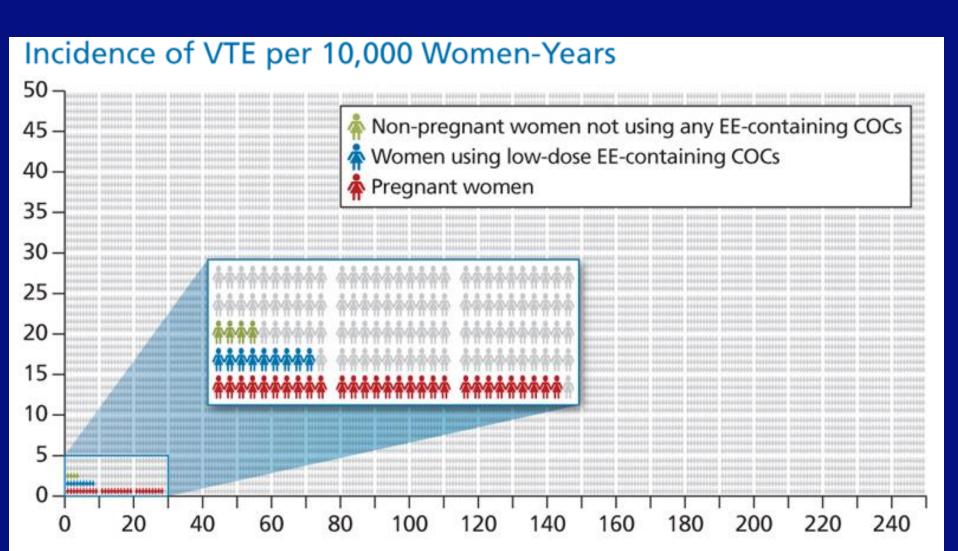
Abb. 1: Altersabhängigkeit des venösen Thromboserisikos (VTE pro 10.000 Frauen/Jahr) bei COC-Anwenderinnen (Quelle: Zwischenergebnisse der LASS-Studie: http://clinicaltrials.gov/ct2/show/NCT00676065; Dinger 2010)

Known risk factors for VTE in COC users: duration of use



apted from Suissa, et al. Hum Reprod 2000;15:817-21

### Problems of the debate: Very low risk presented out of proportion



### Correlation is not proof of causation

SOMEDAY, I WANT TO GET MARRIED BECAUSE STUDIES SHOW THAT MARRIED PEOPLE ARE HAPPIER.

A SMARTER INTERPRETATION IS THAT NO ONE WANTS TO MARRY AN UNHAPPY PERSON.

"Assuming that the demonstrated associations are causal"

### Number of storks and deliveries in Burgenland, Austria

Would the interpretation be:

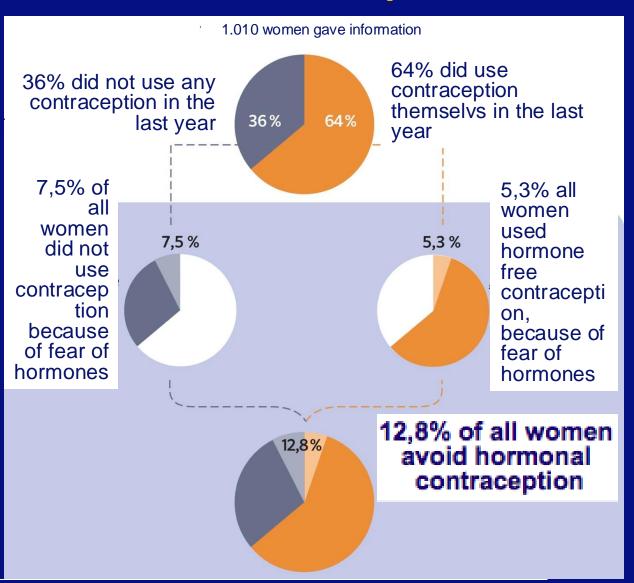
AND THE VILLAIN STILL PURSUES HER.

"Risk" of lower birth rate with lower number of storks?



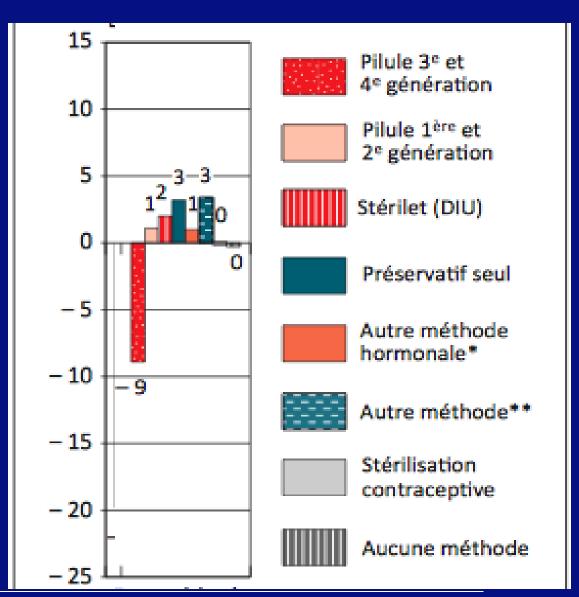
### Hormone fear – and the consequences

women who avoid hormones, use less effective contraception or no contraception at all

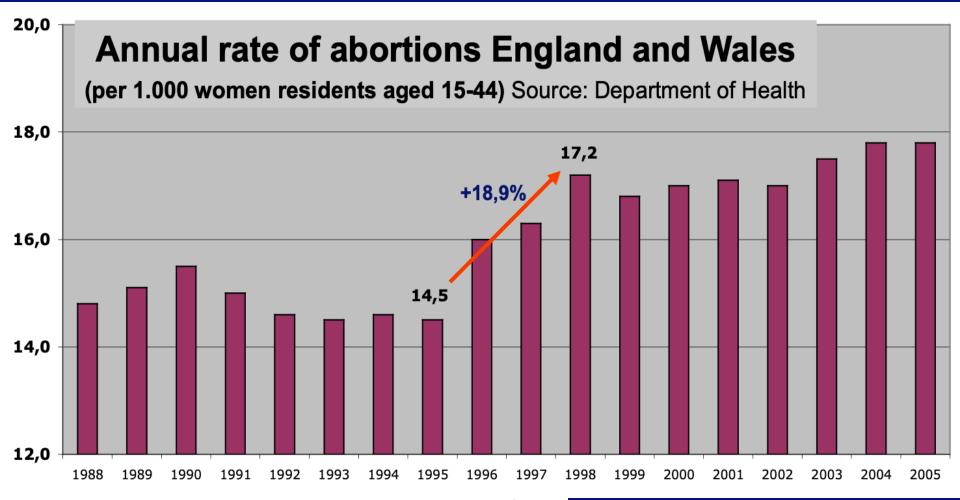


### Consequences of the pill scare 2.0 (2012)

Contraceptive use in France between 2010 and 2013



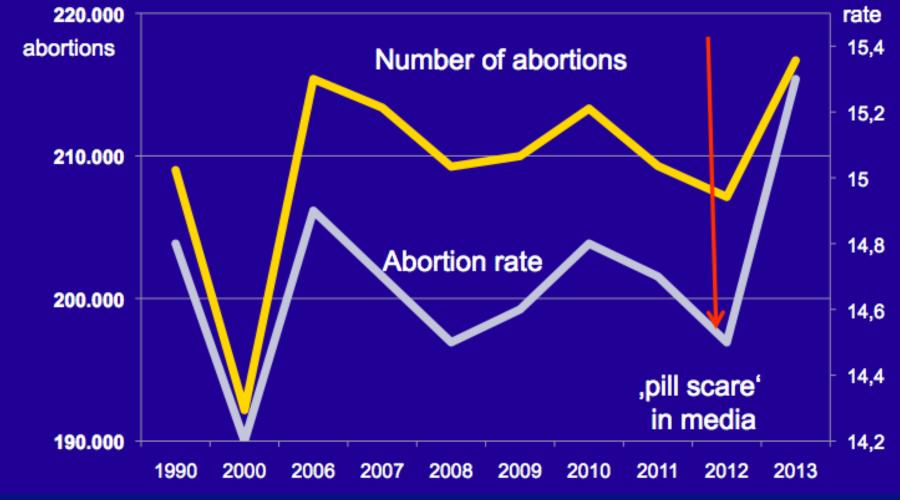
### Consequences of the pill scare 1.0 (1995)



In October 1995, the Committee on Safety of Medicines (CSM) released a 'Dear Doctor' letter, warning doctors about an increased risk of venous thromboembolism (VTE) in women taking third-generation combined oral contraceptive (COC) pills.

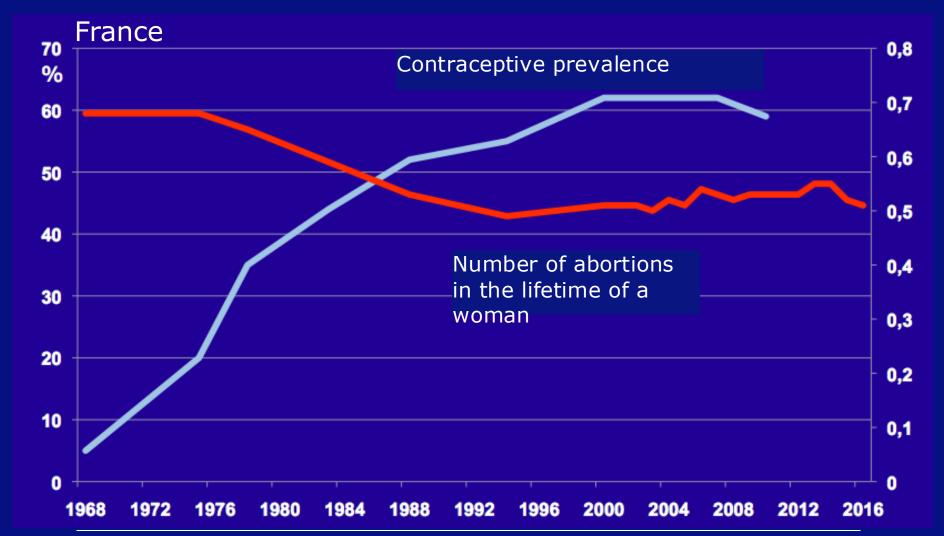
Pill scare, C. Fiala

### Consequences of the pill scare 2.0 France (2012)



Increase in the number of abortions and abortion rate following the ,pill scare'

## Pill scare leading to the contraceptive paradox



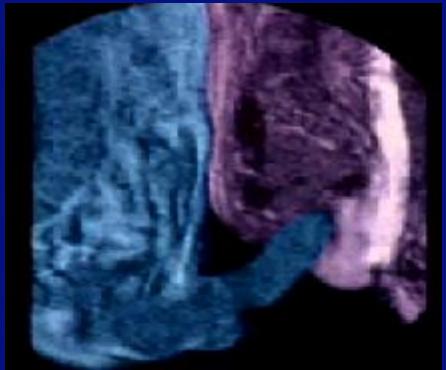
## Estimated accidental pregnancies resulting from contraceptive failure worldwide

**Table 1.1** Estimated number of women using a contraceptive method and those experiencing an unintended pregnancy during the first year of contraceptive use, by type of contraceptive method, global data, 2007

Contraceptive method	Estimated fail- ure rate (typical use), %ª	Number of users, thousands <sup>b</sup>	Number of women with accidental pregnancy (typical use), thousands <sup>c</sup>
Female sterilization	0.5	232 564	1163
Male sterilization	0.15	32 078	48
Injectables	0.3	42 389	127
Intrauterine device (IUD)	0.8	162 680	1301
Pill	5.0	100 816	5041
Male condom	14	69 884	9784
Vaginal barrier	20	2291	458
Periodic abstinence	25	37 806	9452
Withdrawal	19	32 078	6095

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### The baseline

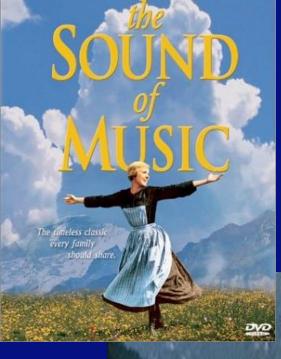


"The result of intercourse in general is the child"

### **Natural fertility**



The Austrian Imperial Family, Empress Maria Theresia, Palace of Schönbrunn, Vienna, 1754



### **Natural fertility**

The Trapp family with 7 children

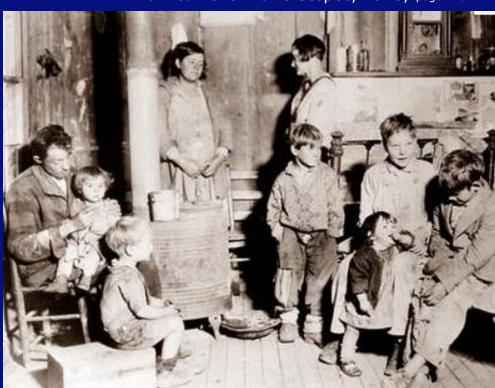


### **Natural fertility**

"... in the whole human relation there is no slavery or torture so horrible as coerced, unwilling motherhood ..."

'Married Love' Marie Stopes, 1918, page 140





Many children died through an ,Angel Maker'

Edited by Margaret Sanger

### A vision

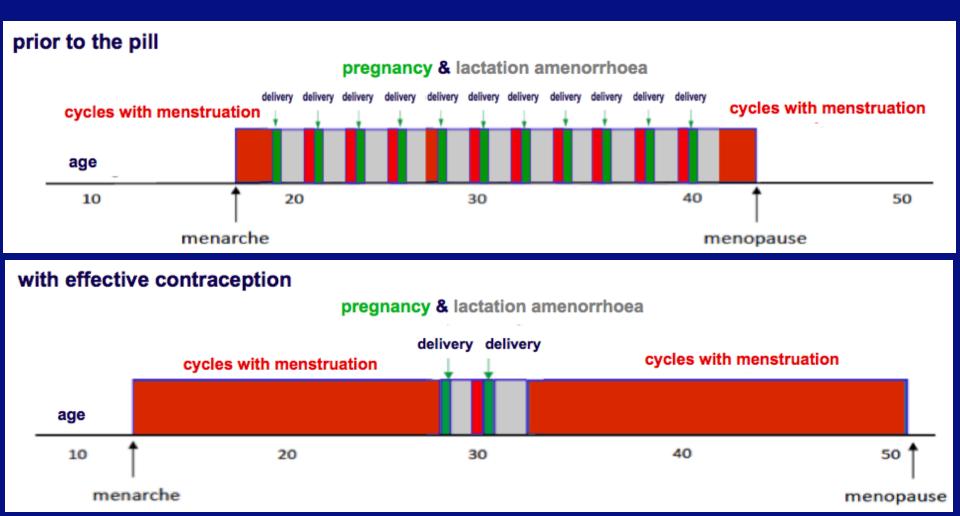
" It would be one of the greatest triumphs of humanity ... if the act responsible for procreation could be raised to the level of a voluntary and intentional behaviour in order to separate it from the imperative to satisfy a natural urge"

Siegmund Freud, 1898

### 35 years fertility in a woman's life

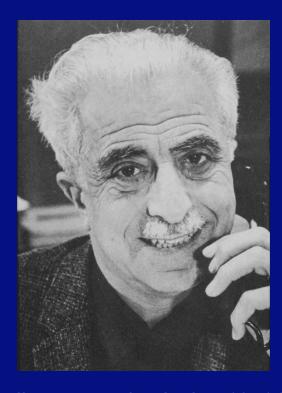
"Natural"	Today	
12-15 pregnancies	1-2 pregnancies	
8-10 live deliveries	1-2 live deliveries	
7-8 surviving children	all children survive	
Breastfeeding 2 years	Breastfeeding 0-4 months	
160 ovulations in a lifetime	450 ovulations in a lifetime  > Effective contraception  needed for most	

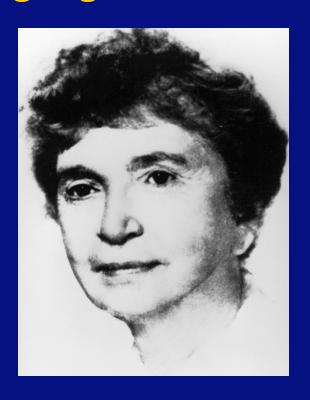
### Result of effective hormonal contraception



New problem: Highly effective contraception needed for most of the 35 fertile years

## First contraception - based on hormones = the language of the body





A dinner party beginning 1951 in New York is considered as the "birth" of the Anti-Baby-Pill. Margaret Sanger in her 70s and her incredibly rich friend Katharine McCormick, ask the scientist Gregory Pincus, how much money he would need to develop a method for women based on the findings of numerous scientists from the decades before.





## 60 years ago hormonal contraception was highly welcomed



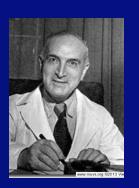
"one of the greatest triumphs of humanity"

Siegmund Freud, 1898

### The long way of developing safe and effective IUDs



Stem pessaries ≈1900



Ernst Gräfenberg



Silk rings ≈1900



Stainless steel rings 1920



Jack Lippes



Plastic devices 1960



Jaime Zipper Cupper added 1969



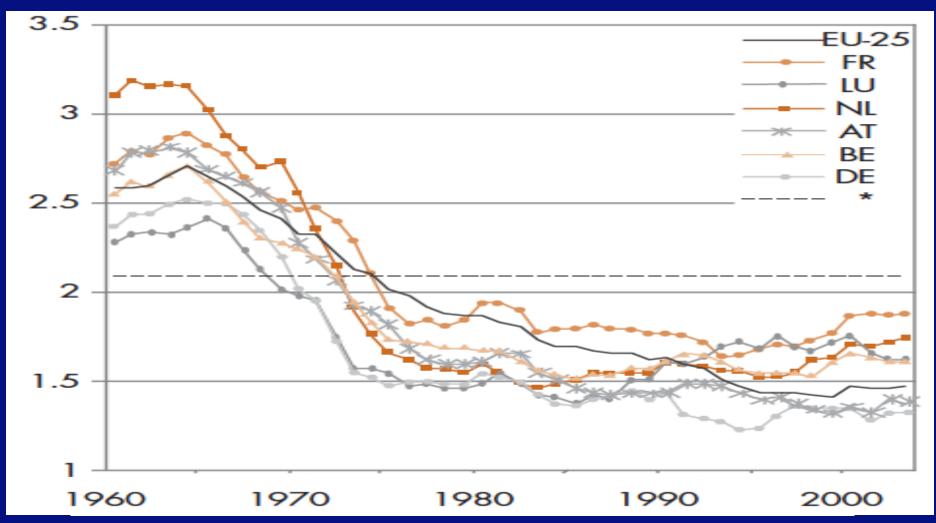
Improved forms Willem van Os >1980



Tapani Progesterone IUD Luukkainen 1990

## Effective contraception: the 2<sup>nd</sup> most important cultural achievement

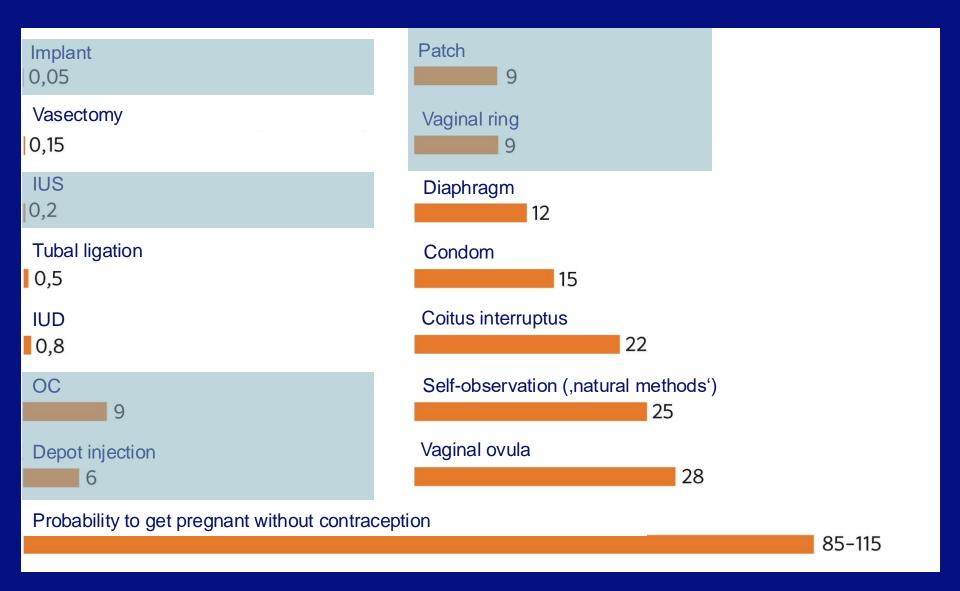
**Total fertility rate, Central Western Europe** 



Source: Europe's demographic future: Facts and figures on challenges and opportunities, European Commission, (2007)

Pill scare, C. Fiala

### **Pearl Index in real life**



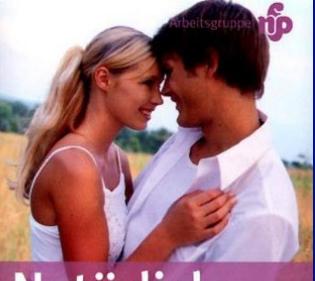
### The Contraceptive Paradox

Today a human dream has come true:

We can effectively separate fertility and sexuality with an unprecedented high number of highly effective contraceptive methods. But the abortion rates remain stable or even increase in countries with reliable abortion statistics.

### Why?

- 1. Hormone scare and the consequences
- 2. Why hormonal contraception
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- 4. Strategies to overcome urban legends/myths and help women to find the individually best method



### Natürlich und sicher

- Auf den eigenen K\u00f6rper h\u00f6ren
- Sichere Empfängnisregelung ohne Nebenwirkungen

Pour une vie conjugale plus heureuse:

ses avantages -

d'après des nouvelles connaissance

"PILULE"

ni aucun autre procédé contraceptif

50 years after the discovery women want to abandon hormonal contraception

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### Natural contraception 'effective'

A natural family planning method is as effective as the contraceptive pill, German research suggests.

The symptothermal method (STM) assesses fertility levels

onthly cycle by dy temperature, a cervical



The method involves monitoring body temperature

natural birth control made simple

YOU NEED THIS BOOK II

- stay in tune with
- \* you need to avoid the health risks and complications of the Pill
- \* you like knowing when you're most fertile and able to conceive

simples métodos de control de la natalidad

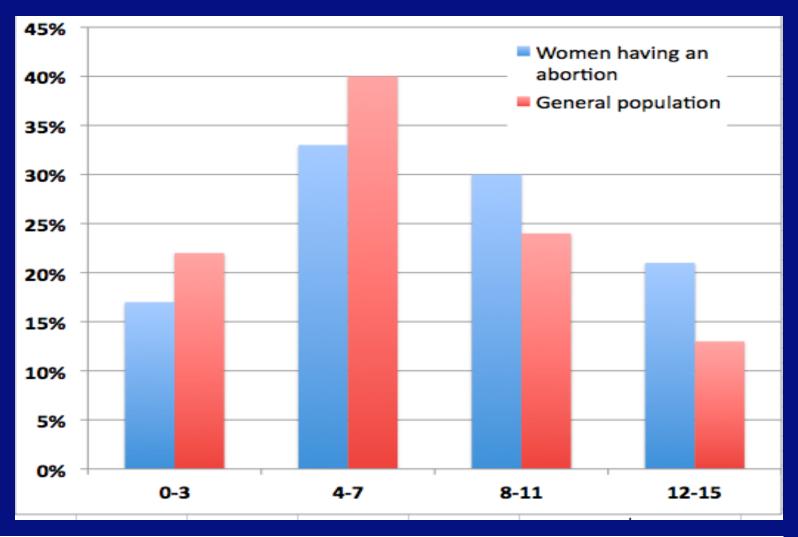
### Romanticisation of fertility:

### in search of paradise lost

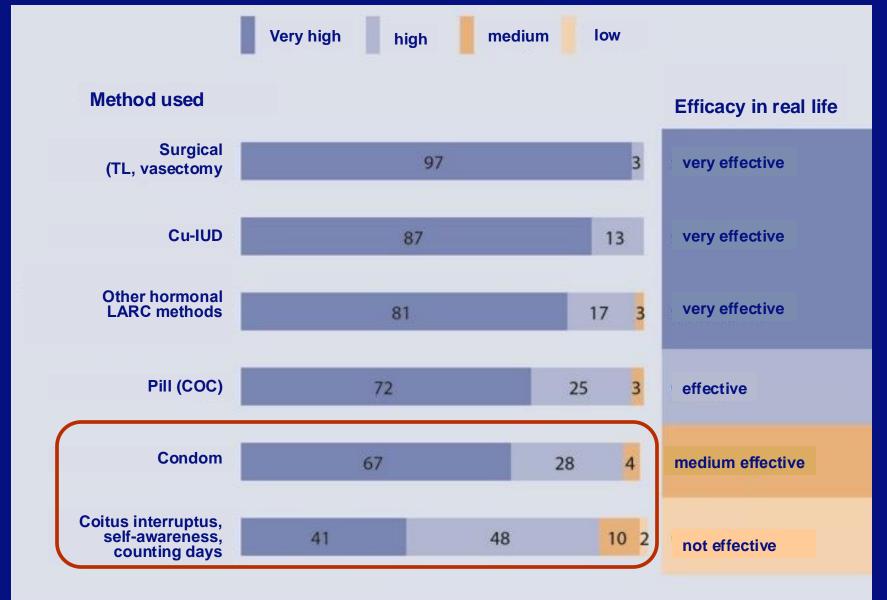
- 100 years after Sigmund Freud described the unimaginable despair caused by natural fertility
- 60 years after the discovery of effective (hormonal) contraception

Most have forgotten what 'natural fertility' means and that there is no such thing as "natural contraception"

## Estimate of the average number of pregnancies in a woman's lifetime without contraception



### Perception of efficacy of the method used



Percentage of couples having used that contraceptive method during the last 12 months, Austrian contraceptive prevalence survey, 2012, www.verhuetungsreport.at

Pill scare, C. Fiala

 ,Natural contraception' is a fundamental contradiction going back to Hermann Knaus who declared having discovered:

"a natural yet arbitrary regulation of fertility"

eine natürliche und dennoch willkürliche Regelung der Fortpflanzung Knaus Wr. Klin. Wschr. 1960

- Women need to decide:
  - either they control their fertility or
  - their fertility will control their life

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# Paradigm shift in contraceptive counselling: A new problem demands a new solution

- The first generations of women after discovery of the Pill had experienced natural fertility. They still had the emotional experience.
- They knew that the desired number of children is the result of a continuous artificial intervention.
- The younger generation can not make that experience anymore.
- It is therefore on us, the adults to pass this perception to the younger generations with adequate pedagogic tools.

# Paradigm shift in contraceptive counselling: A new problem demands a new solution

- Until the year 2 000 we needed to explain how to use contraception, women understood why they needed it
- Nowadays we have to explain why they need use effective contraception at every intercourse, women get the information about how to use them from their smart phone

A shift from "how" use contraception to "why" use it.

## Underlying misunderstanding of the pill scare

#### Hormones are the language of the body

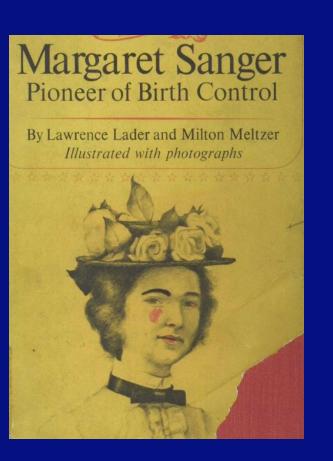
'Hormone-free contraception' is refusing to use the way our organs communicate (lingua franca of the body).

- 'Hormone free contraception' is equivalent to:
- non-verbal communication between people: not very effective with increased risk of misunderstanding (side-effects)
- refusing to use the language spoken in a guest country

## How to overcome the pill scare

- Focus on individual self-perception instead of externally defined, ideologically based goals
- Switching the product in case of side-effects
- Consider non-contraceptive benefits: relief from PMS
- Explain long cycle: www.period-free.info
- Develop counselling strategies to correct misinformation and myths

To Margaret Sanger, birth control was the first freedom for women. "No woman can call herself free until she can choose consciously whether she will or will not be a mother," she wrote.



We can make that vision a reality only if we use hormonal contraception up to it's full potential:

Children and menstruation by choice not chance

A museum for sex education to change the perception of natural fertility and make people understand the need for effective contraception for most intercourses in 35 years of fertility in a woman's life





Museum of Contraception and Abortion – in Vienna and online www.muvs.org

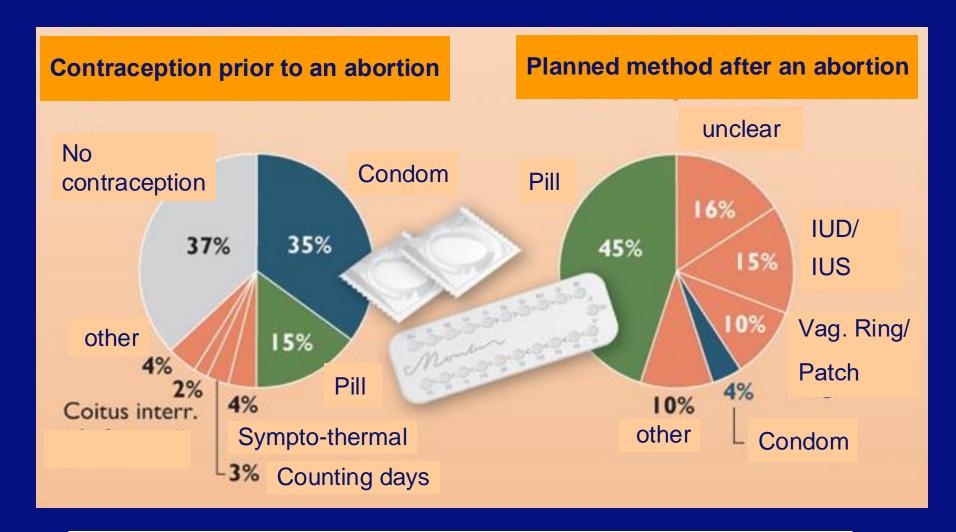
# Reasons for not using effective hormonal contraception

#### Avoiding hormones:

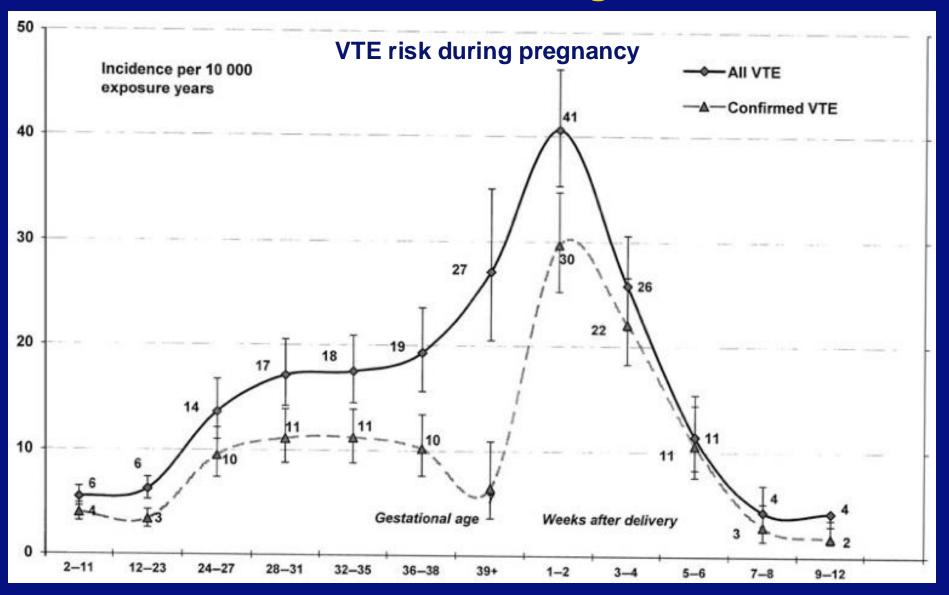
- No correlation with "Romantic Herbal Naturalist" (43% of total)
- Strong correlation with "Pharma Industry Distrust", p<0,001 (28% of total)

Preliminary results of a new study among women having an abortion, n=300 (planned n=500)

## The learning curve in contraception



## Other risk factors ignored



## Consequences of the 'pill scare' are real

Method of contraception	2012	2015	2019
Effective hormonal	60%	57%	44%
Effective non-hormonal (TL, vasect., Cu-IUD)	8%	7%	10%

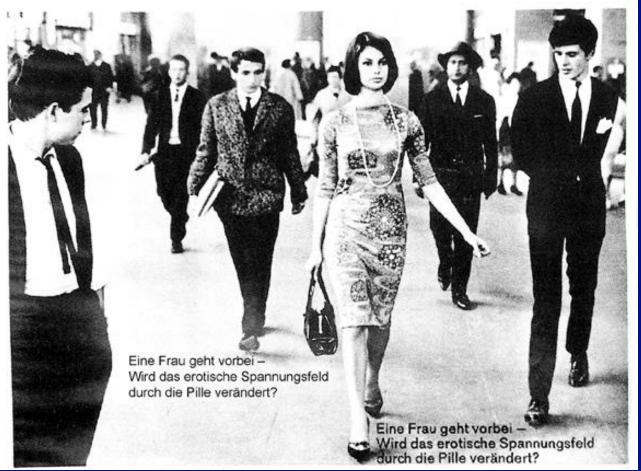
Source: Austrian national contraceptive prevalence survey, 2012 n: 1 060, 2015 n: 2 018, 2018 n: 2 019

## Reasons for not using effective contraception

- 40% of women having an abortion think hormones are dangerous
- 64% of women having an abortion avoid hormones
- 39% of women in the general population avoid hormones

# Die Die Lund die Moral in Deutschland

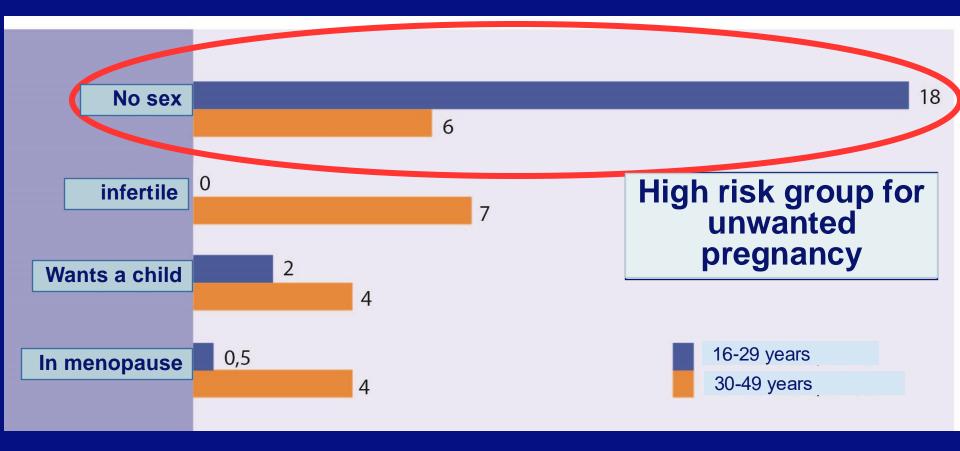
The pill and the moral in Germany



A woman walks by.
Will the erotic spirit
be changed by the
pill?

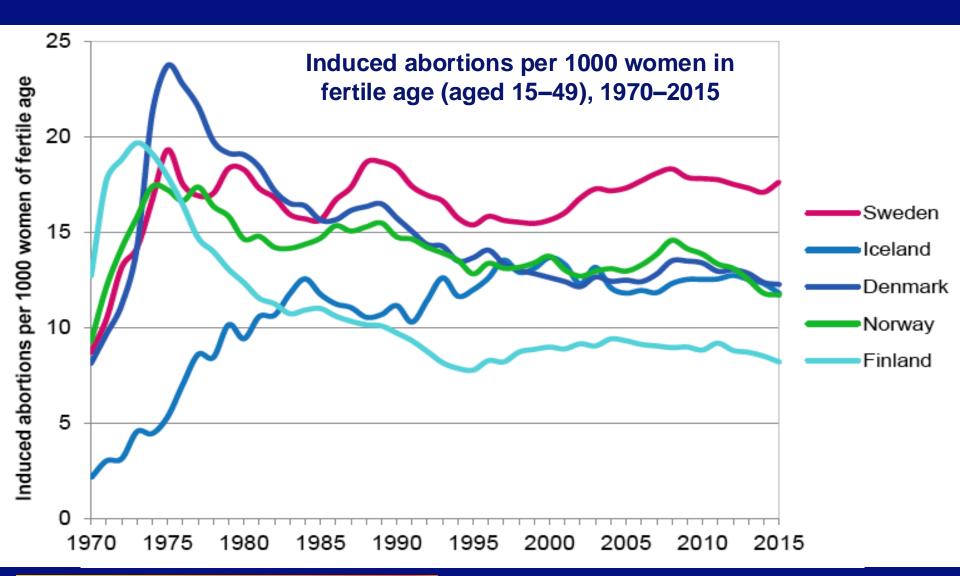
Der Stern (Magazin) Cover in 1967

## Reasons for not using any contraception by age

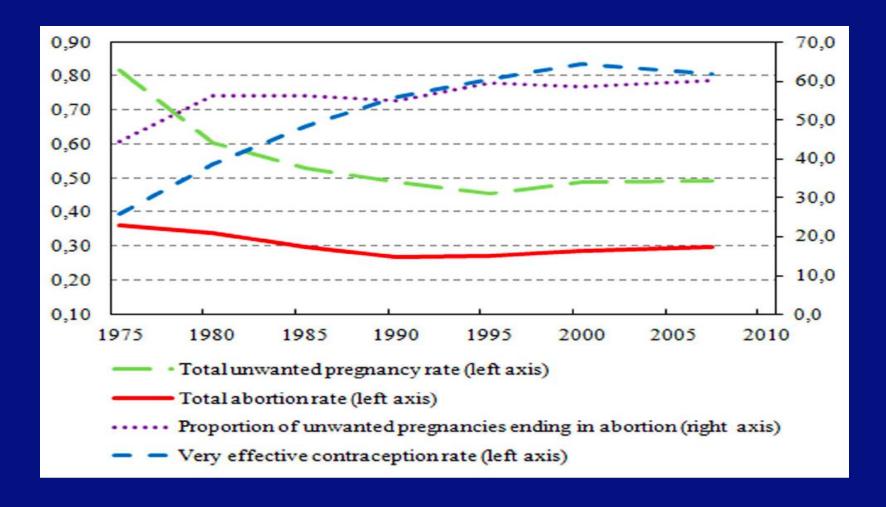


Basis: all participants, n= 1.060

## The Contraceptive Paradox



## The Contraceptive Paradoxon



unwanted pregnancies, probability of ending them, and abortion rates for women 18-29,

## The Contraceptive Paradoxon

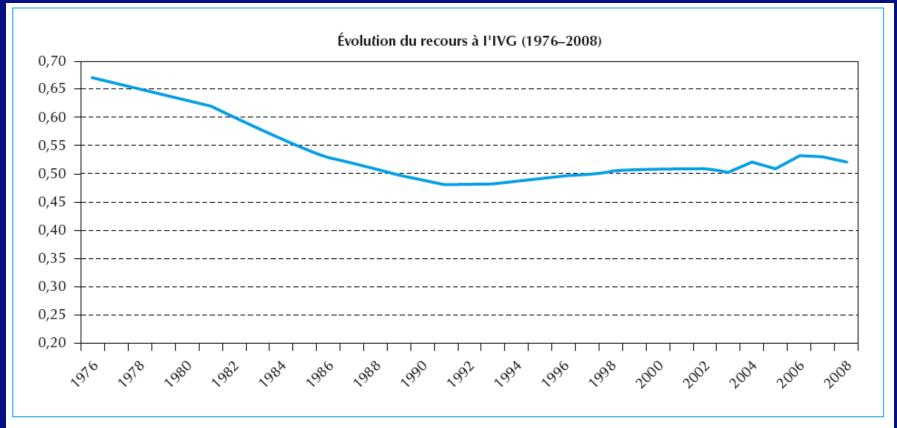


Figure 1. Évolution des indicateurs conjoncturels de recours à l'avortement en France (°/°) de 1976 à 2008 (Sources : données corrigées de l'Ined de 1976 à 2002 et statistiques de la DRESS à partir de 2002 [1, 24].

D'après les taux de recours à l'avortement enregistrés en 1968, 68% des femmes auront recours à l'avortement dans leur vie. Ce chiffre est de 52 % en 2008 ; il tient compte des avortements de rang 1 et de rang 2 et +.

## The Contraceptive Paradoxon

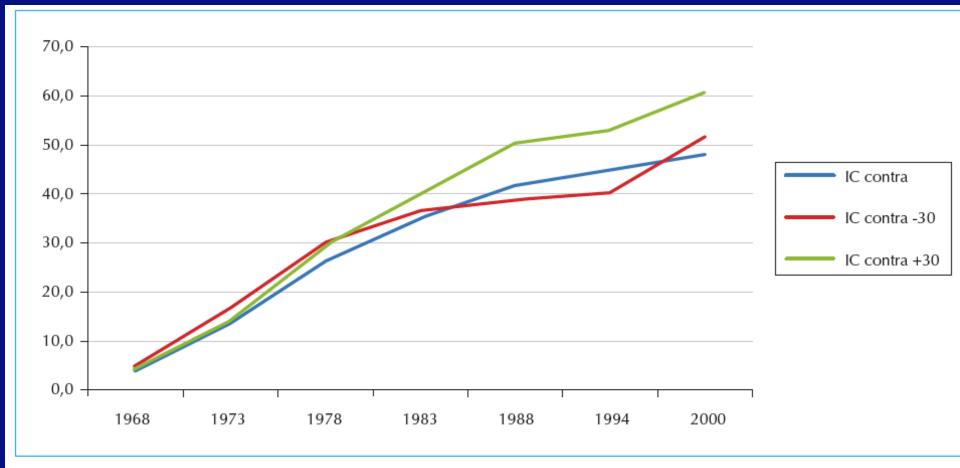
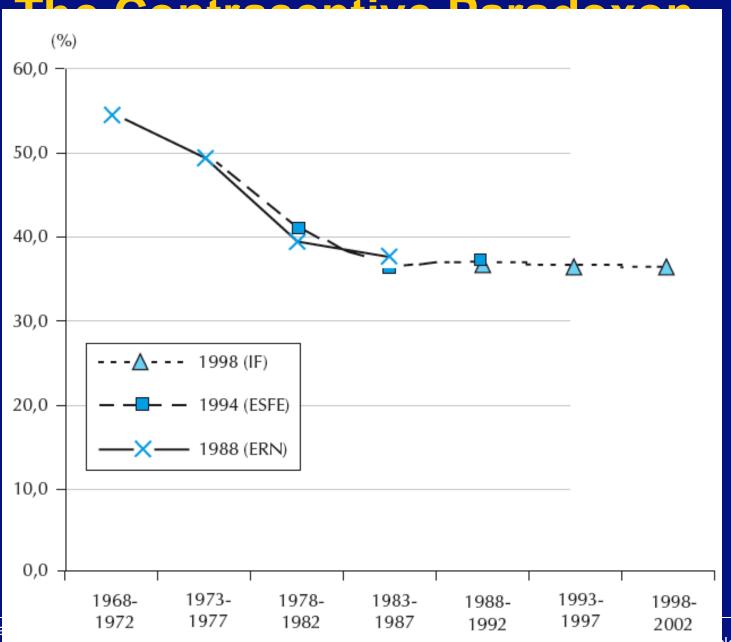


Figure 3. Évolution du taux de recours à la contraception (%) selon l'âge des femmes (Sources : enquêtes Ined et Inserm). Les indicateurs conjoncturels (IC) représentent la somme des taux par âge de recours à la contraception par année donnée.



Bajos N, Ferra contraceptif à

la

We need to know the past

in order to understand the present and

be able to shape the future

# "Contraceptive Paradoxon" –reasons for not using effective contraception

Preliminary results of a new study among women having an abortion, n=300 (planned n=500)

## Women having an abortion:

-Avoid hormones frequently (64% compared to 39% in the general population) and even think hormones are dangerous in 40%

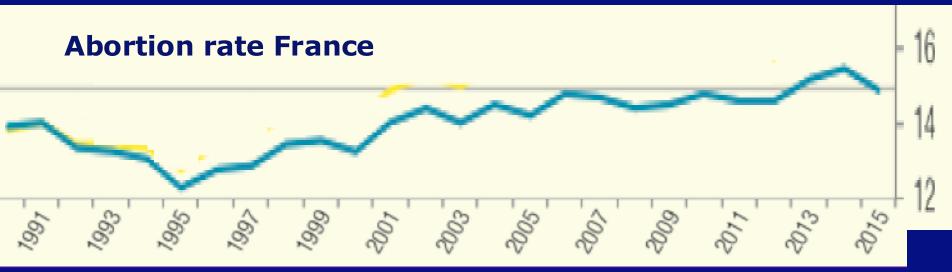
#### -Think that:

- "body processes should be autonomous": 76%
- "Herbal medicine is harmless": 50%
- "Avoid taking pain killers": 23%

## The Contraceptive Paradox

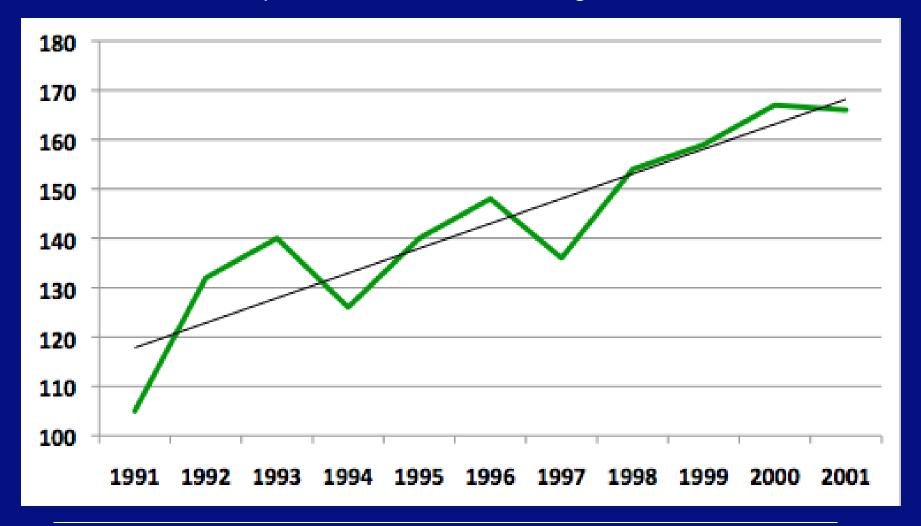
Today a human dream has come true:

We can effectively separate fertility and sexuality with an unprecedented high number of highly effective contraceptive methods. But the abortion rates remain stable or even increase in countries with reliable abortion statistics.



#### No of storks and deliveries in Burgenland, Austria

Would the interpretation be: An increasing number of storks may have the potential side-effect of a higher birth rate?

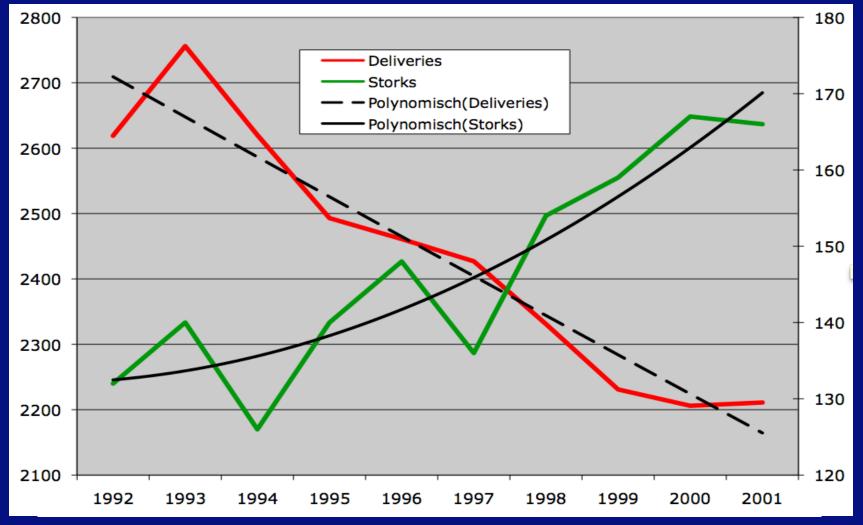


Pill scare, C. Fiala

#### No of storks and deliveries in Burgenland, Austria

Would the interpretation be:

we need to look at potential confounders?



Pill scare, C. Fiala

#### No of metal rings put on (juvenile) storks Austria

Would the interpretation be: Metal rings on the legs of storks have the "risk" or "potential side effect" that they can not do their work?

