Age, fertility and assisted reproductive technology

In most high-income countries the age of childbearing is increasing. In Australia the average age at all births rose from 29.9 years in 2008 to 30.7 years in 2018. The average age of first-time mothers also increased, from 28.2 years in 2008 to 29.3 in 2018 [1]. Between 1996 and 2016, the median age of fathers of nuptial births increased from 32 to 33.3 years [2]. Increasingly people use assisted reproductive technology (ART) to conceive. The evidence about the impact of parental age on fertility and ART outcomes is summarised here.
Maternal and paternal ages both influence fertility and the chance of a live birth. Time to pregnancy (TTP), and the risk of infertility, spontaneous abortion, ectopic pregnancy, and chromosomal abnormalities increase in women from about age 30 with more pronounced effects in women aged over 35. The effects of a woman's age are compounded by the effects of their male partner's age.

Male fertility starts to decline at about age 45 and the risk of fathering a child with developmental problems including autism spectrum disorders increases after age 40.

Recommendations

• Public education about the relationship between age and fertility in both women and men is needed.
• Public education needs to emphasise that ART cannot overcome age-related infertility.
• Fertility specialists need to ensure that people contemplating ART are well informed about the chance of a live birth considering their age.

For more information about pre-conception health visit www.yourfertility.org.au

Written by Sheryl de Lacey in 2015 and updated by Karin Hammarberg in 2021 on behalf of PCHSIG  karin.hammarberg@monash.edu

April 2021
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References


