

# How to deal with disinformation about hormonal contraception

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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”



„57% of German women think OC is bad for their health in long term use.“



Natural hormone inspires new contraceptive pill



Feministisches Frauen Gesundheits Zentrum e.V. Berlin



## 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. Skovlund 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 in an LNG-dose-dependent manner across low-, medium-, and high-dose LNG-IUSs. Although the observational design of the study does not permit causal inference“

Toffel et al. 2024

„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.“

Larsen et al. 2024

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## 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 <b>levonorgestrel, norethisterone or norgestimate</b>	About 5-7 out of 10,000 women
Women using a CHC containing <b>etonogestrel or norelgestromin</b>	About 6-12 out of 10,000 women
Women using a CHC containing <b>drospirenone, gestodene or desogestrel</b>	About 9-12 out of 10,000 women



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## Problems of the debate: Other risk factors ignored

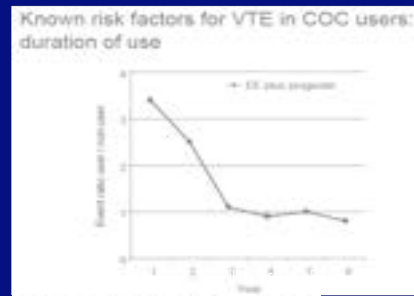
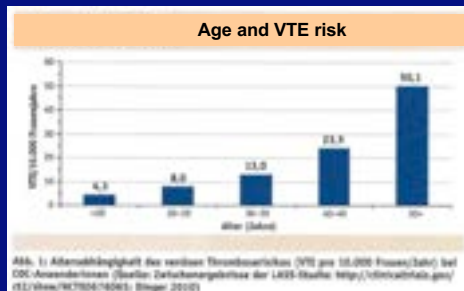
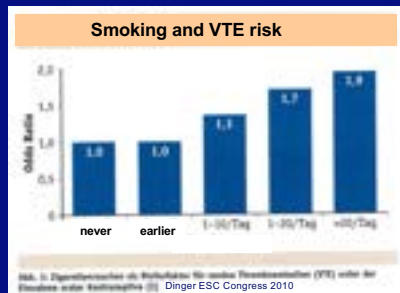
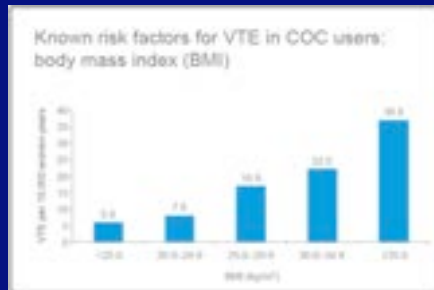
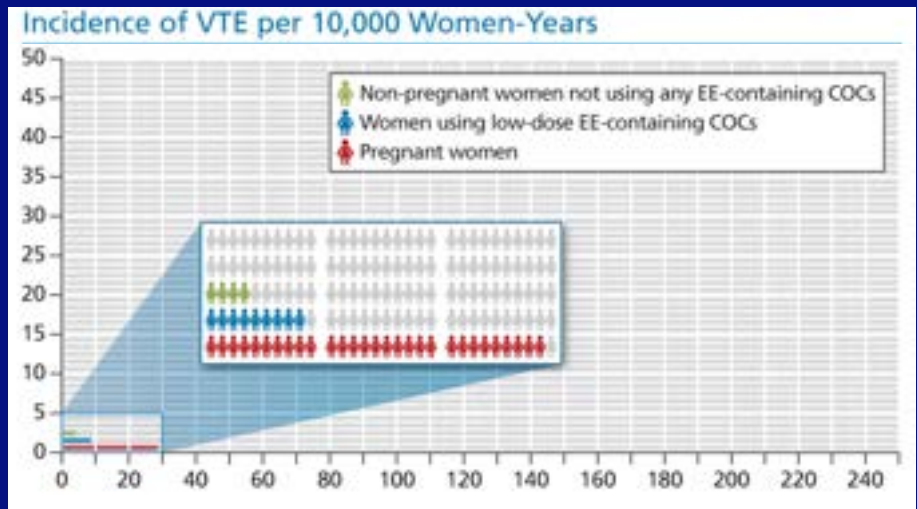


Abb. 1: Altersabhängigkeit der relativen Thromboembolierisiken (VTE pro 10,000 Frauen/Jahr) bei COC-Anwendung (Quelle: Zulassungsberichte der Läng-Studie <http://clinicaltrials.gov/ct2/show/study/16961>; Singer 2010)

Adapted from Sanchez, et al. Hum Reprod (2005) 19(11):21

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



Reference(s): Dinger J et al. Contraception. 2007;75:344-354.  
1. Jacobsen AF et al. Best Pract Res Clin Obstet Gynaecol. 2012;25:319-332.

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## Correlation is not proof of causation



„Assuming that the demonstrated associations are causal“

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## Number of storks and deliveries in Burgenland, Austria

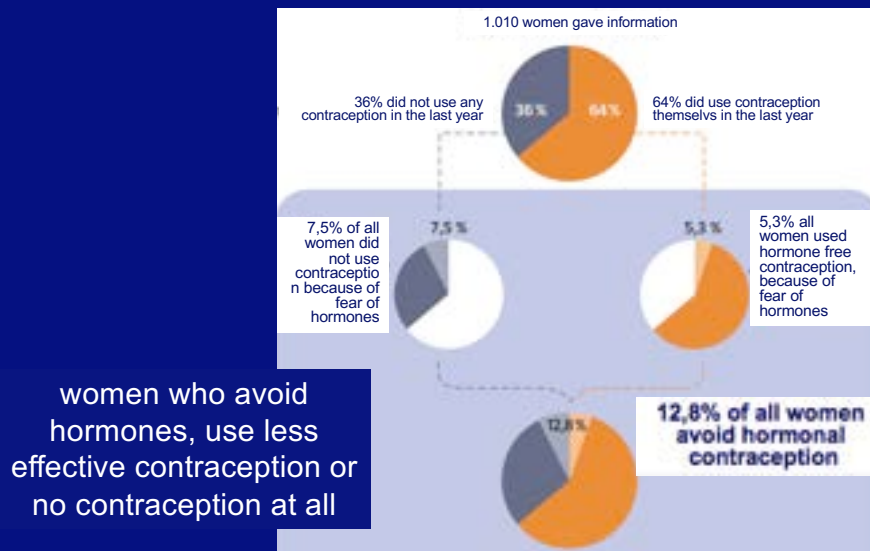
Would the interpretation be:  
„Risk“ of lower birth rate with lower number of storks?



Source: BirdLife Austria and Statistics Austria

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## Hormone fear – and the consequences



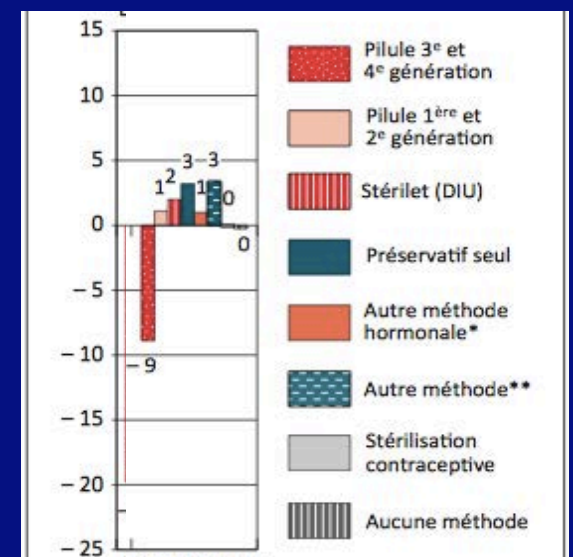
women who avoid hormones, use less effective contraception or no contraception at all

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Austrian contraceptive survey, 2015, www.verhuetungsreport.at

## Consequences of the pill scare 2.0 (2012)

Contraceptive use in France between 2010 and 2013

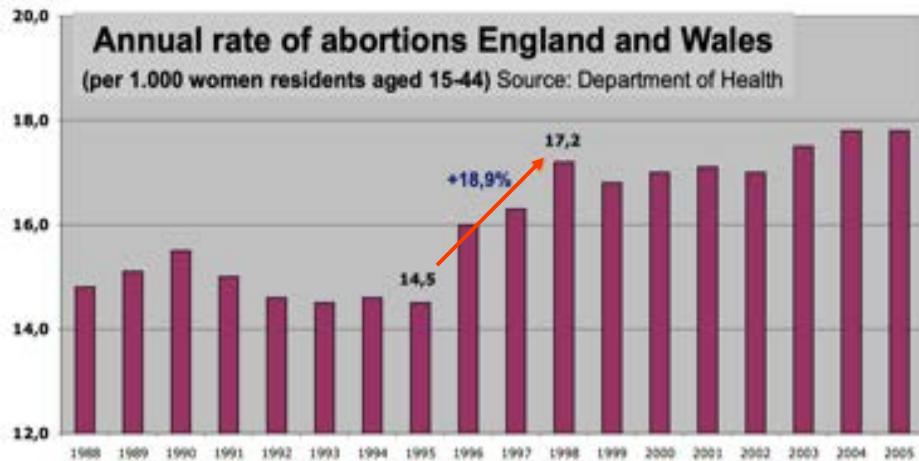


N. Bajos et al., Population & Sociétés, n° 511, Ined, 2014

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## Consequences of the pill scare 1.0 (1995)

13

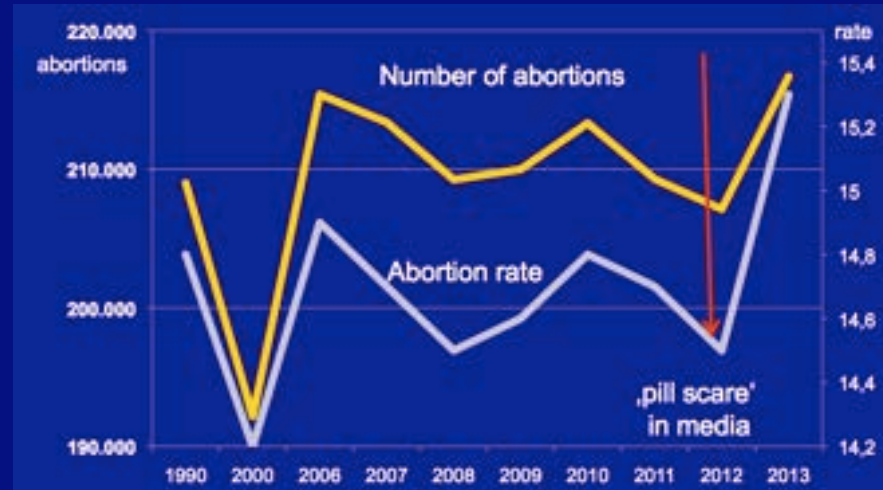


In October 1995, the Committee on Safety of Medicines (CSM) released a 'Dear Doctor' letter, warning doctors about an increased risk of venous thromboembolism (VTE) in women taking third-generation combined oral contraceptive (COC) pills.

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

14



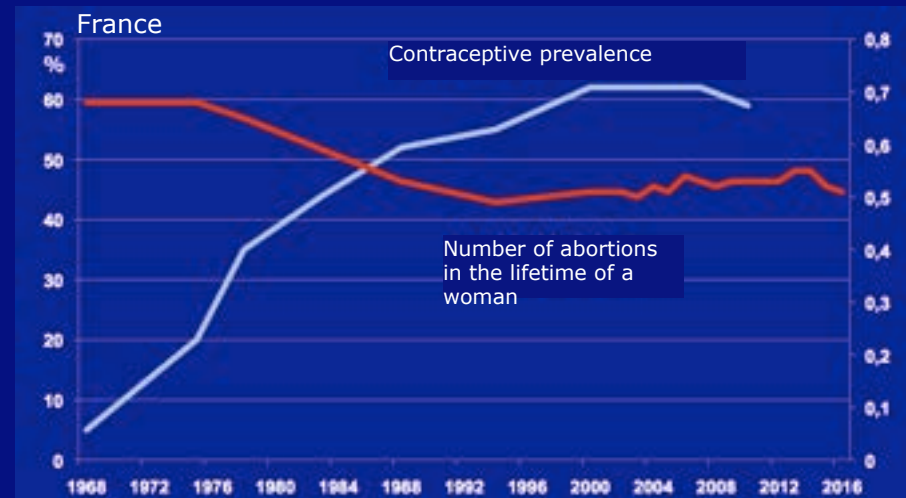
Increase in the number of abortions and abortion rate following the 'pill scare'

Institut national d'études démographiques (Ined)

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## Pill scare leading to the contraceptive paradox

15



Bajos et al. Évolution du recours à l'IVG en France, 2012  
www.ined.fr

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## Estimated accidental pregnancies resulting from contraceptive failure worldwide

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**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 failure rate (typical use), %*	Number of users, thousands <sup>†</sup>	Number of women with accidental pregnancy (typical use), thousands <sup>†</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

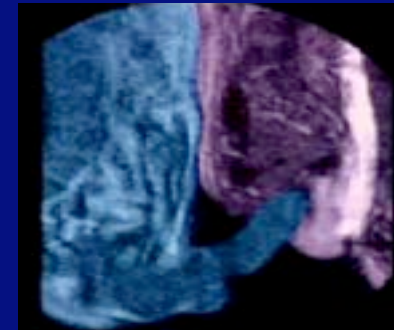
Safe abortion: technical and policy guidance for healthsystems  
WHO, 2012

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## The baseline



„The result of intercourse  
in general is the child“

Love without unwanted children, 1914  
(Liebe ohne unerwünschte Kinder)

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## Natural fertility



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

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## 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'

**BIRTH CONTROL REVIEW**  
 Edited by Margaret Sanger  
 NOVEMBER, 1922

### 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”

Sigmund Freud, 1898

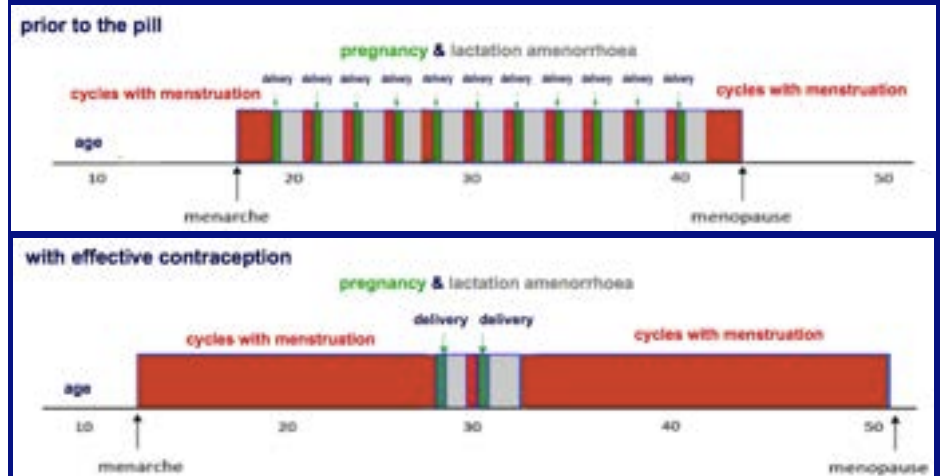
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### 35 years fertility in a woman's life

“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

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### Result of effective hormonal contraception



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

Based on R. Short 1984 and 1997

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# 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.

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# 60 years ago hormonal contraception was highly welcomed



“one of the greatest triumphs of humanity”

Sigmund Freud, 1898

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# The long way of developing safe and effective IUDs



Stem pessaries ≈1900



Ernst Gräfenberg



Silk rings ≈1900



Stainless steel rings 1920



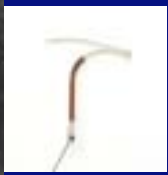
Jack Lipps



Plastic devices 1960



Jaime Zipper Copper added 1969



Willem van Os Improved forms >1980



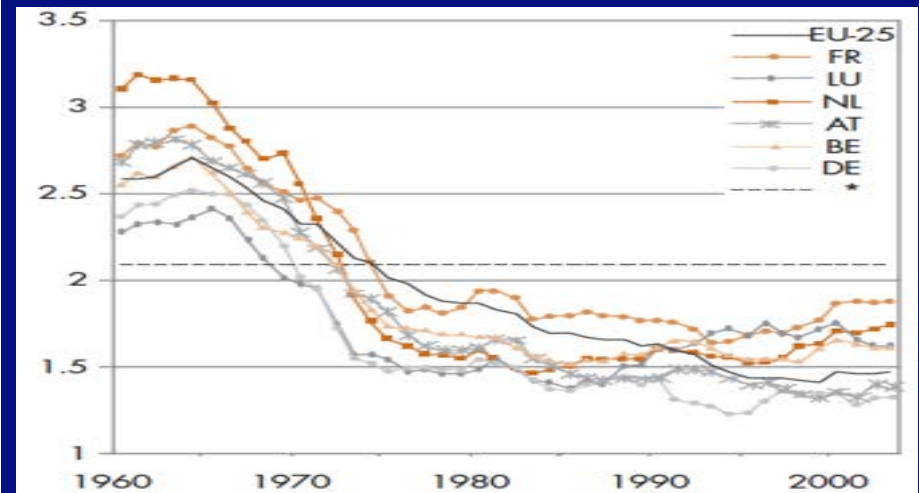
Tapani Luukkainen Progesterone IUD 1990



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# Effective contraception: the 2nd most important cultural achievement

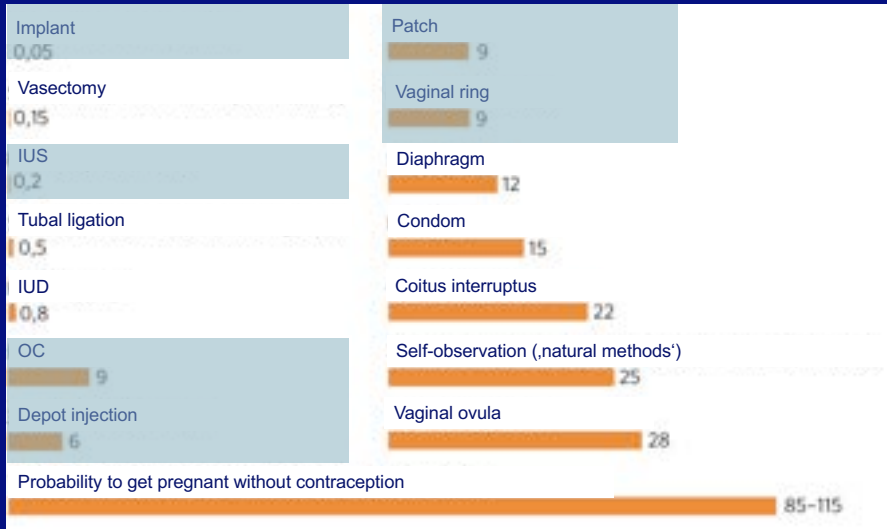
Total fertility rate, Central Western Europe



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

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## 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?

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## 50 years after the discovery women want to abandon hormonal contraception

The collage features several elements:

- A photograph of a young couple embracing.
- A news article snippet from "Euronews" dated Wednesday, 21 February 2007, titled "Natural contraception 'effective'", which states: "A natural family planning method is as effective as the contraceptive pill, German research suggests." It also mentions: "The symptothermal method (STMO) assesses fertility levels by monthly cycle by body temperature, cervical mucus and cervical pH."
- A book cover in German titled "Natürlich und sicher" (Natural and safe).
- A book cover in French titled "LA CONTRACEPTION NATURELLE - ses avantages - d'après des nouvelles connaissances SANS LA 'PILULE' ni aucun autre procédé contraceptif".
- A book cover in English titled "natural birth control made simple".
- A book cover in Spanish titled "simples métodos de control de la natalidad".



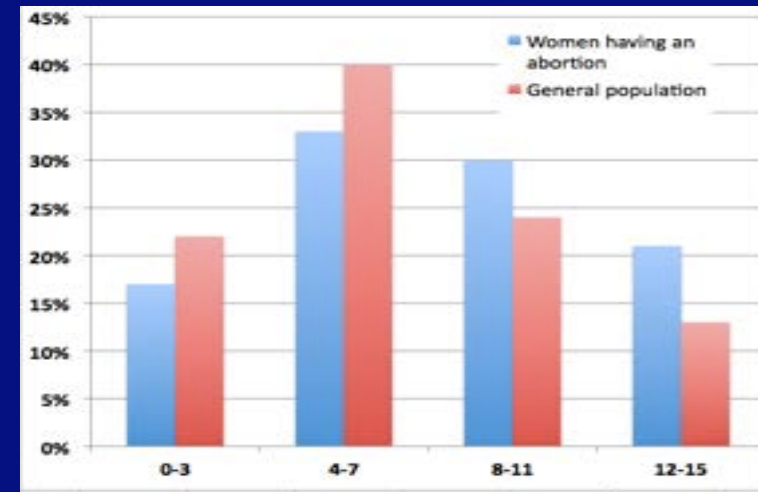
## Romanticisation of fertility: in search of paradise lost

- 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"

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

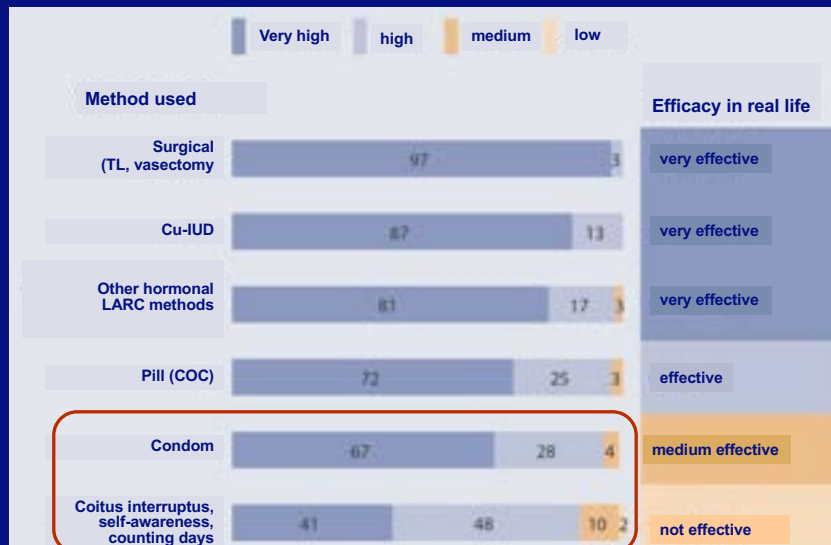


Austrian national contraceptive survey 2019, n= 1.782

Survey among abortion patients Gynmed, 2017-8, n= 300

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## 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](http://www.verhuetungsreport.at)

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- ‚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](http://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**