

Infertility & Reproduction Health Center**Male Biological Clock is Ticking, Too
Older Age Affects Male Fertility, Especially After Age 45**

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June 26, 2003 - It takes two to tango, and when it comes to making a baby, the age of both dancers may play an equally important role. A new study shows that the age of the male partner can have just as big an impact on fertility and the time it takes to successfully conceive a child as the age of the mother.

Researchers found it takes up to five times as long for a man over 45 to get a woman pregnant than if he was under 25. Although the impact of age on a woman's fertility has been well-studied, experts say this is the first time such a strong association has been found between age and male fertility in the time it takes to conceive a child.

"It's always been said that men make sperm every day, and women are born with all eggs they're going to have, so the effect of male age on fertility hasn't been perceived as a major issue until now," says researcher Stephen Killick, MD, professor of reproductive medicine at the University of Hull, U.K. "But in this particular case, there was just as strong an association with male age and infertility, and, statistically, it was even stronger than the woman's age."

Fertility Declines With Male Age

The study, published in the June issue of *Fertility and Sterility*, compared the time to conception among a group of 2,112 pregnant women. Each of the women filled out a questionnaire about the time it took to achieve pregnancy, the age of both partners, and individual lifestyle characteristics of both partners.

Overall, researchers found that age was the most significant factor that affected the time it took to conceive, but there were small relationships with other factors already known to increase the risk of female and male infertility, such as caffeine or alcohol use and smoking.

Killick says the average time to conception for a woman with a male partner under 20 was 4.5 months but that time rose to 26 months for a 50-year-old man. Compared to men who were under 25, men over 45 were nearly five times as likely to have a time to pregnancy of more than one year and more than 12 times as likely to have a time to pregnancy of more than two years.

The study also showed that male age remained a strong contributing factor to infertility even after accounting for other factors such as frequency of intercourse and the age of the female partner.

Sexual Function Isn't Everything

Peter Schlegel, MD, acting chairman of the department of urology at Weill Cornell Medical Center in New York City, says there have been a lot of bits and pieces of information on male age and fertility, but "this is the most definitive study to look at the issue and sort out the effects."

Sexual Function Isn't Everything continued...

"From a couple's or individual's standpoint, assuming that a man's fertility will continue because his sexual function does is not something you should do, it's an incorrect assumption," Schlegel tells WebMD.

Experts say age gradually begins to take its toll on sperm starting at about age 30, and a more abrupt decline in male fertility starts at age 45.

"The quality of sperm is not as good as men get older, which is associated with fertility and genetic problems," says Harry Fisch, MD, director of the Male Reproductive Center at Columbia-Presbyterian Medical Center, also in New York City.

The age-related decline in the quality of sperm is also more severe in men with conditions that affect sperm production or the ability of the testes to cool, such as an undescended testicle.

A New Look at Infertility

Fisch says the results of this study should encourage doctors to take a more serious look at male age when dealing with infertility issues.

"It takes the onus off the woman, it's not just a woman's problem," Fisch tells WebMD. "There is a male biological clock, and that clock affects fertility."

"It's no longer maternal and paternal age, it's parental age that needs to be considered," he says.

Because the study only looked at couples that achieved pregnancy, researchers say the findings may actually underestimate the effect of male age on infertility, and future studies should also include couples that were unsuccessful in their conception attempts.

But researcher Killick says the findings should be a cause of reassurance, not worry for couples trying to conceive.

"It gives us a greater understanding of the fertility process, and the more we know about natural conception, the more we can intervene when something goes wrong," Killick tells WebMD.