Editorial

Pregnancy in women over 45: should this be encouraged?

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Pregnancy in women aged 45 or older is unusual. Of the 4.1 million births in the USA in 2004, only 6122 were to women aged 45 or more.[1] In the UK, births to women in this age group are not reported separately, but rather are lumped in with births to women over 40.

Published data tell us little about women who fall pregnant at this late stage in their reproductive lives. The group will include women who conceive spontaneously as well as those who have undergone assisted reproduction. It will include women for whom pregnancy is a mistake, as well as those who choose to get pregnant. In a review of 1865 pregnancies among Danish women aged 45 or older who conceived between 1978 and 1992, it was reported that the majority (1184; 63%) ended in induced abortion.[2] In England and Wales in 2005, 568 pregnancies among women aged 45 or more were terminated.[3] While some of these pregnancies are undoubtedly terminated because of recognized fetal malformations or serious maternal ill-health, most are probably terminated because the pregnancy was unintended.

Surely few women would choose to have a child at the age of 45 or older. In the first place, the chance of getting pregnant at all is low. Without assisted reproduction, fewer than 5 out of 10 women will conceive within one year if they do not start trying until the age of 40.[4] One of the few reports relating specifically to women over 45 was from a study of women in a Hutterite community, where modern contraception and abortion are not used; 87% of these ‘couples’ (women in reality, since fertility in men is much less related to age) were estimated to be infertile.[5]

Even where pregnancies are achieved, most will fail. In the Danish survey, after excluding pregnancies which ended in induced abortion, only 17% ended in a live birth: 75% of women miscarried and another 8% had an ectopic pregnancy.[2] Other studies have suggested spontaneous abortion rates as high as 90% in this age group.[6]

Assisted reproduction does not greatly increase the chance of a successful outcome. In the UK, in 2005, it was estimated that only 3.2% of women over 42 who started a cycle of assisted reproductive technology (ART) treatment using fresh eggs had a live birth; when frozen eggs were used the ‘take home baby rate’ was still only just over 10%.[7] Most of these pregnancies arise from eggs donated by younger women.

If pregnancy does continue, it is likely to be difficult, and, for some, distinctly unenjoyable. Older women are more likely to have coexisting chronic medical conditions, particularly diabetes and hypertension.[8] The risks of pregnancy complications, including pre-eclampsia and gestational diabetes, are significantly higher among older than among younger women, and antepartum haemorrhage and placenta praevia are also more likely.[9,10] A few women will die. Although the absolute risk of dying is small – only 19 maternal deaths were reported in the biennium 2000–02 in the UK – nevertheless, the maternal mortality rate among women aged over 40 was 35.5 per 100,000 maternities, compared with less than 10 per 100,000 for women aged under 30.[11]

Selflessly (and clearly misguidedly) most women are likely to be unconcerned about their own health and much more worried about the outcome for the baby. The baby is more likely to be delivered by Caesarean section (either electively or because of an increased incidence of fetal distress) or by instrumental delivery, which, among parous older women, is more likely to be associated with postpartum haemorrhage.[9]

The risk of fetal malformation is also significantly related to age. For example, the risk of autosomal trisomy, detected by amniocentesis, is less than 1 per 1000 for women aged 20, but more than 1 in 20 for women over 45.[12] While early fetal diagnosis can detect most of the severe malformations, induced abortion is not acceptable to some women, particularly if this may be their last chance of having a child.

Even where antenatal testing rules out the possibility of severe damage to the fetus, the parents are left worrying for a few more months about how the baby will cope with pregnancy and delivery. Despite a higher incidence of low birth weight, prematurity, low Apgar scores and time spent in neonatal intensive care units,[8,9] in general neonatal outcome appears to be little affected by advanced maternal age – at least among white, educated women.[9]

So, given this dreadful liturgy of problems, why would anyone choose to embark on pregnancy at the age of 45? The simple answer is that, for most of these women, it is now or never. Throughout the Western world, the numbers of pregnancies in older women are increasing. In the USA, the birth rate among women

aged 40–44 rose by 2% from 2004 to 2005 and the rate for women aged 45 and above rose from 0.5% to 0.6%, the highest rate for this age group since 1970.[1] In their widely quoted editorial published in the *BMJ* in 2005, Bewley and colleagues refer to this demographic shift as an 'epidemic of pregnancy in middle age'.[13] They also describe it as 'a major preventable cause of ill health and unhappiness'. Is it really preventable? Should we discourage women from going down this awful path?

Late childbearing, particularly with a first child, is associated with educational status.[14] First-time mothers over 40 are often well educated professionals,[10] most of whom, in keeping with their high socioeconomic status, are unlikely to have coexisting chronic disease. Although they may be unable to quantify them accurately, it seems doubtful that these women are totally ignorant of the risks – both of not getting pregnant and of the pregnancy itself. For most of them, however, pregnancy is simply not an option at an earlier stage in their lives and for the majority this is because they are not in a relationship within which they want to have children.[15]

Could it be that women are getting fussier? Is it possible that 30 or 40 years ago women were prepared to settle for starting a family with 'Mr Probably Okay' whereas now they continue to hold out for 'Mr Right'? Does the increased choice of highly effective contraceptive methods and the increasing social acceptance of abortion if pregnancy is unintended make it easier to avoid commitment to 'Mr Second Best'? For some women, single motherhood is an acceptable alternative and they will procreate with 'Mr Phenotypically Acceptable' and raise the child on their own. But these women are the exception; most women do not just want a baby – they want a family.

Should we encourage late childbearing? Of course not, but it is very unlikely that we will have much success in actively discouraging it. Just as most young women seem to think that they will get away with having unprotected sex without getting pregnant, the same women – a little later on in their reproductive lives – are almost certainly of the view that the disasters associated with 'middle aged' pregnancy will not happen to them. And so they will go on deferring until the time is absolutely right – or until they are too late.

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