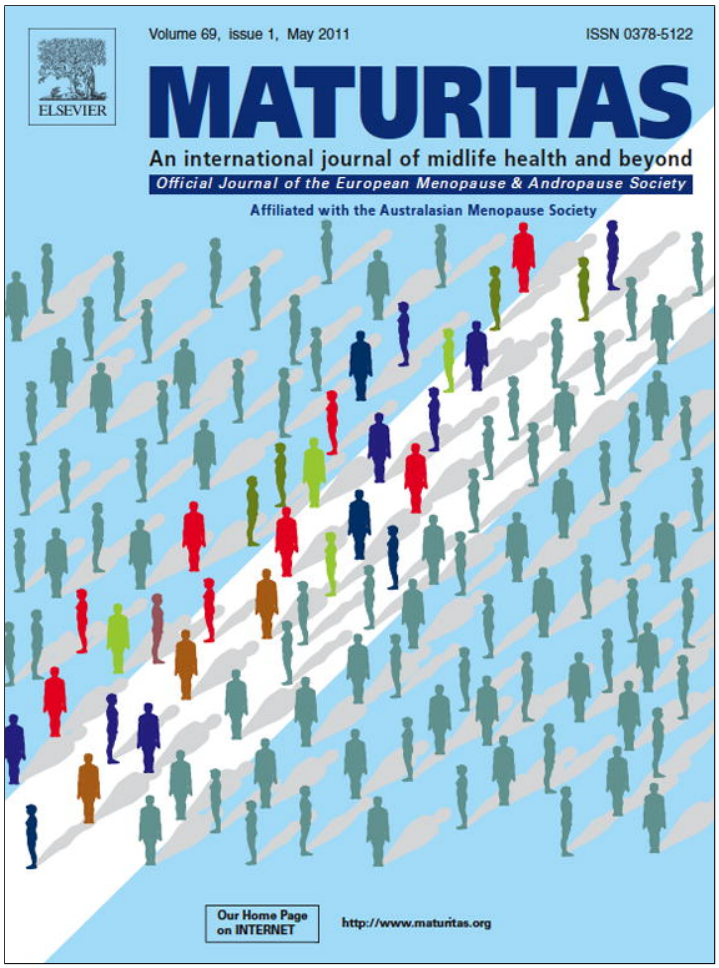

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Review

The ethics of IVF over 40

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ABSTRACT

The average age of women having their first child has been rising in recent decades [1]. Since fertility declines with age, it is not surprising that larger numbers of women over 40 are seeking IVF. Any change in reproductive norms tends to generate concern. Women's apparent postponement of motherhood has met with criticism directed variously at women themselves, and at society for its failure to support women to have children at the 'appropriate' time. The provision of IVF to women over 40 is one facet of this broader social trend towards later reproduction.In this paper I consider a number of ethical problems that might be connected with the provision of IVF to patients over 40. I look at risks to women and offspring, and also consider questions of efficacy and cost-effectiveness. I discuss the possibility that IVF for older women could raise increase the problems associated with egg procurement. Finally I address the concept of medicalisation and suggest that as long as IVF is regarded as a medical treatment, access to it should not be used as a means of social control. Nor should it be provided or withheld on the basis of moral judgements about patients' values or lifestyles.[1]

Contents

1. Introduction: risks to women and babies 37
2. Risk, values and informed consent 38
3. Efficacy and health resources 38
4. Postponement and social control 38
5. Social costs 39
6. The medicalisation of reproduction 39
Contributor 39
Competing interest 39
Provenance and peer review 39
References 39

1. Introduction: risks to women and babies

All pregnancies are risky, but some are riskier than others. Older women are more likely to suffer from conditions such as gestational diabetes and pre-eclampsia. Their offspring may be of lower birth weight, and are more likely to require intensive care. These are risks that affect all births to older mothers, but there are also risks that relate specifically to assisted conception [2,3]. Should this militate against the provision of IVF in the over 40s? Art Caplan suggests that fertility clinics have a moral duty to prevent older women from accessing treatment [4]. He assumes that increased risk is a sufficient cause for concern. But what role does risk play in these judgements, and can it really provide an answer to the question of whether women over 40 should use IVF?

What constitutes risk is itself open to question. The high incidence of caesarean in older mothers is commonly regarded as a risk. But there are benefits as well as drawbacks associated with caesareans. One study comparing births to women of different ages, observes that in births to women over 40 "...a lower rate of birth trauma was [...] reported perhaps due to increased delivery by caesarean section" [5]. Some clinicians argue that 'normal' labour ought not to be the default, and that its risks – especially those of incontinence – should be explained so that women can weigh these risks against those associated with elective caesarean [6]. When

[1] There is, of course, a wide spectrum of 'older mothers'. Even those who accept the idea of IVF in the over 40s may balk at the idea of women in their 50s, 60s and 70s becoming mothers. It is not within the scope of this paper to delve into the extremes of specifically postmenopausal motherhood, although I will address the issue of women's life expectancy later on in the paper.

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women have the option, they often choose to have caesareans [7]. Could it be that older mothers – wealthier, educated and assertive [8] – are more effective at getting what they want, namely, a caesarean delivery? If so, it is questionable whether caesarean section is a risk in same the way that gestational diabetes is.

Nevertheless, it is generally accepted that it is riskier to have a child at 40 than at 30. Consider, for example, the risk of gestational hypertension among women having their first child.

Maternal age	Gestational hypertension [9]
30–34	5%
35–39	5.6%
40–44	6.2%

And the risks of giving birth prematurely:

Maternal age	Birth <32 weeks [9]
30–34	1.2%
35–39	1.5%
40–44	1.9%

Women conceiving at 40 have a greater risk of gestational hypertension, and of premature birth than at 30. But the difference between risk at 30 and 40 is less striking than that between reproducing at 30 and not reproducing at all. In fact, if women always chose the safest reproductive option, they would use contraceptives rather than getting pregnant. If they did get pregnant, early abortion is clinically safer than undergoing the risks of pregnancy and childbirth – whatever the mother's age [10].

For offspring, there are risks in being born to older mothers generally [11] and risks associated with being conceived through IVF [12,13]. But women of 45 cannot benefit their children by having them at 25. They cannot choose between the smaller risks of motherhood at 25 and the greater risks of motherhood at 45. Their only option is to undergo the risks of reproduction at 45 or to forego reproduction altogether [14,15].

Where women have choice, their choices may be riskier than the alternatives. There are two possible reasons for this. First: there are values other than avoidance of medical risk which inform women's decisions (I will come to this in the next section). Second: perhaps women's decisions *are* based on risk, but they calculate wrongly. The media may colour patients' perceptions. Patients may struggle with unfamiliar concepts and terminology; understanding and applying statistical information is challenging. It is vital to continue to communicate and provide information as effectively as possible. But it is *also* essential to recognise that 'unwise' decisions do not invariably spring from misinformation or miscalculation.

2. Risk, values and informed consent

Accurate information is crucial for informed consent. But if the right option were always the least risky, there would be no *need* for informed consent. Doctors could make appropriate decisions based on clinical knowledge. There is a deep conflict here between the ethical principles of beneficence and respect for autonomy. For doctors to benefit patients, some idea of what constitutes the good is required. A superficially appealing approach is to identify the medically lowest risk option as always the best. But there are values and goods in people's lives that supercede merely medical or clinical benefits. Reproduction is one of these.

Having children is important to women. Doing so when they feel ready, and in ways that suit them, is valuable [16]. Caplan believes that women should prioritise risk avoidance over other values in their reproductive decision-making. But as we have seen, risk avoidance is not compatible with reproduction *at all*. Nor is it compatible with what medical ethicists have recognised over the past decades: that medical values do not necessarily trump other values that patients may hold. Human wellbeing depends on more than good health [17].

Risk is a valid consideration in conjunction with other factors. But in isolation it offers no answers to the question of whether we should provide IVF to the over 40s. If there were an age at which the risks of IVF rise dramatically, things might be easier. But this is not the case. Risks rise incrementally, and given that we generally expect reproduction to be risky, it is not clear that gradual incremental differences provide sufficient grounds for refusing treatment.

Nevertheless there are other grounds on which medical treatment can and should be denied. I will go on to consider these in detail.

3. Efficacy and health resources

In publicly funded healthcare systems, there may be reasons not to fund IVF, in some, or all, cases. A key consideration is cost-effectiveness. IVF success rates dwindle with age [18]. In the UK, an upper age limit of 39 is suggested for state-funded IVF treatment on these grounds [19].[2] Some might disagree with the interpretation of the facts, or the exact positioning of the cut-off point, but the need to make the best use of resources requires little justification.

However, the efficacy of IVF for the over 40s increases when 'younger' oocytes are used [20]. Accordingly, use of donated oocytes increases dramatically after 40 [9]. But although donated oocytes may increase efficacy, they raise other problems. There are well-documented debates surrounding oocyte procurement, including the possibility of coercion and exploitation [21,22]. Yet most women would prefer to use their own eggs if they could. Goold and Savulescu argue for greater acceptance of 'social egg freezing' as an insurance policy for future reproduction [16], although this is also controversial [23,24]. There is not scope in this paper to delve into these questions. Nevertheless it is important to note that if there were conclusive grounds for regarding egg donation or 'social' egg freezing as unethical, these practices could be banned without requiring that IVF over 40 is likewise banned.

4. Postponement and social control

Some women are infertile through disease; others, it is assumed, seek IVF as a result of poor choices or the deliberate postponement of parenthood [25]. Caplan describes women as being 'bombarded by media messages that suggest that technology can extend the age at which a woman can be fertile with little difficulty' [4]. Restricting treatment to those under 40 would teach women that they cannot expect to reproduce as and when they choose, perhaps helping to reverse the trend towards later motherhood.

Withholding treatment on the basis of poor choices is a hugely powerful means of social control. But do older mothers constitute such a danger to society that they should be excluded from frameworks that protect the interests and rights of other patients? A central tenet of medical ethics is the separation of moral judgements from the question of access to healthcare. This is why care is not withheld from criminals. Should women's health claims should be governed by stricter criteria than those of other patients?

If treatment is denied on the basis of poor choices, it becomes supremely important to establish the nature of these choices. It is commonly assumed that a woman who reached the age of 40 without having children has had ample opportunity to become a mother but has chosen postpone or forego it [26]. Pennings is highly critical of this assumption, arguing that young women's reproductive options are almost invariably formed and constrained by circum-

[2] Despite this, there are commentators who argue that NICE oversteps its role in incorporating these efficacy evaluations into its judgements – John Harris, for example. See Harris [35].

stances beyond their control [27]. Because of this, he believes that it is wrong to assume that older mothers have postponed pregnancy, and therefore wrong to penalise them for doing so.

I would suggest that the apparent choices of prospective patients, whether commendable or reprehensible, should play no part in access to treatment. Efficacy is a valid consideration in a publicly funded system, but the means by which it is calculated, and the rationale used by decision-makers should be explicit and transparent.

5. Social costs

Even if the immediate costs are covered by the patient, there may still be implications for the rest of society. IVF by its nature creates new claimants on state resources. Health problems suffered by mothers and offspring may place a burden on society. Battin et al. report that "Infants born to mothers over the age of 40 currently represent about 3% of total births but 5% of the infants requiring neonatal intensive care" [28]. Offspring of women who fund their own IVF may subsequently need state-funded treatment. One way round this would be to require that clinics are insured to cover the costs of future health needs resulting from their services.

But while health costs can be covered through insurance, there remains the question of who is to rear children born to older mothers. If women over 40 are allowed to access IVF, are we sanctioning the creation of children who will be orphans? [26,29,30] Losing a parent is a devastating trauma for a child; a motherless child may also place a significant burden on society. Banh et al. recommend that IVF patients should have a life expectancy of at least 18 years to allow for the child to become independent. Based on current figures, they suggest a cut-off point of around 68 [31].

This suggestion seems fairly reasonable. Yet perhaps lifespan estimates should apply to all IVF patients, not just those over 60. I have noted elsewhere that younger women may seek IVF because their fertility has been impaired through disease, which may also reduce their lifespan [32]. If the chance of losing a parent in infancy is to be minimised, the life-expectancy of *all* fertility patients should be ascertained. If patients are likely to live at least 18 more years, they may access treatment. If not, it will be withheld – whatever their age.

6. The medicalisation of reproduction

IVF has brought conception into the medical domain. This has resulted in a power struggle, which is informed by various, and sometimes conflicting values [33]. One of the problems here is that reproductive technologies do not always fit into easily into the medical paradigm. It is not always possible to establish a clear causal link between the clinical need and the means of meeting it [34].

Patients and medics alike have sought to locate reproductive technology in the sphere of medical need. There is a price to pay for this. I have argued that those things we regard as medical needs should be privileged above other needs. Hence, we should not ask moral questions about whether patients deserve treatment, nor use healthcare as a means of controlling behaviour. This can be painful: doctors may think that women over 40 should not access IVF. Yet it is hard to stipulate a clear logical difference between the 'need' of a 25 year old that excludes the 40 year old.

I do not share the values that cause women in their 40s to seek IVF. However, I do support the ethical importance of treating patients without allowing punitive social justice to enter the frame. Rather than seeking to control women's reproductive choices through these means, one might decide that IVF is simply too disruptive to fit into the medical framework. This is a choice: what we decide to regard as a medical need is not given, but is negotiated. But as long as IVF is construed as a medical need, we must afford women the same protections and privileges that other patients receive.

Contributor

Anna Smajdor is the sole contributor of this work.

Competing interest

No competing interests.

Provenance and peer review

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