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## COMMENTARY

## The need to improve fertility awareness

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**Abstract** Women and men globally are delaying the birth of their first child. In the UK, the average age of first conception in women is 29 years. Women experience age-related fertility decline so it is important that men and women are well-informed about this, and other aspects of fertility. A group of UK stakeholders have established the Fertility Education Initiative to develop tools and information for children, adults, teachers, parents and healthcare professionals dedicated to improving knowledge of fertility and reproductive health.

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**KEYWORDS:** age, awareness, fertility, infertility, pregnancy

Decisions about whether, when and how to have children should be matters of individual choice. But choice in this area of life relies on having accurate information, and currently awareness about fertility is low (Bunting et al., 2012; Daniluk and Koert, 2013; Sydsjö et al., 2006). Women and men may not understand their reproductive choices, or realise that both unplanned pregnancies and infertility occur commonly in the population (Bunting et al., 2012).

Globally the age of first conception in men and women is increasing and the overall fertility rate is decreasing; in

the UK in 2013, the average age of first-time mothers was 28.3 years (compared with 26.6 years in 2001) and over half of all live births (51%) were to mothers aged 30 and over (Office for National Statistics, 2013). People are delaying parenthood for several reasons, such as undertaking further education, pursuing careers, travelling, finding a partner later in life and facing the challenges of establishing secure finances and housing (Mills et al., 2011). But female fertility declines with age, so that over the age of 35 years the chance of getting pregnant is significantly decreased (No, 2014).

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Male fertility also declines with age (Fisch and Braun, 2013; Johnson et al., 2015) partly due to modifiable lifestyle factors such as diet and alcohol consumption (Jurewicz et al., 2014), with older fathers more likely to be obese, smokers and consume more alcohol (Kuhnert and Nieschlag, 2014). In younger men, the trend of abusing anabolic steroids to increase muscle mass is of concern, as they are unlikely to be aware of the damage this does to their fertility (El Osta et al., 2016).

International estimates of infertility prevalence report a figure of 9-15% (Boivin et al., 2007), which makes it common among those of childbearing age. Most couples seek medical advice after 1-2 years of trying to conceive, meaning that fertility issues are the second most common reason for women to visit their GP, after pregnancy (NICE, 2014). Infertility is considered a major public health issue (Macaluso et al., 2010; WHO, 2016) but some people are unaware of their own fertility potential, the constraints on their fertility, the signs, symptoms or preventable causes of fertility problems (Bunting and Boivin, 2010; Bunting et al., 2012; Daniluk and Koert, 2013), or the available assisted reproductive technology that can shape their reproductive lives (Daniluk and Koert, 2013). In particular, there is a lack of awareness of individual variation in terms of how fertility declines with age: one woman may be functionally infertile at 37, another at 44. The media perpetuates misinformation by highlighting individual cases of conception in later years and suggesting that assisted reproductive technology, such as IVF, can compensate fully for age-related decline in fertility (Mills et al., 2015). The Human Fertilization and Embryology Authority (HFEA) data shows that the live birth rate from assisted reproductive technology is 32.3% for females aged below 35 years but decreases to 13.6% for ages 40-42, and to 5% for ages 43-44 (HFEA, 2016). As a result, an increasing number of men and women are finding that they have inadvertently missed their reproductive chance (Berrington, 2004). The percentage of childless people at age 44 in the UK is now 20%, but some of these will be childless by choice (Miettinen et al., 2015).

Poor fertility knowledge will be a contributory factor to many people not achieving their goal of parenthood (Everywoman, 2013). Understanding the reproductive cycle and fertility are essential for both effective use of contraception to control fertility, and for planning a pregnancy. This includes education to help women and men understand how their individual fertility may decline with age, based on a combination of genetic and lifestyle factors. Fertility education should be an integral part of comprehensive sex and relationships education (SRE) in all schools to ensure children and young people have a sound foundation of knowledge. However, SRE has not been a statutory requirement for schools (House of Commons, 2016), provision beyond the limited content in the science curriculum is patchy, and the UK government's Office for Standards in Education, Children's Services and Skills (Ofsted) reports that SRE requires improvement in one-third of schools (Ofsted, 2013). The current guidance for English maintained schools, published 16 years ago (SRE guidance, 2000), does not mention fertility awareness. This has left many children and young people ill-equipped to make informed choices about their reproductive lives and relationships (Sydsjö et al., 2006). In March 2017, following overwhelming support for statutory SRE, most recently demonstrated by a letter from five Parliamentary

Select Committees (UK Parliament, 2016), the UK government announced proposals for statutory status. This is a huge opportunity to ensure children and young people understand their bodies and receive accurate information about fertility and reproductive choices. However, much will depend on the accompanying guidance for schools and investment in teacher training.

Taking into account the lack of fertility education throughout the UK, and to help ensure all women and men are able to make informed choices, a group of stakeholders have set up the Fertility Education Initiative (FEI). The FEI is led by the British Fertility Society in partnership with the Royal College of Obstetricians and Gynaecologists (RCOG), the Faculty of Sexual and Reproductive Healthcare (FSRH), Sex Education Forum, Brook, Sexpression, Teenage Pregnancy Knowledge Exchange, Fertility Network UK, Marie Stopes and Public Health England.

The FEI wants accurate information about fertility addressed in schools and provided to adult women and men through reliable and trusted sources. The FEI are developing a number of interactive tools for teachers, young people, parents and health professionals with the aim of increasing fertility awareness and ensuring all women and men are able to make well informed choices about their reproductive lives.

The provision of accurate fertility information must now become a mandatory part of the education curriculum to increase fertility awareness. As with all areas of health, to stay healthy one needs to be empowered with knowledge. It is time to ensure that the tools are available now to those who will be facing the reality of childbearing in the twenty-first century.

For further information, please visit: <https://britishfertilitysociety.org.uk/special-interest-groups/fertility-education-initiative/about-fei/>.

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