Older father? Impact of 'aging sperm' on diseases

Worries about aging sperm — or, more accurately, sperm from aging men — are the same as the concerns about aging eggs: decrease in fertility, and increase in genetic problems and psychiatric and behavior disorders among offspring. The primary issues in the latter category are autism and attention deficit hyperactivity disorder (ADHD).

Let's consider fertility first. You might think that it would be easy to figure out how sperm quality declines by comparing pregnancy rates for the partners of older and younger men. And, in fact, some scientific papers do this. But they have a central problem: Older men tend to be matched with older women. And since we know female fertility declines with age, it's hard to figure out whether male age has any additional effect. This study in the American Journal of Obstetrics & Gynecology is a good example of a case where older men appear to have lower fertility, but the effect is impossible to detect when you also adjust for partner age.

It turns out this problem is surmountable with a simple trick: Observe cases where couples are using donor eggs. There's no reason that the age of the egg donor would be related to the age of the father (indeed, in the data it typically is not) which means you can examine the impact of the father's age independent of the mother's.

Studies that do this — here is <u>one nice review</u> in the journal Fertility and Sterility — tend to find that while semen volume (and, hence, sperm count) does decline with age, there is little overall impact on reproductive success (the ability of the sperm to penetrate the egg, fertilize it, etc.). This is encouraging — but it's worth noting that while the number of sperm doesn't matter much when fertilization occurs outside the body, as is the case when using donor eggs or doing in vitro fertilization, it will matter if you're procreating the old-fashioned way. So more sex may be necessary.

Read full, original article: Are older men's sperm really any worse?