



Dr Mary Birdsall

Medical Director, Fertility Associates
Auckland

Fertility Myths - Practice Nurses Programme

Saturday, 22 June 2013

Start 3:00pm

Duration: 30mins

Sportsdrome



  **Rotorua GP CME 2013**

General Practice Conference & Medical Exhibition

20-23 June 2013 | Energy Events Centre | Rotorua

Fertility Myths Debunked

Mary Birdsall

Medical Director

Fertility Associates Auckland

Just Relax And It Will Happen



Stressful life events are associated with a poor in-vitro fertilization (IVF) outcome: a prospective study

Table II

Differences between pregnant and non-pregnant women

Measures	Pregnant	Non-pregnant	Pvalue
Perceived stress	14.8 (6.0)	14.4 (6.0)	ns
Depressive symptoms	7.2 (6.1)	7.2 (6.5)	ns
Total number of life events	5.4 (3.0)	5.9 (3.4)	ns
Negative life events	2.5 (2.5)	3.0 (3.0)	P = 0.017



You Must Be Allergic To His Sperm



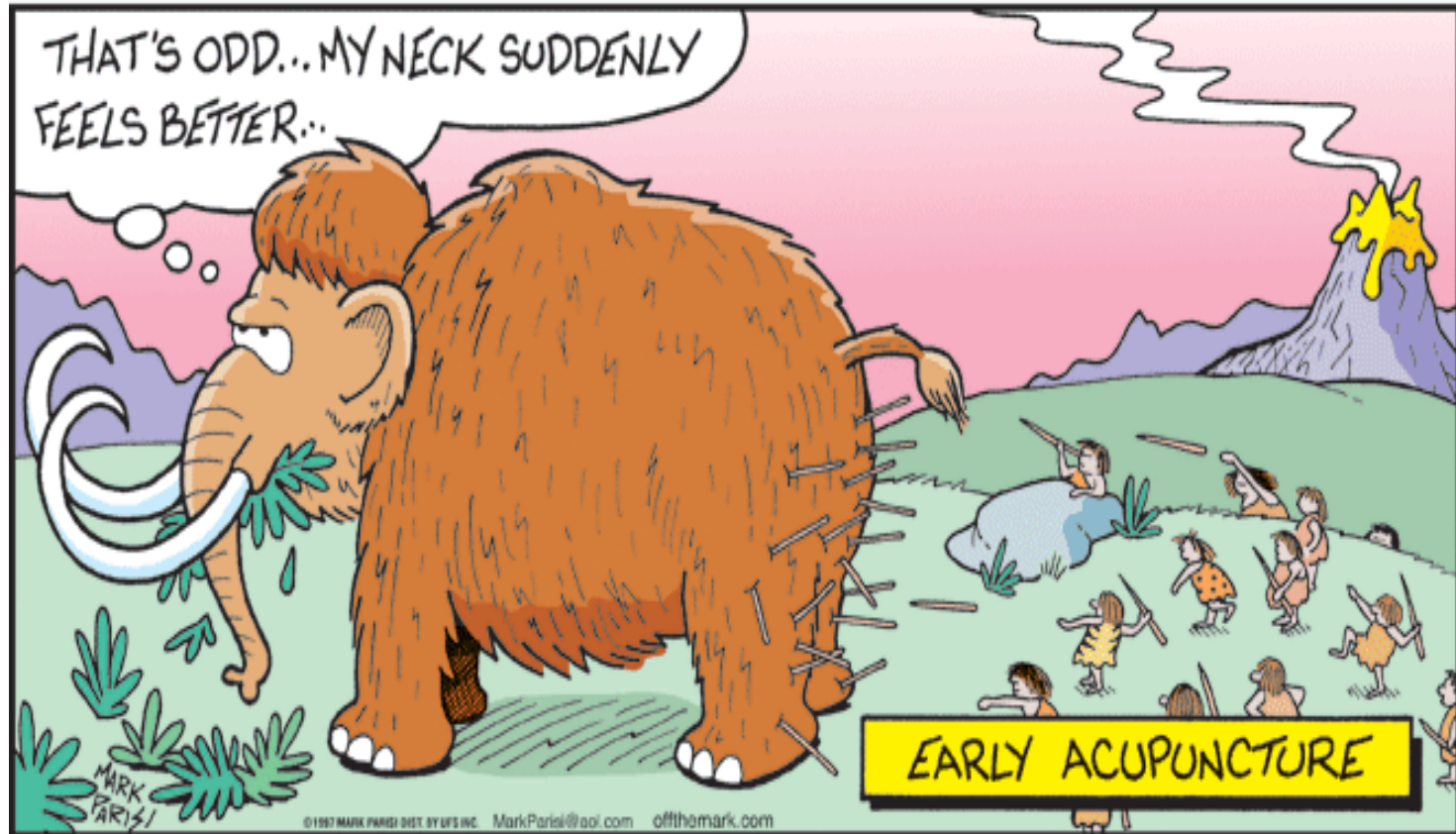
Sperm Allergy

- Yes it does exist, but uncommon
- Local or systemic symptoms
- Should not occur with condom usage
- Skin allergy testing
- Probably related to a prostatic antigen
- Intra uterine insemination with sperm washing is often an option

Acupuncture Cures Fertility Issues

off the mark.com

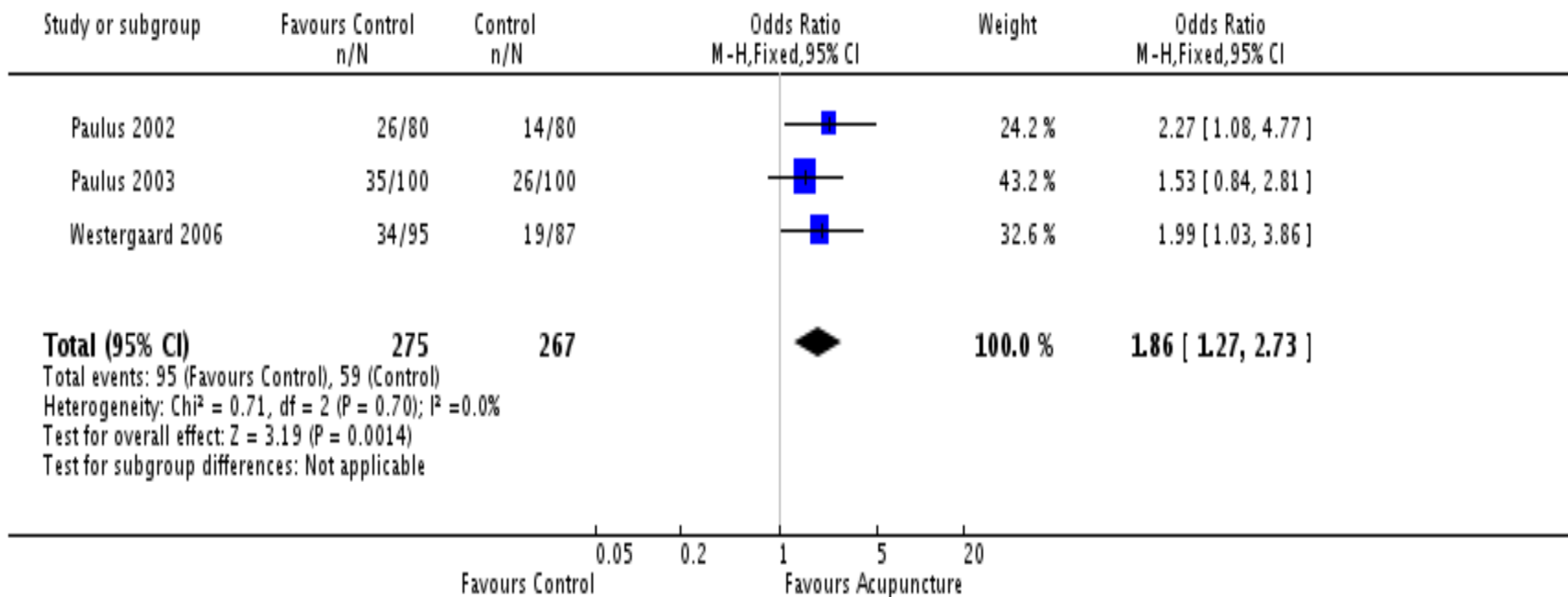
by Mark Parisi



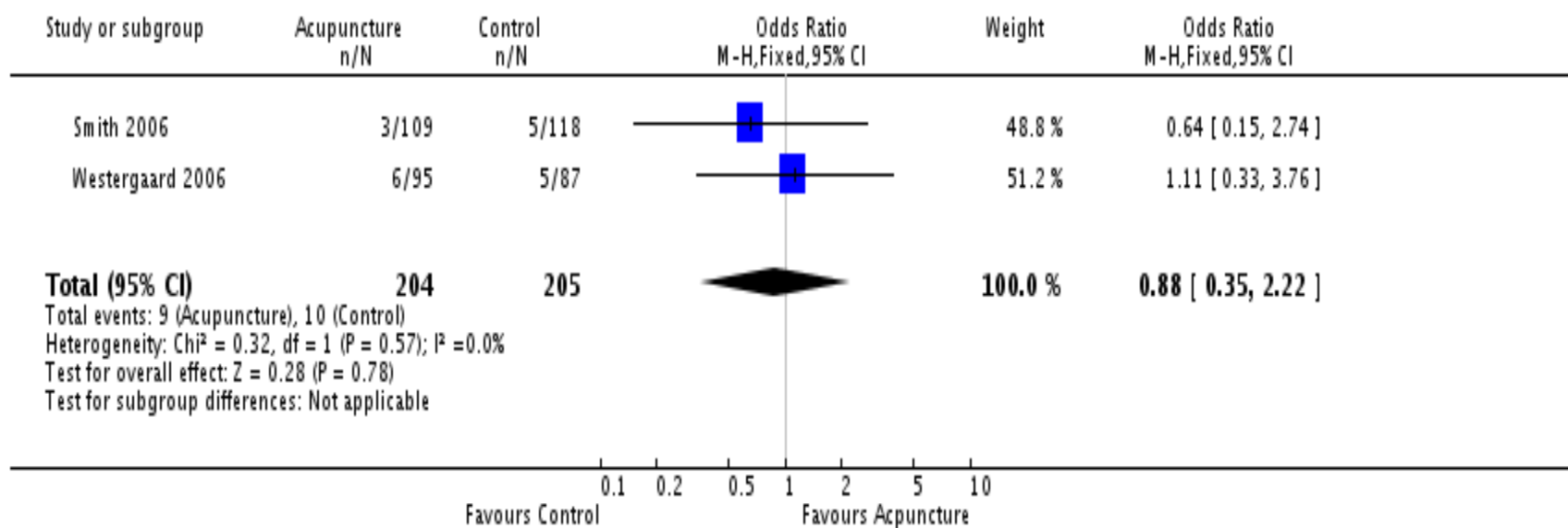
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Review: Acupuncture and assisted conception
 Comparison: 1 Acupuncture on the day of ET versus no acupuncture
 Outcome: 1 Live Birth



Review: Acupuncture and assisted conception
 Comparison: 1 Acupuncture on the day of ET versus no acupuncture
 Outcome: 4 Miscarriage



**IVF always works no matter how
old you are**

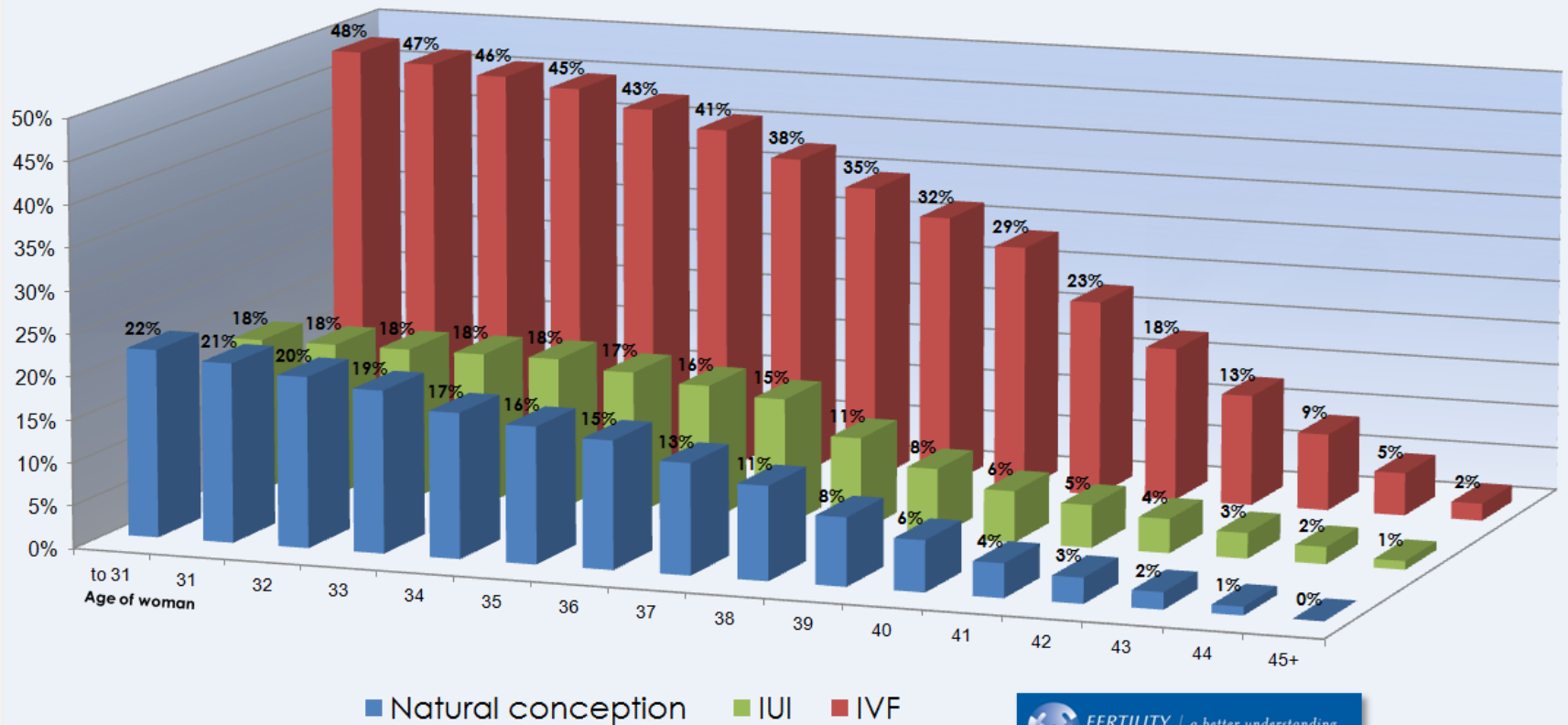


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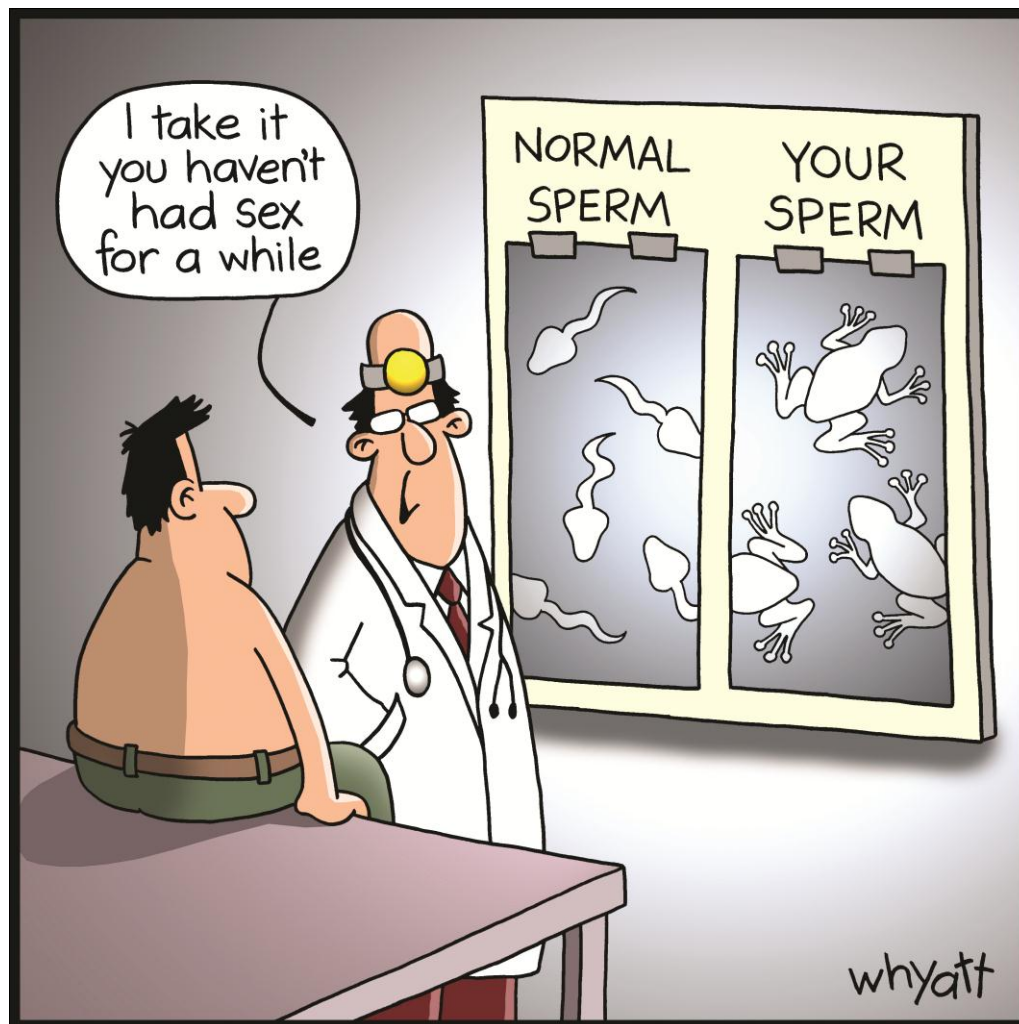
% Chance of a live birth per cycle



Source - Fertility Associates Biological Clock & Pathway to a child data



Too much sex reduces sperm quality



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Shorter abstinence decreases sperm deoxyribonucleic acid fragmentation in ejaculate.

Gosálvez J, González-Martínez M, López-Fernández C, Fernández JL, Sánchez-Martín P.

Departamento de Biología, Unidad de Genética, Universidad Autónoma de Madrid, Madrid, Spain. jaime.gosalvez@uam.es

Abstract

OBJECTIVE: To evaluate the relationship between duration of sexual abstinence and sperm selection on sperm DNA fragmentation (SDF).

DESIGN: Prospective study based on normozoospermic individuals.

SETTING: Fertility and IVF unit and university unit for research.

PATIENT(S): Two cohorts of normozoospermic individuals: 21 men (aged 25-35 years) attending a clinic and with clearly adverse female factors; and a group of 12 selected donors (aged 20-25 years).

INTERVENTION(S): SDF assessment using the sperm chromatin the dispersión test (Halosperm) in two cohorts of normozoospermic men.

MAIN OUTCOME MEASURE(S): SDF assessment after 24 hours of abstinence with recurrent ejaculation (one every 24 hours) using neat sperm samples; and SDF assessment before and after sperm selection with abstinence of 3 hours.

RESULT(S): Lower baseline levels of SDF were observed after shorter periods of abstinence between ejaculations (24 hours and 3 hours) than those recommended. This effect is much more marked after quick repetitive ejaculation (3 hours of abstinence) and sperm selection.

CONCLUSION(S): The present results challenge the role of abstinence in current male infertility treatments and suggest that SDF can be efficiently reduced by a biological practice consisting of short-term recurrent ejaculation coupled with effective sperm selection.

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Male Age Does Not Matter

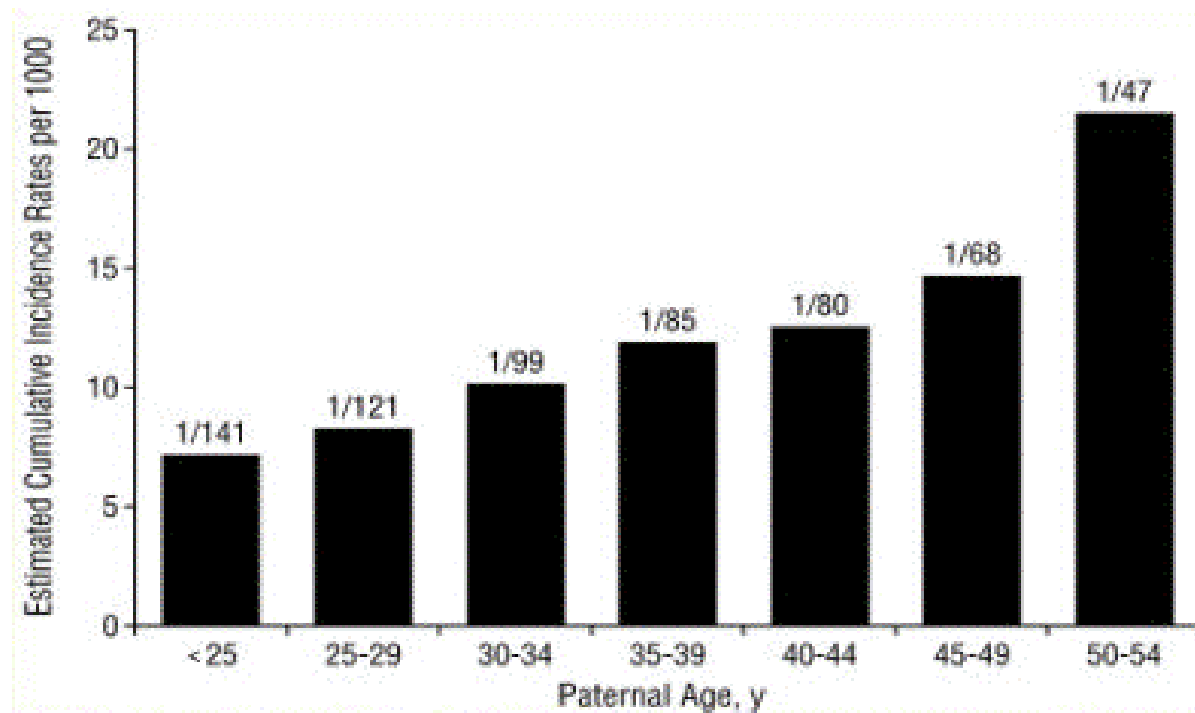


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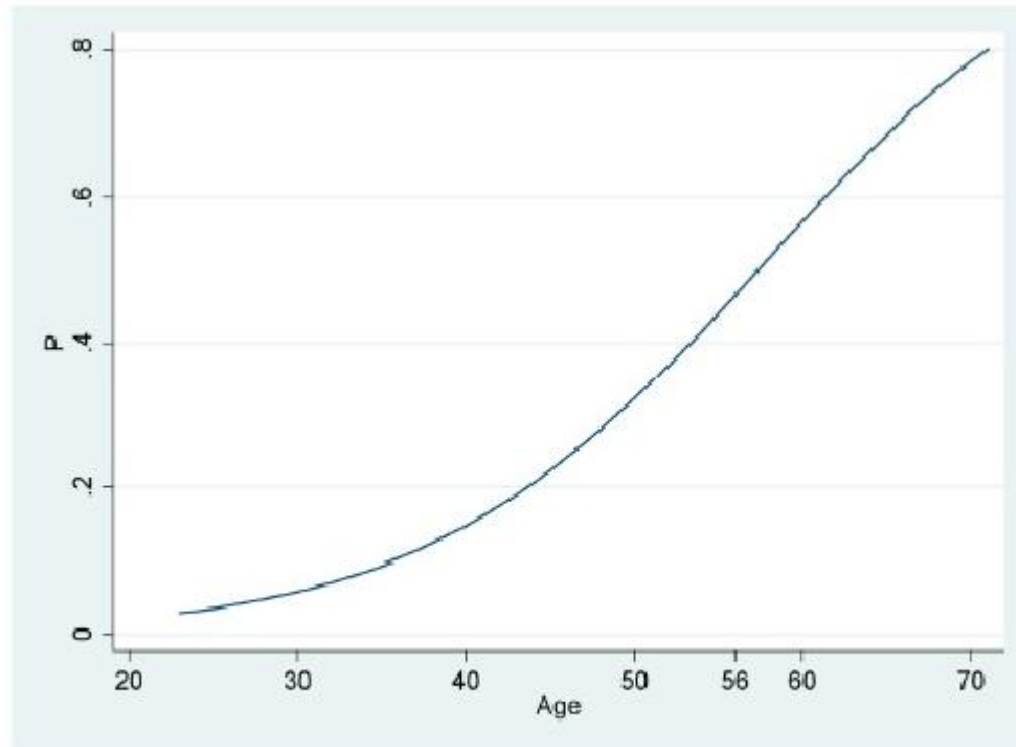
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Paternal age and schizophrenia risk



Sperm DNA fragmentation: the effect of age



Magendzo A. et al. Hum Reprod. 2010;25:Suppl 1,p25

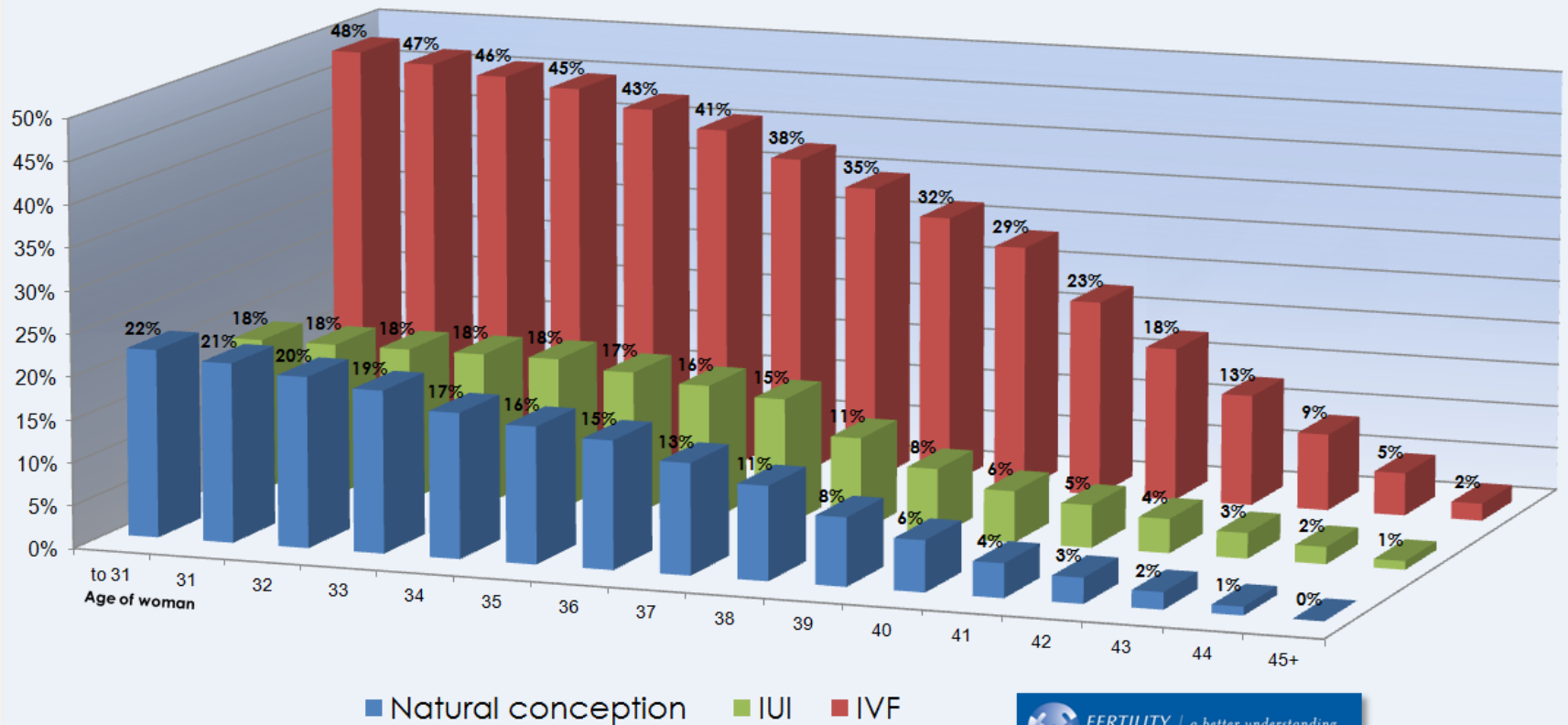
**You have all the time in the world so party,
study, travel. You can always have babies later**



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% Chance of a live birth per cycle



Source - Fertility Associates Biological Clock & Pathway to a child data



Sex before ovulation increases the chances of a boy



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Human Reproduction vol.13 no.5 pp.1397-1400, 1998

Sex ratio associated with timing of insemination and length of the follicular phase in planned and unplanned pregnancies during use of natural family planning

Ronald H.Gray^{1,8}, Joe L.Simpson²,
Adenike C.Bitto¹, John T.Queenan³, Chuanjun Li¹,
Robert T.Kambic¹, Alfredo Perez⁴, Patricio Mena⁵,
Michele Barbato⁶, Wilma Stevenson⁷ and
Victoria Jennings³

¹Department of Population Dynamics, School of Hygiene and Public Health, The Johns Hopkins University, 615 N. Wolfe St., Baltimore, MD 21205, ²Department of Obstetrics and Gynecology, Baylor College of Medicine, 6550 Fannin Suite 729A, Houston, TX 77030, ³Institute for Reproductive Health and the Department of Obstetrics and Gynecology, Georgetown University, Georgetown, USA, ⁴Department de Obstetricia y Ginecologia, Pontifica Universidad Catolica de Chile, ⁵Hospital Clinico Universidad de Chile, Santiago, Chile, ⁶Centro Ambrosiano Metodi Naturali (CAMEN), Milan, Italy, ⁷Department of Obstetrics and Gynecology, Universidad Javeriana, Bogota, Colombia, Washington and DC NFP Providers, USA and Asociacion de Trabajo Laico Familiar, Lima, Peru

⁸To whom correspondence should be addressed

This was a multicentred, prospective study of pregnancies among women using natural family planning. The women maintained natural family planning charts of the conception cycle, recording acts of intercourse and signs of ovulation (cervical mucus changes, including peak day and basal body temperature). Charts were used to assess the

recent review indicates that reliable sex selection is currently possible only by preimplantation diagnosis and transfer of embryos of a given sex, by prenatal diagnosis and abortion of undesired sex, or perhaps by sperm separation using flow cytometry combined with in-vitro fertilization (IVF; Rueggsegger and Jewelewicz, 1988). However, the cost and clinical nature of preimplantation diagnosis and IVF limits their use. There is thus a continued interest in the study of potential sex selection methods that are more under the control of couples, such as timing of intercourse during the menstrual cycle.

Several studies, predominantly of women using natural family planning to plan their pregnancies, have suggested that the sex ratio might vary with timing of conception relative to the day of ovulation. In these studies, the sex ratio generally showed a U-shaped association with fewer male conceptions (i.e. an excess of females) around the time of ovulation, but a predominance of males with both pre- and post-ovulatory conceptions (Guerrero, 1975; Harlap, 1979; Perez *et al.*, 1985; France *et al.*, 1992). However, this was not a universal finding (World Health Organization, 1984; Gray, 1991; Weinberg *et al.*, 1995). A possible mechanism explaining the excess of female conceptions around ovulation is that the midcycle hormonal milieu may differentially favour conceptions with X-bearing

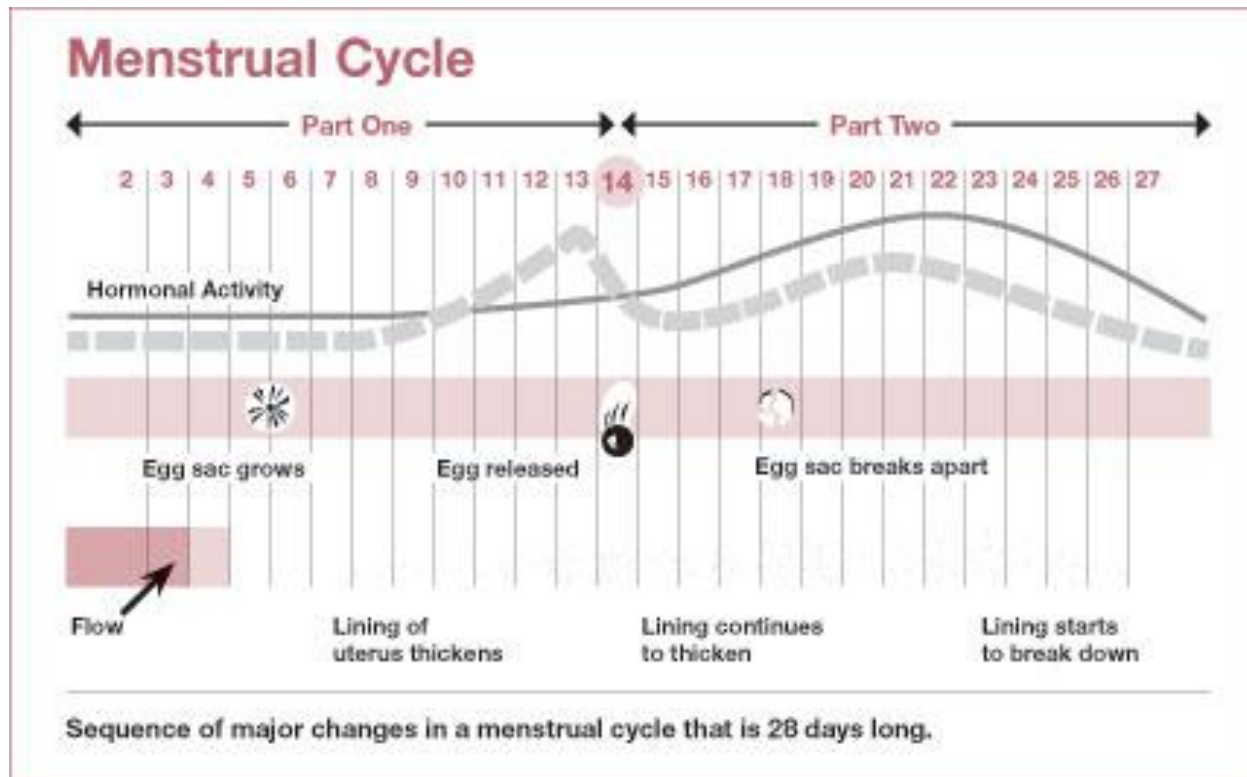


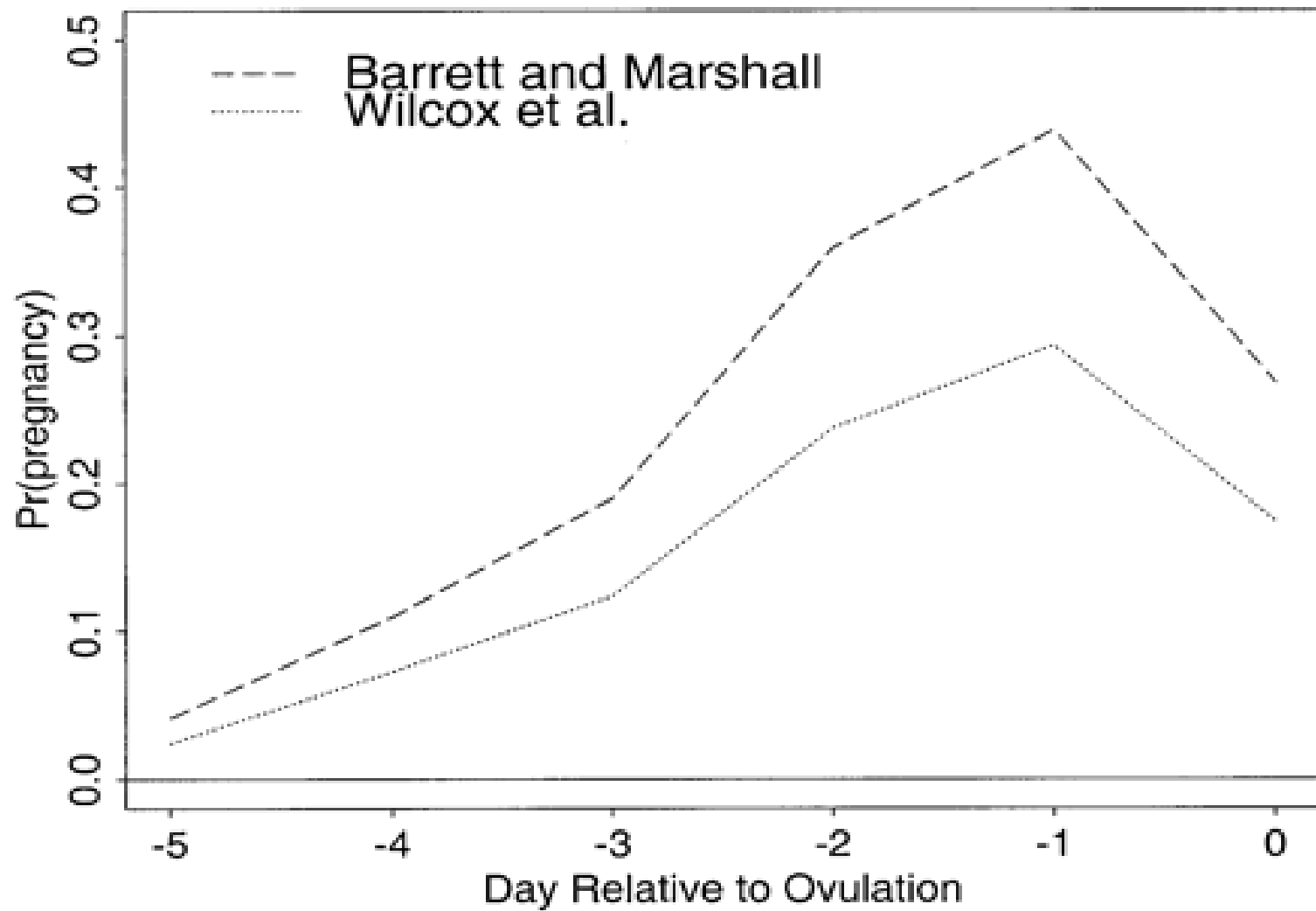
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Sex on day 14 is the best day to conceive

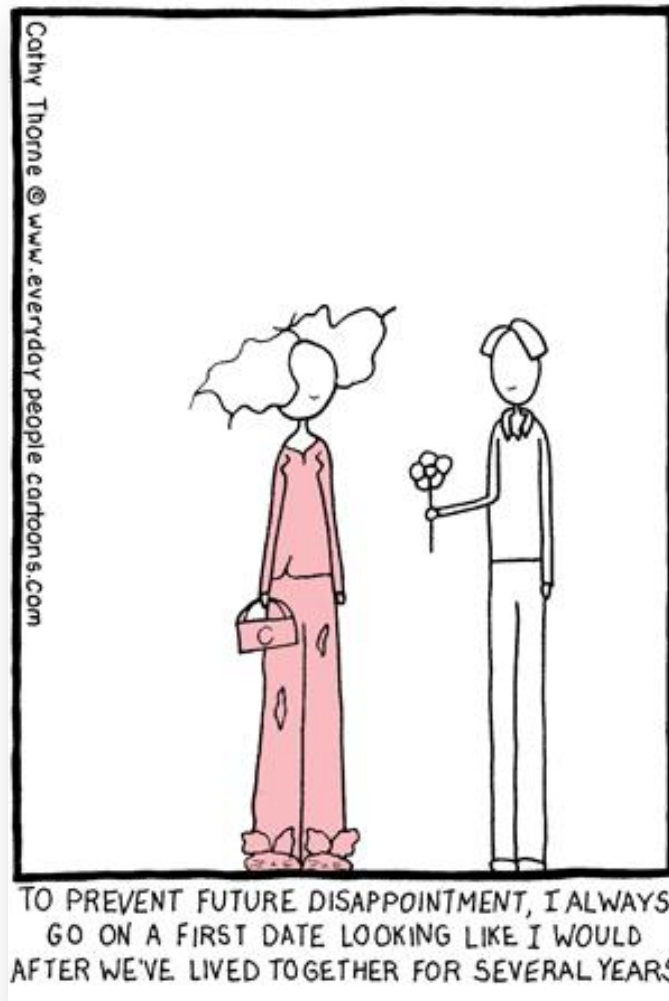


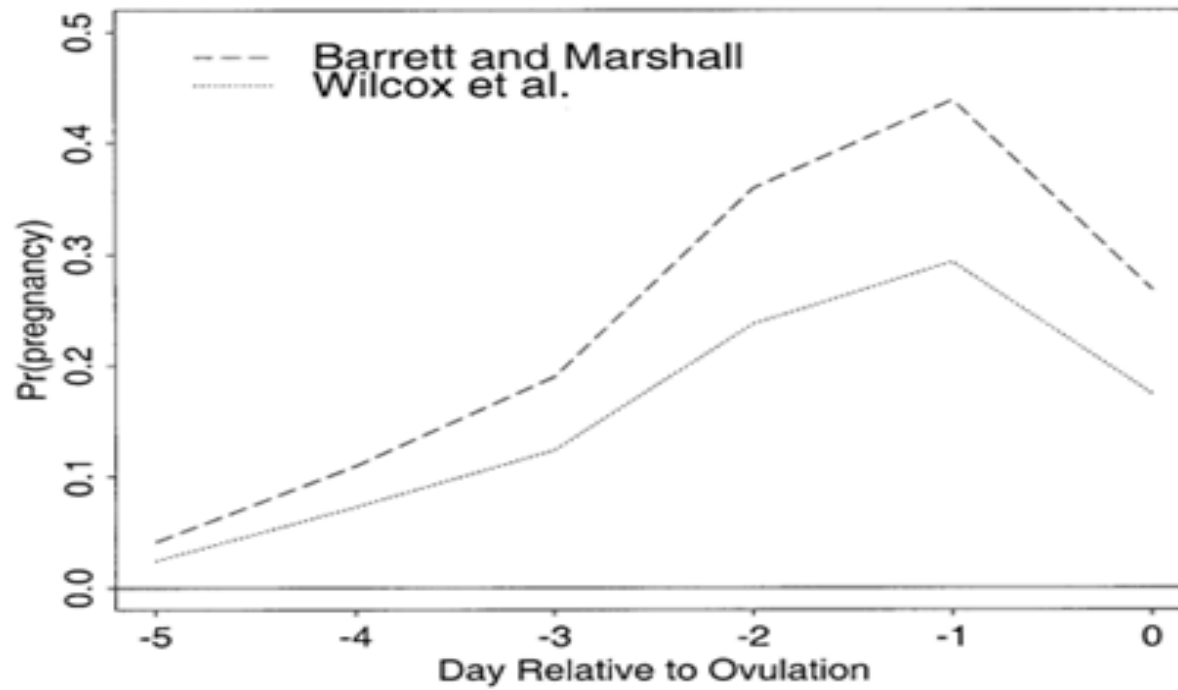


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A woman can get pregnant only 1 day per month





Orgasm increases the likelihood of conception

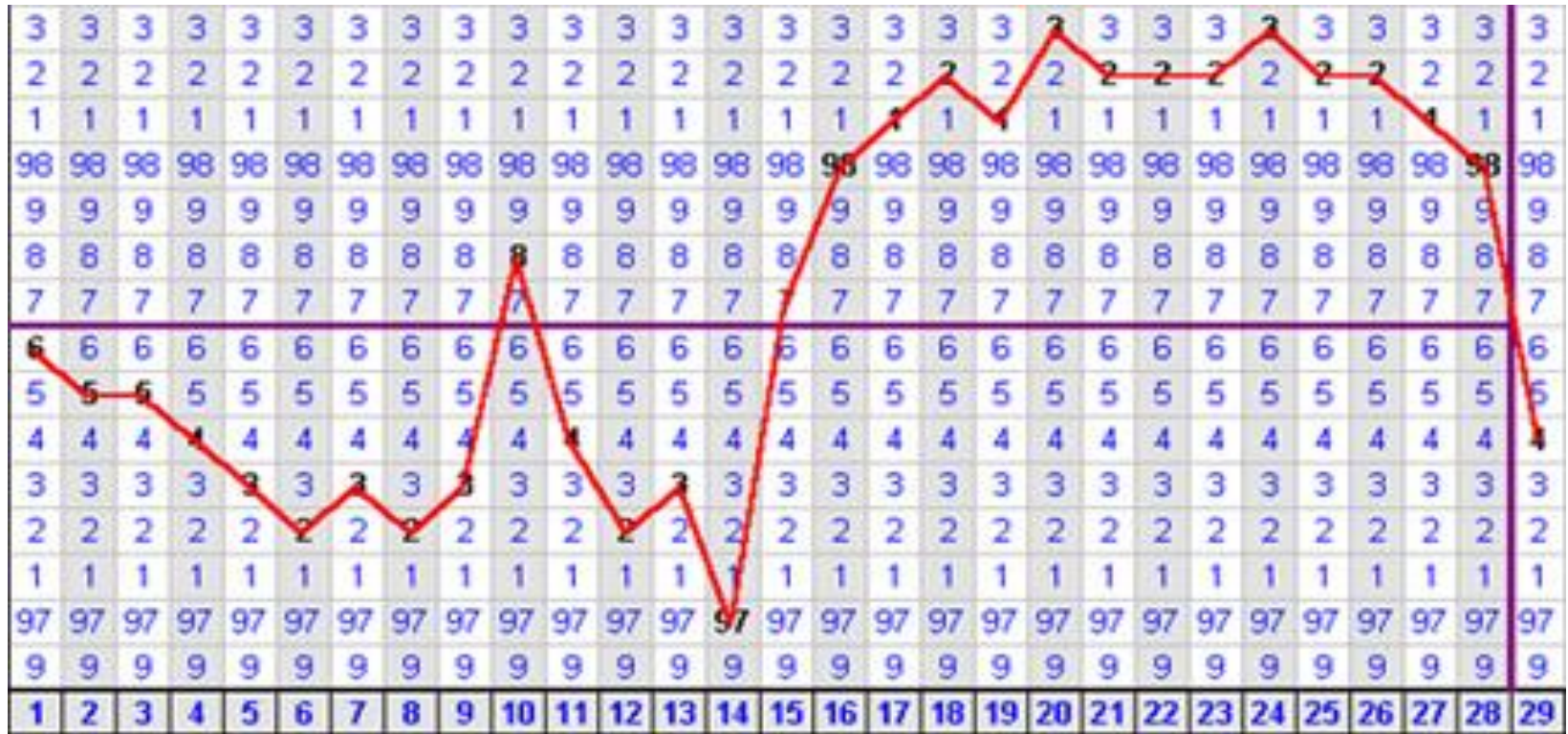


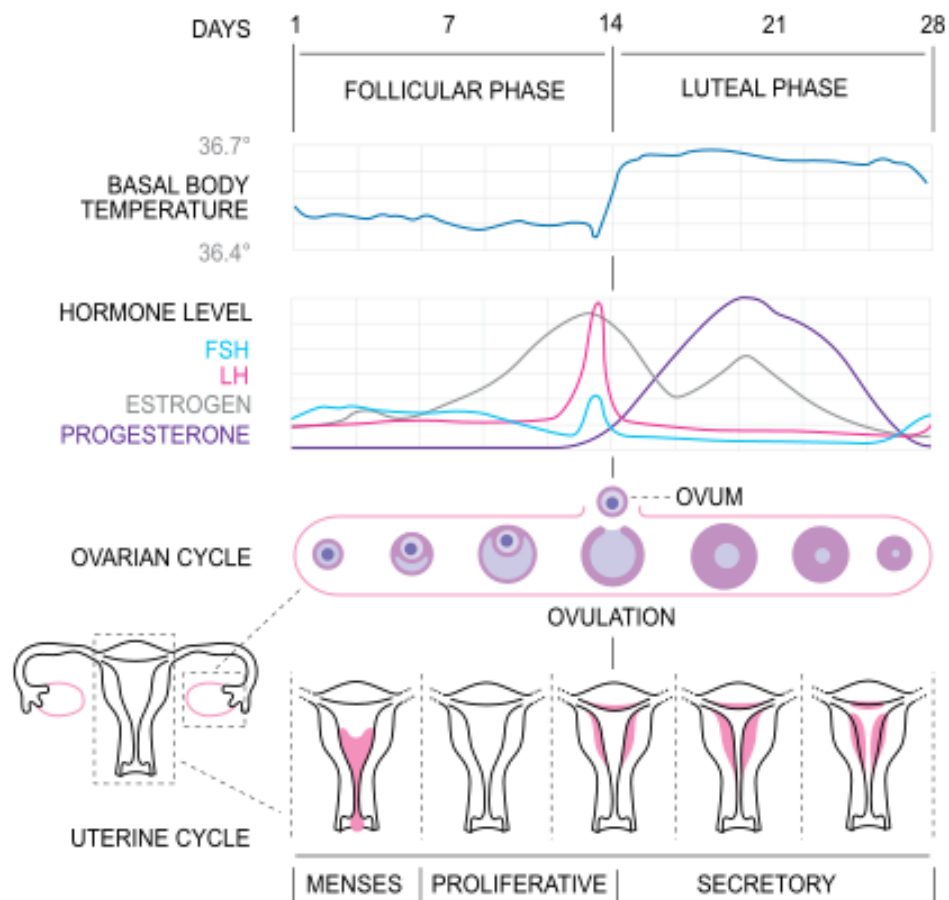
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**Orgasm makes no difference to
chances of conceiving**

Ovulation Occurs on the day your temperature increases





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A woman is more likely to conceive once they have adopted a child



No evidence that adopting a child
increases the likelihood of
conceiving

11 to 20% of couples are likely to
conceive after failed IVF

Diet and exercise will preserve your fertility



The preconception Mediterranean dietary pattern in couples undergoing in vitro fertilization/intracytoplasmic sperm injection treatment increases the chance of pregnancy.

Vuikovic M, de Vries JH, Lindemans J, Macklon NS, van der Spek PJ, Steegers EA, Steegers-Theunissen RP.

Department of Obstetrics and Gynecology, Erasmus MC, University Medical Centre, Rotterdam, The Netherlands.

Abstract

OBJECTIVE: To investigate associations between preconception dietary patterns and IVF/intracytoplasmic sperm injection (ICSI) outcomes validated by biomarkers of the homocysteine pathway.

DESIGN: Observational prospective study.

SETTING: A tertiary referral fertility clinic at the Erasmus University Medical Centre, Rotterdam, The Netherlands.

PATIENT(S): One hundred sixty-one couples undergoing IVF/ICSI treatment.

INTERVENTION(S): No interventions other than the Dutch governmental recommendation of folic acid.

MAIN OUTCOME MEASURE(S): Dietary patterns, blood and follicular fluid concentrations of folate, vitamin B12, vitamin B6, homocysteine, and fertilization rate, embryo quality, and pregnancy.

RESULT(S): In women, two dietary patterns were identified. The "health conscious-low processed" dietary pattern (variation explained 12.1%) was characterized by high intakes of fruits, vegetables, fish, and whole grains and low intakes of snacks, meats, and mayonnaise, and positively correlated with red blood cell folate ($\beta=0.07$). The "Mediterranean" dietary pattern (variation explained 9.1%), that is, high intakes of vegetable oils, vegetables, fish, and legumes and low intakes of snacks, was positively correlated with red blood cell folate ($\beta=0.13$), and vitamin B6 in blood ($\beta=0.09$) and follicular fluid ($\beta=0.18$). High adherence by the couple to the "Mediterranean" diet increased the probability of pregnancy, odds ratio 1.4 (95% confidence interval 1.0-1.9).

CONCLUSION(S): A preconception "Mediterranean" diet by couples undergoing IVF/ICSI treatment contributes to the success of achieving pregnancy.



The oral contraceptive causes fertility problems



Family planning methods ... Oral contraceptives have their many advantages but for some women it can contribute to weight gain



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No association between COC use and time to pregnancy

Having a termination can affect your fertility



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History of induced abortion and the risk of tubal pathology.

Data from 6149 couples were available for analysis.

The OR for tubal pathology after a previous induced abortion was 1.6 (95% CI 1.3 to 1.9),

after a previous ectopic pregnancy, 8.4 (95% CI 6.3 to 12),

after a previous spontaneous miscarriage, 1.1 (95% CI 0.87 to 1.3),

and after a previous live birth, 1.0 (95% CI 0.88 to 1.2).

A history of induced abortion is associated with an increased risk of tubal pathology in subfertile couples. As a consequence, in subfertile women with a history of induced abortion, tubal patency tests should be considered early in the diagnostic work-up.

**Thank you.
Questions?**