A microscopic view of sperm cells, showing their characteristic heads and tails, swimming in a fluid medium. The image is in shades of blue and white, with the sperm heads appearing as small, dark, oval shapes and their tails as thin, wavy lines.

Poorer semen quality impacts  
time to pregnancy and  
probability of conceiving in  
any cycle

**Tina Kold Jensen**  
**Department of Environmental Medicine**  
**University of Southern Denmark**

# European pregnant partner study

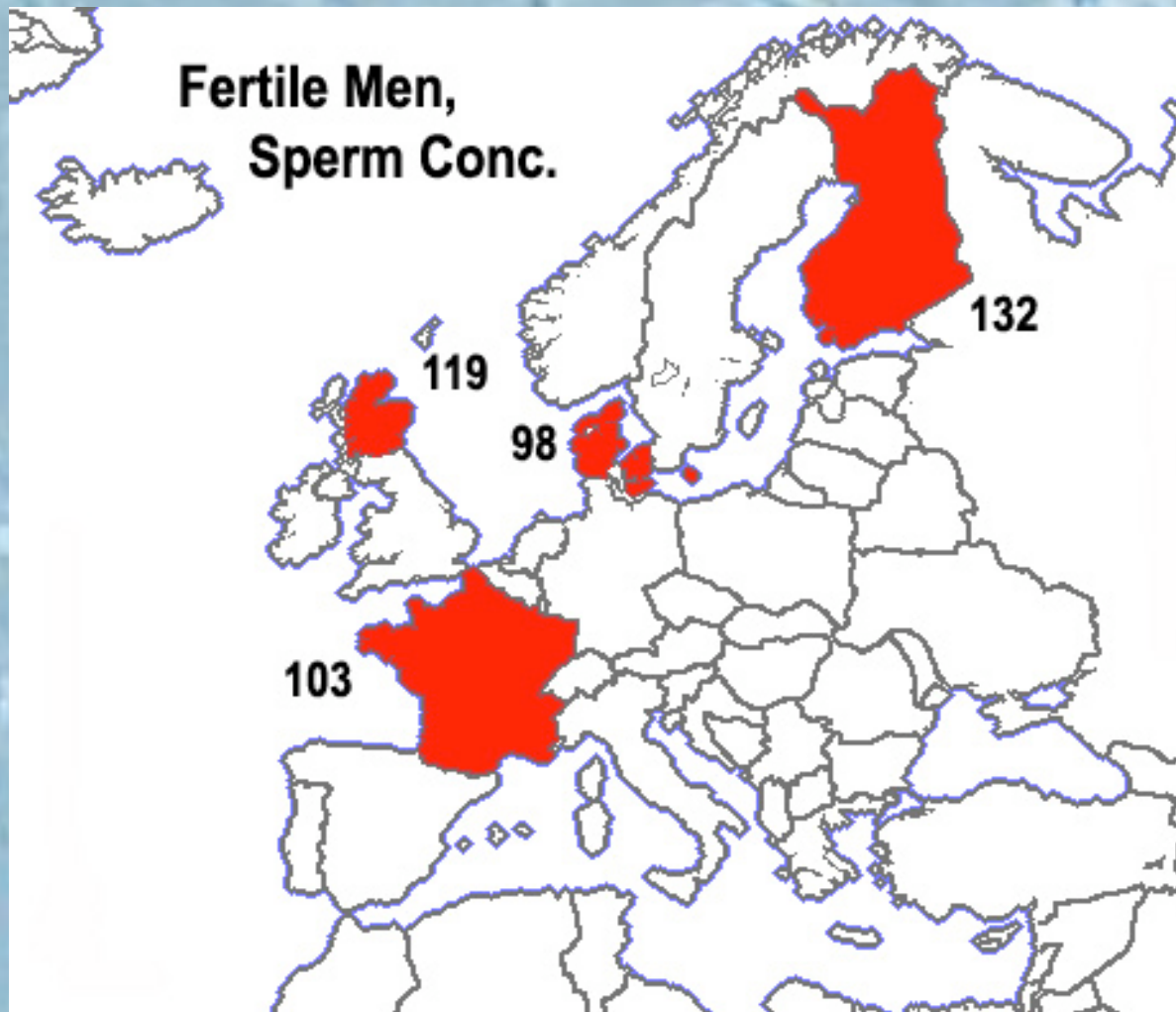
- Pregnant women in the four centres invited to participate when they showed up for their first antenatal visit or “parent craft” class
- Eligibility criteria; male partner 20-45 years of age, born in the country in which he was currently living, residing in the local referral area of the hospital, current pregnancy had to be achieved without fertility treatment. Diseases in reproductive organs and previous fertility treatment were not exclusion criteria



# European pregnant partner study

- Participation rate between 15-43%
- Sperm concentration and questionnaire information were finally known for 1,081 couples
- 275 from Turku
- 348 from Copenhagen
- 250 from Edinburgh
- 208 from Paris

# European pregnant partner study



*Jorgensen et al. Human  
Reprod 2001;16:1012-19*



# Pregnancy planner study

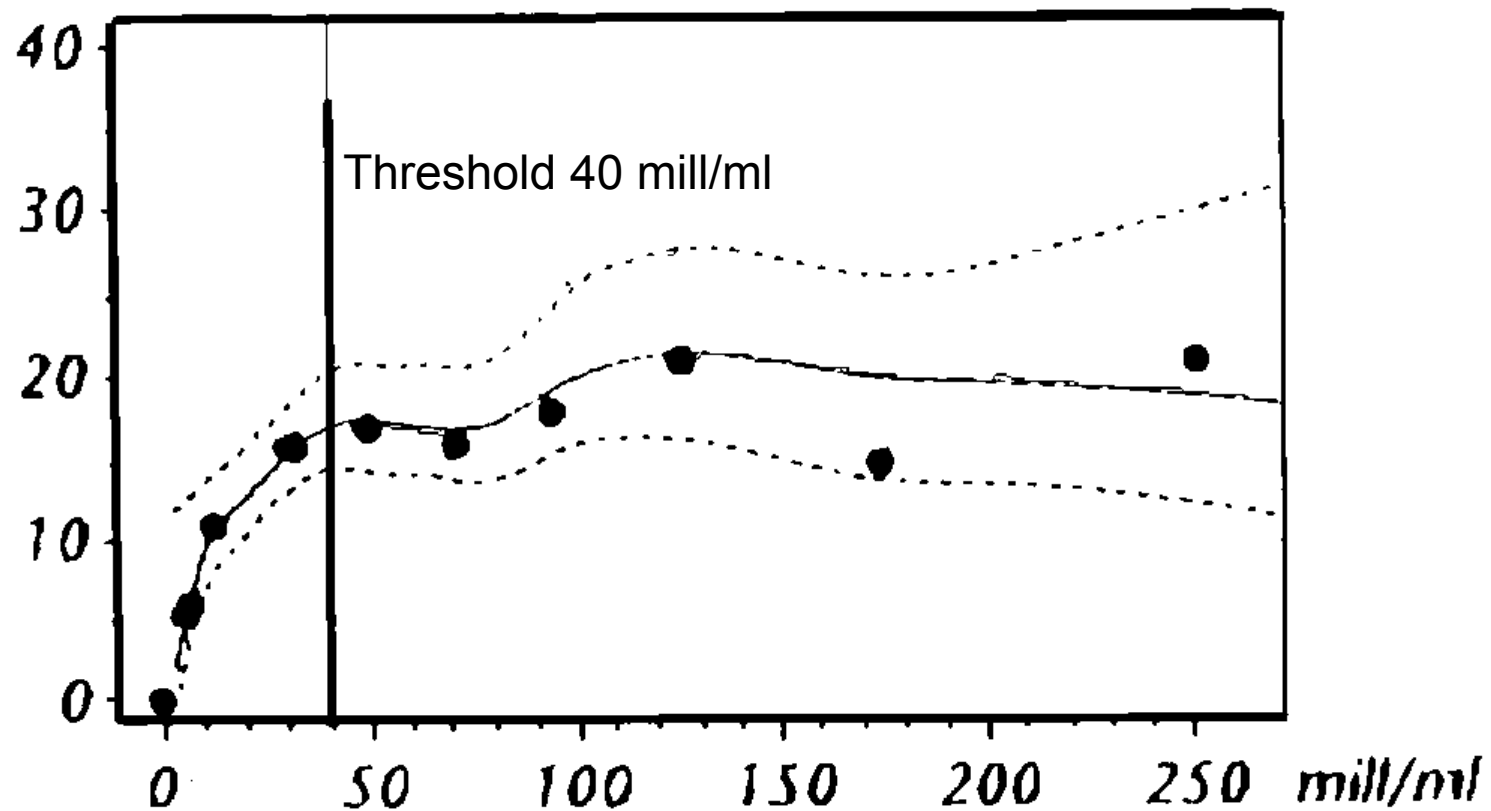
- A total of 430 couples were recruited after a nationwide mailing of personal letters to 52 255 trade union members who were 20-35 years old, lived with a partner, and had no children.
- The exact number of eligible couples was unknown. Under the assumption that 75% of pregnancies in Denmark are planned, an average participation rate of 16% was estimated

# Pregnancy planner study

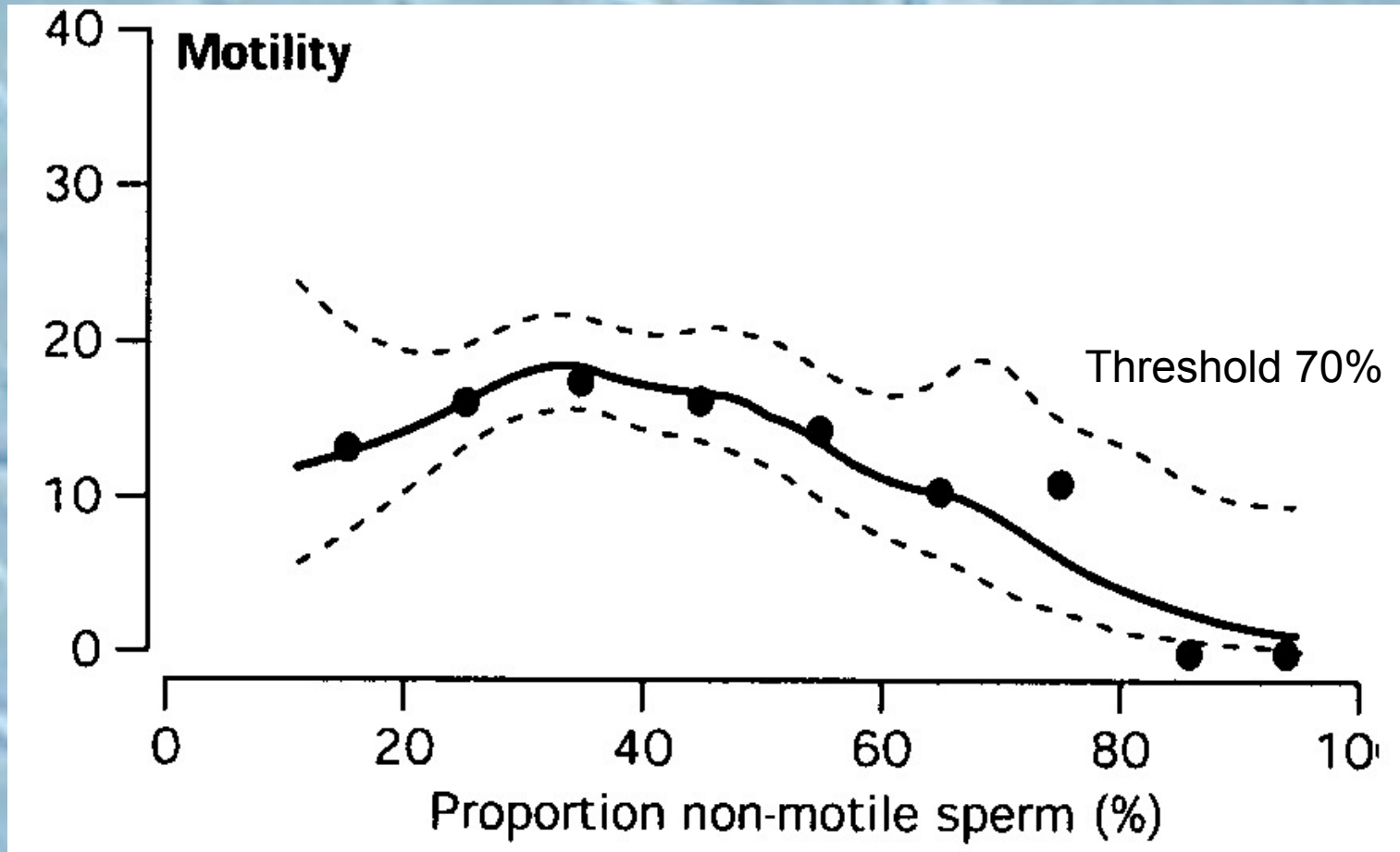
- The couples were enrolled into the study when they discontinued birth control and were followed for six menstrual cycles or until a clinically recognised pregnancy
- The couples were enrolled at two centres in Denmark
- At enrolment both partners filled in a questionnaire on demographic, medical, reproductive, occupational, and lifestyle factors and the men provided a semen sample
- During follow up the women recorded vaginal bleeding and sexual intercourse daily, and one additional semen sample was collected during the menstrual period of each cycle



# Pregnancy planner study; concentration and probability of pregnancy in a cycle



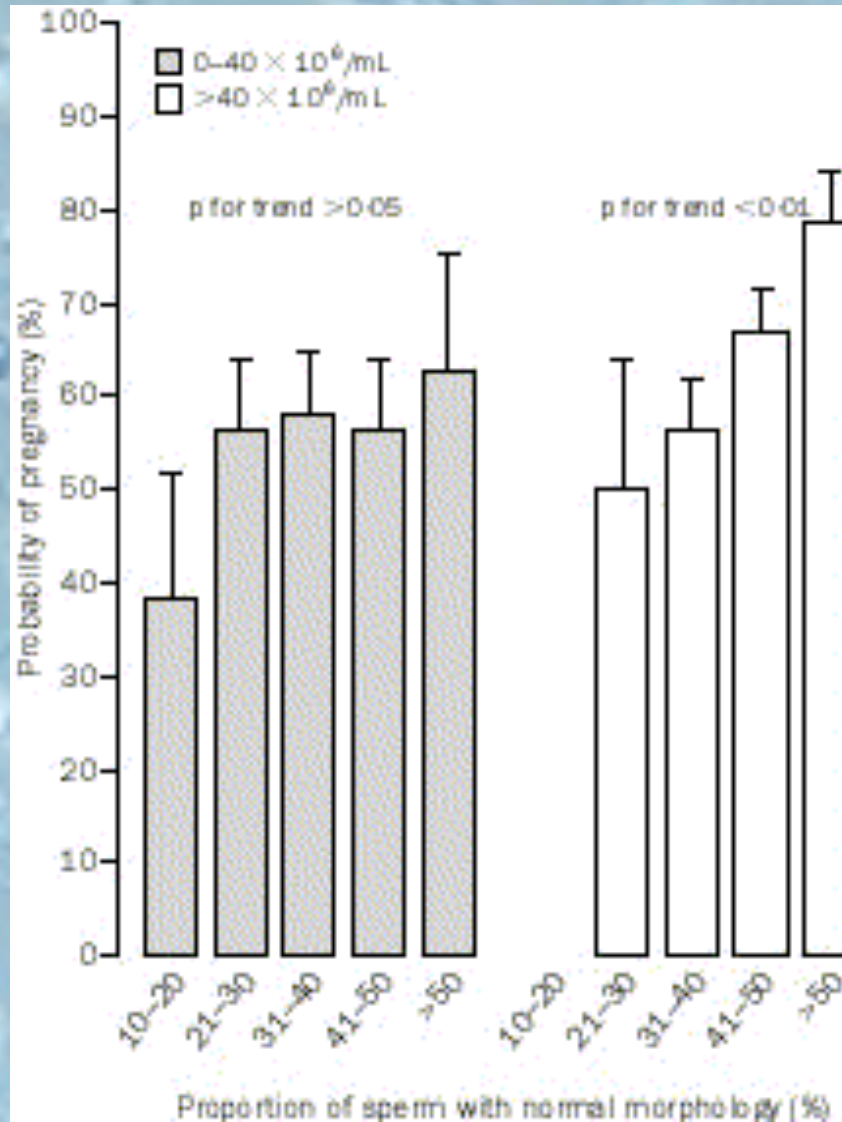
# Pregnancy planner study; motility and probability of pregnancy in a cycle



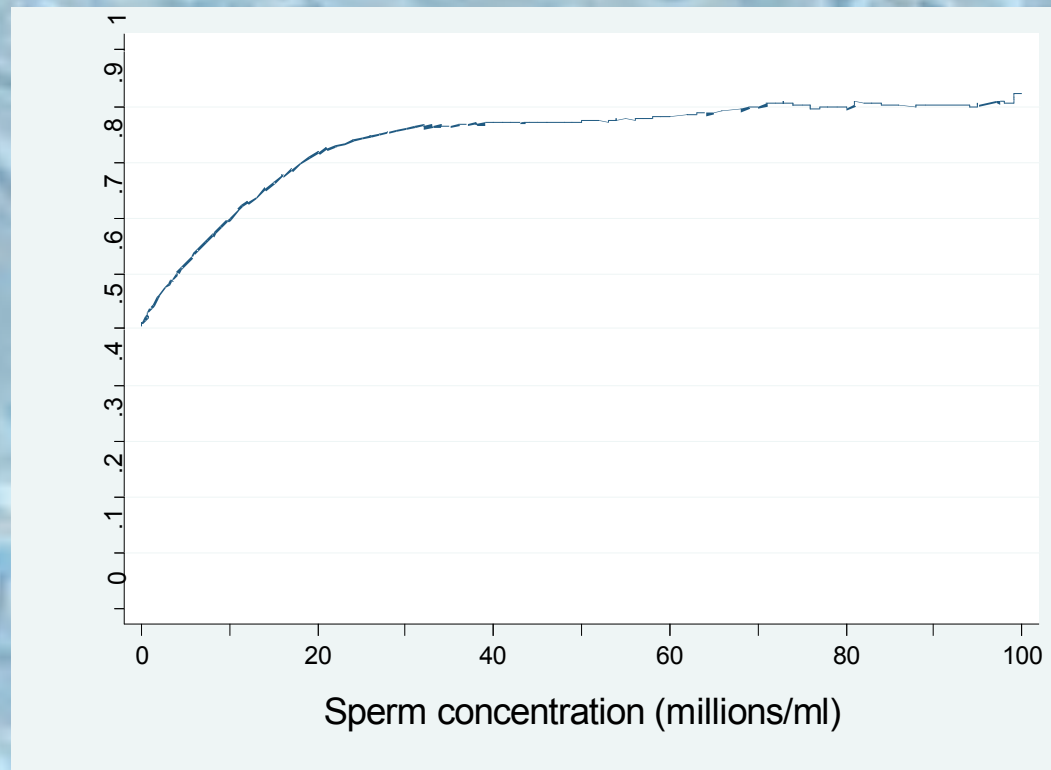


# Pregnancy planner study;

motility, concentration and probability of pregnancy in a cycle

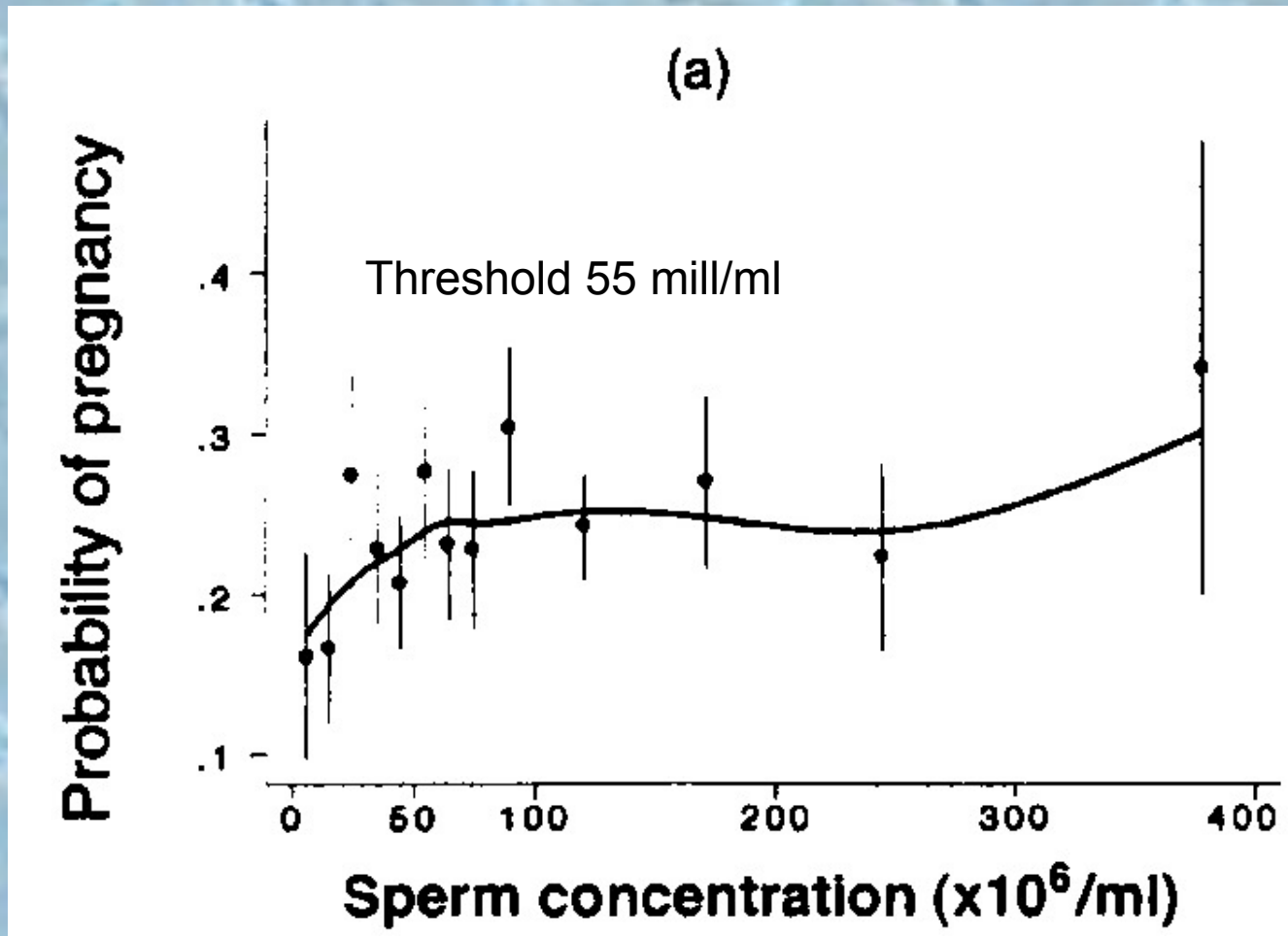


# Pregnancy planner study; 5 years follow-up

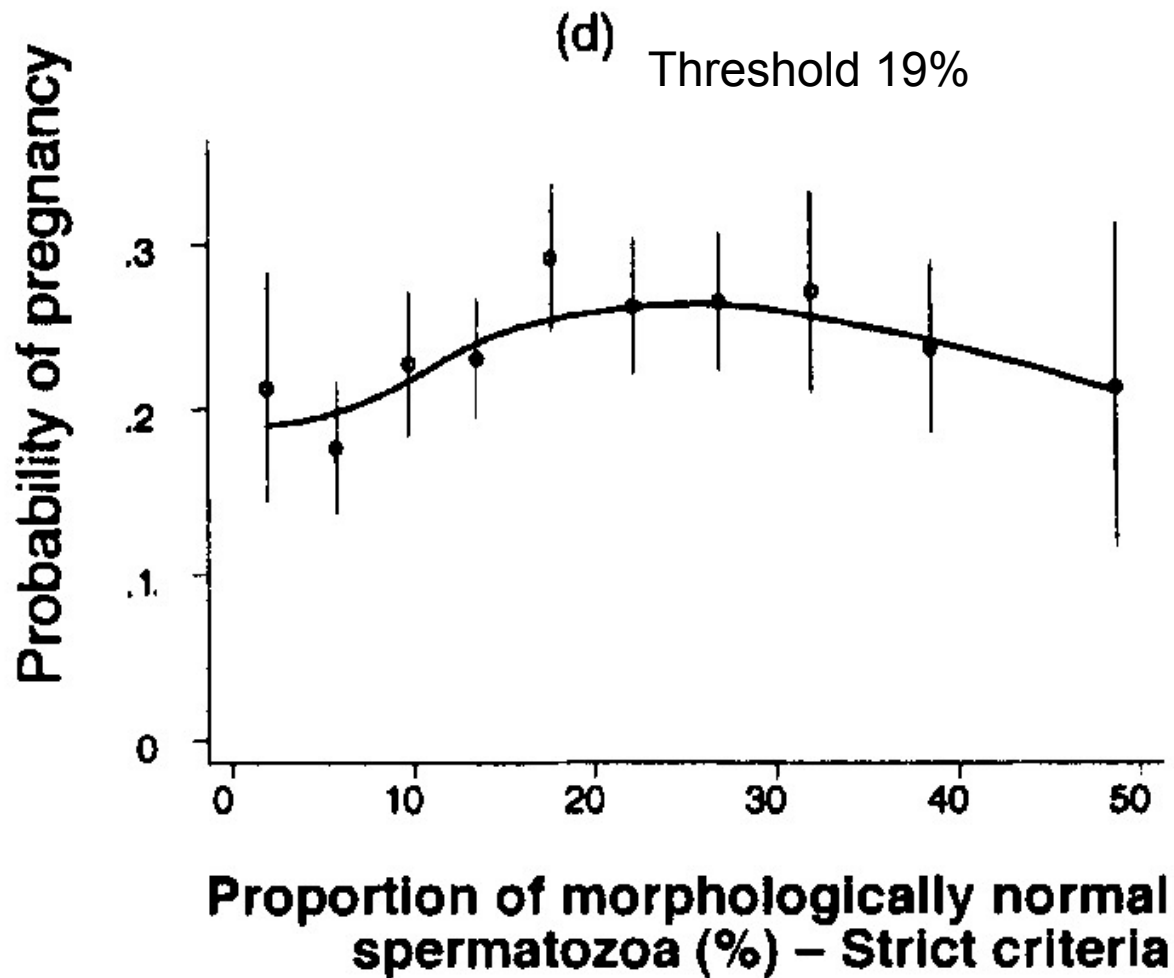




# European pregnant partner study; concentration and probability of pregnancy in a cycle



# European pregnant partner study; morphology and probability of pregnancy in a cycle





# Problems

- Selection bias!!!