

Reproductive health matters

Olga van den Akker argues that psychological research and policy are surprisingly embryonic, struggling to keep pace with technological developments

You do not need to be a psychologist to know that reproductive health plays an important role in society and that individual psychological, behavioural and social factors affect reproductive health and vice versa. But did you realise psychological research has shown that health education, willpower, planning and the opportunity to exercise health behaviours (e.g. moderate alcohol and caffeine consumption, not smoking or taking drugs, maintaining a balanced diet) can lead to a healthy reproductive lifestyle, much like it affects general health? Health behaviours can also free people from unnecessary and preventable damage (e.g. unsafe abortions) or disease (e.g. sexually transmitted infections) and from the potential psychological consequences of these (depression, guilt, stigma); can contribute to early detection and treatment (e.g. for breast or testicular cancer); and can reduce time off work and use of the healthcare system (van den Akker, 2012). Clearly, reproductive health matters.

However, since many people do not know what affects reproductive health, they cannot all make informed decisions (Marshall, 2006; Oluwatosin & van den Akker, 2012). Access to and understanding of good reproductive healthcare advice, education and services is therefore necessary. There is a general lack of understanding about treatments for reproductive health problems too. Pioneer users of increasingly

technologically advanced treatments, for example tackling infertility, do not experience them in isolation – they live in a social world. They need to make informed choices. Impaired reproductive health, and in particular involuntary childlessness and treatment with assisted conception using third parties, can have severe and long-lasting psychological effects. It is therefore in the interests of governments and practitioners to consider social, psychological and behavioural research evidence in debates, consultations, policy, legislation and practice. Inexplicably, this does not happen as a rule.

Reproductive health inequalities

Legislating, provisioning, educating and improving reproductive health



Consequences – not accurately predicted

effectively – and incorporating psychological research, assessment and treatment – is even more complex in the developing world. Here, much disease relating to reproductive functioning is preventable. Trauma and distress due to reproductive ill health is common, and psychological treatment and professional support is largely unavailable – possibly leaving people suffering in the hands of traditional healing and rituals. Infertility or miscarriage can have dreadful consequences across the world, with women in particular known to be ostracised, socially stigmatised, isolated, maimed and even killed for reproductive ‘incompetency’ (Vayena et al., 2002). Issues of gender, poverty, cultural traditions, religious beliefs, lack of educational and healthcare infrastructures, preventable morbidity and mortality all contribute to unnecessary and unjustifiable reproductive health inequalities and unimaginable psychological scarring.

Unfortunately, global health inequalities are difficult to eradicate, because good health infrastructures, transportation or electronic accessibility to remote areas and education all requires funding – not readily available in many parts of the world. This makes enactment of new or improved national policies difficult, but not impossible (Inhorn, 2012). Implementing behavioural change programmes or psychological support services for improved reproductive health and wellbeing, and balancing that against other economic pressures, is not the only difficult part: long-term planning needs to consider the psychological impact too.

Reproductive health planning and cultural beliefs

Implementing national policies ideally requires a full understanding of the consequences, drawing on relevant research. This is not always the case. The UK recently legislated for anonymous mitochondrial donation (see tinyurl.com/nzx4arn). It is suggested

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that the amount of genetic material transferred in mitochondrial donation to the resultant child is minimal; therefore no information about the donor providing it is necessary (see tinyurl.com/pfuvubr). However, there is no reason to withhold health information from individuals no matter how small the expected third-party contribution may be. It is a basic human right to have accurate information about one's health (Gomes de Andrade, 2010), particularly where medical intervention has brought the third-party material into play, not a forgotten phone number after a night of unplanned, unprotected sex. Research on other third-party reproduction, such as surrogacy and gamete donation, has demonstrated that anonymity about one's origins can affect the identity of the resultant children as they grow up (van den Akker et al., 2015). Third-party assisted conception leads to new and complex interpretations of relatedness (Richards, 2014), which can have devastating psychological consequences for members of the new family in the long term. Useful culture specific psychosocial evidence – concerning, for example, the importance of a genetic link – was largely ignored in recent legislation.

The disastrous long-term effects of a very different kind of state intervention, which did not tap into psychosocial factors either, can be found in China. In 1980, a one-child policy was introduced for people living in cities, to reduce overpopulation and the number of children requiring feeding. The psychosocial, economic and human rights (and wrongs) effects of this policy on the population are known to have been substantial. People feared having a daughter, as cultural traditions dictate she would marry and help her husband's family into old age, whereas a son would work and care for them. The resultant consequences were not accurately predicted. They included selective feticide (killing of unborn fetuses) and female infanticide (killing of newborn babies) (Tyano et al., 2010); a subsequent

unplanned and unbalanced male to female ratio; disabled children left abandoned to die inhumanely; and new unauthorised (second) births hidden from the authorities. Abortion rates for policy and economic reasons have skyrocketed. In addition, China is left without a sufficient workforce to care for its growing ageing populations; and a more recent slackening of this policy, in recognition of this shortfall, has not resulted in a substantial increase in parity. The psychological impact and long-term effects of these desperate measures are not yet fully assessed, but guilt, depression and symptoms of post-traumatic stress are likely to haunt those who succumbed to these diabolical practices.

Choice and the context

According to the Office of National Statistics, a steady decrease in births and fertility from previous years is evident in England and Wales (see tinyurl.com/ngcmsqa), as is the case elsewhere. Here, state reforms and economic austerity measures of the welfare system (such as reductions in housing benefit and room sharing) played a part, though much more subtly than in China. Total fertility rates are also decreasing, and the average age of mothers has increased to 30.0 years, compared with 29.8 years in 2012.

These national statistics reflect behavioural changes, lifestyle choices and attitudes towards competing interests (Galinsky et al., 2011). We weigh up finances, career prospects and housing situations when deciding if and when to start a family. Also, other social issues, including a decline in childbearing within marriage, an increase in people remaining single, and more lesbian and gay

partnerships, affect and limit reproductive 'choices' and contribute in turn to the changing fertility rates. Yet survey evidence from young educated, professional Western populations shows the desire to build a family in addition to achieving life goals is not abating (Johnson & Tough, 2012).

Governments need to react to the lifestyle and attitude shifts they have encouraged, because the biological clock is ticking – more and more people will need treatment if this important life goal is still to be achieved. The decreasing or impossible fertility prospects for people due to psychological or social factors means many more people now require and seek assisted conception services to help build their families (Richards, 2014). Furthermore, the choice is also limited by the fact that building a family using

Meet the author

'Even before I started work as a psychologist, my interests as a student were sparked by a diversity of innovative reproductive health research projects. Much of that research has subsequently seemed more like an interesting hobby than a job.'

Some 35 years (and three children of my own) later, I still think I made the right decisions, would not change any of it, and enjoy these questions as much as when I started. I hope I have inspired others along the way, and that – out of all reproductive health matters – priority is given to eradicating reproductive health inequalities.

My main message here is that long-term psychosocial research, across diverse areas of reproductive health, reflecting on past changes and projecting on future needs contextually, is urgently needed to inform policy.'



Olga van den Akker
is Professor of Health
Psychology, Middlesex
University
o.vandenakker@mdx.ac.uk

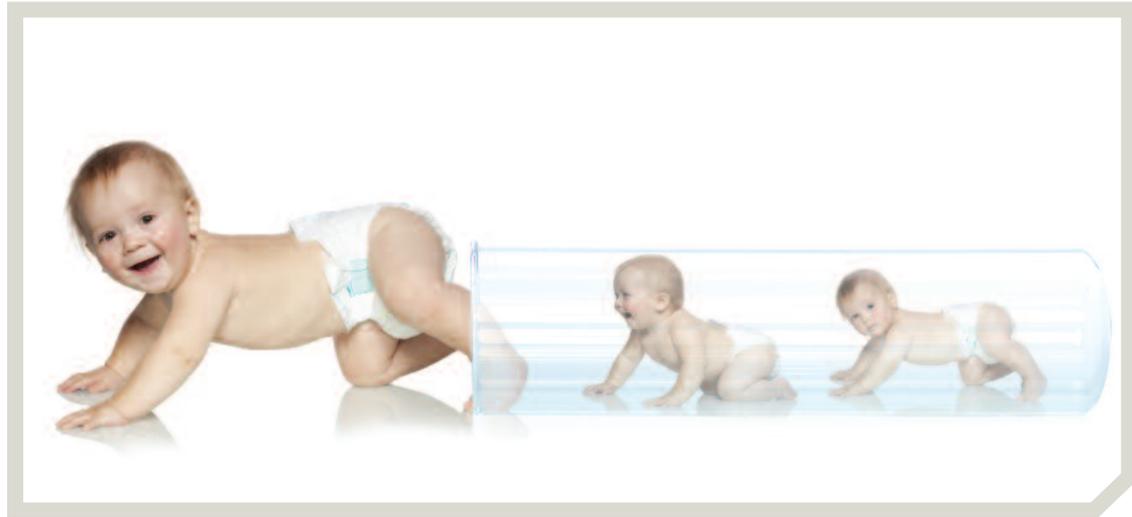
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assisted conception is not as easy as it sounds; it is notoriously unsuccessful, can be associated with stigma and uncertainty, it medicalises conception, brings a third party into the process and can lead to substantial psychological distress and disappointment (Johansson et al., 2011).

In addition to these psychological costs, there's a financial burden too. In some parts of the UK, healthcare resources fund assisted conception treatment, and in areas where this is not the case health

inequalities determine who has and does not have treatment to overcome involuntary childlessness, again impacting upon 'choices'. Internationally, research has shown that white, middle-class, heterosexual couples are more likely than non-white couples to have used assisted conception (Culley et al., 2012). Where treatment opportunities are not possible, psychological support is necessary, although this is still not catered for in most countries across the world and not addressed adequately in substantive reports on inter/national guidelines and best practices (Lunenfeld & van Stierteghem, 2004).

Medically recognised infertility is another area where apparent 'choices' are limited. Around 10 per cent of the world's population are born with either no, incomplete or malfunctioning reproductive organs or systems. This can be caused by disease (e.g. childhood mumps), treatment for disease (e.g. treatment for cancer), accident or injury. Because infertility is associated with stigma or incompleteness, and challenges culturally determined notions of



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femininity and masculinity, it is globally interpreted as one of the greatest life stressors (Cousineau & Domar, 2007; see also tinyurl.com/qcsacyg). Numerous increasingly sophisticated treatments are available, giving people opportunities they could not have dreamt up a few decades ago. Nevertheless, some of these are associated with substantial risks at medical, public, social and private levels (Mathur, 2015). Preventing risk factors for infertility should therefore be a worldwide educational priority, and accessibility to treatment should be a local priority. Unfortunately, research funding is not proportionally allocated to this area of health.

Risks of treatment

In addition to dealing with the emotional turmoil associated with a diagnosis of infertility or involuntary childlessness, most treatments are technologically complex and personally invasive, requiring new psychological adjustments. Increasingly sophisticated techniques, such as intra-cytoplasmic sperm injection,

prenatal genetic diagnosis and the use of donated gametes, surrogates, frozen embryos and, more recently, mitochondrial donation, result in increasing uncertainty of the long-term physical, genetic and cognitive/mental health of the children resulting from these treatments (Mathur, 2015). Cognitive dissonance and cognitive restructuring of what kinship, motherhood and fatherhood means is also necessary (Strathern, 2005), although this does not usually happen until after treatment is initiated. There is a professional, ethical and moral obligation across disciplines to ensure the welfare of all parties involved is protected and assured prior to or at the time of treatment (van den Akker, 2013). However, few studies report on the psychological, behavioural and social risks associated with them.

The international market

Biopower – modern political systems regulating and controlling populations via modern medical techniques, including public health regulation and heredity

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(Foucault, 1998) – has become increasingly relevant in reproductive health. A new kind of biopower is also in the hands of sufficiently wealthy infertile couples and gay, lesbian and single men and women of all ages who can afford it. As with quests for new teeth, enhanced body parts or improved appearances, individuals pay for alterations the NHS does not cater for. The savvy healthcare shopper goes abroad, and the international market in fertility treatment, gamete donation and surrogacy is now a multi-million dollar industry.

Surprisingly, the ethics of international baby buying is rarely addressed (Qadeer, 2010), despite known cases of child trafficking and paedophile users of these internationally accessed services. Other ethical concerns include the discrepancy between male and female infant births, illegal abortions for sex selection and the exploitation of surrogate mothers. Surrogate mothers in developing countries, for example, are not always giving informed consent; they undergo chemical abortions for which they were not fully prepared; they are paid minimal fees; some commissioning parents will not take a child born with abnormalities; and some surrogates are removed from their families to prevent STIs and the ‘stigma’ of surrogacy in their local communities (see report from the Centre for Social Research, India: tinyurl.com/qc2fhgh). The psychological consequences for all parties concerned are only just being addressed in research. We need to catch up with these new and thriving businesses that encourage people to exploit each other.

The consequences

Although most of us understand the strong desire some people feel to have children – and indeed evidence suggests not fulfilling this life goal affects wellbeing well into late life (Hansen et al., 2009) – this should be balanced with the best interests of the child. Unregulated treatment is not designed to be in the interests of any child conceived for the sole purpose of meeting the specifications of the commissioning parent(s) at a negotiated price. Because international laws differ, and UK law on birth registration is not aligned with, say, Indian law, new parents commissioning gametes or surrogate babies via India can find they have a baby they cannot legally

call their own or give British nationality. Because of legal loopholes, it is not possible to accurately predict the number of parental order reports made for surrogate babies brought into the UK (Crawshaw et al., 2012), and legal parenthood is not officially registered. Having children should be a positive experience involving private certainty and public understanding and recognition that the best interests of the child were paramount. This is not always the case.

Much previous research has reported there are no adverse outcomes for children born from third-party assisted conception, although there are exceptions. Higher levels of adjustment problems are noted in children conceived via surrogacy, but not in children conceived using gamete donation (Golombok et al., 2012). The authors suggest this can be due to the lack of a gestational link or an awareness of their conception, and children may feel less secure when faced with their mothers’ emotional problems. Numerous other adverse and unanticipated consequences are reported.

It is telling that people conceived via scientific developments that helped create them, are now in turn, using science to find genetic relatives (van den Akker et al., 2015). Normative concepts of relatedness and kinship are challenged and these are not yet adequately addressed in research, policy or practice.

Family and kinship shifts

The study of kinship of families created using third-party assisted conception has mostly focused on the treatment of the parents seeking the treatment, rather than the kin relationships once the new family exists (Carsten, 2004). This is again too late. How we define family and what it means to be in a family are all areas that influence how we see and define ourselves. Third-party reproduction mimics familiar family forms and creates new ones. Discourses of resemblance and similarity described many decades ago continue to pervade people’s ideas of biogenetic relations, and any ‘outside’ or third-party biological or genetic input is hidden or marginalised.

A key theme in current debates over kinship in reproductive technologies is the place of the biogenetic relationship and how it is ‘choreographed’ where disclosure has taken place (Thompson,

2005). For example, in Vietnam, like India, limited education about genetics is available, leaving couples using or providing gamete donation or surrogacy with culture-bound beliefs that a birth mother is the ‘real’ mother of the child (Hibino, 2015). In many Western cultures, genetic parenthood is seen to be the determinant of parenthood, even if governments (e.g. the UK) register births to birth mothers automatically. Levine (2008) argues that kinship models created by non-traditional families use conventional as well as radical ideas to reference biogenetic connections. This is evidenced in research where people coped with cognitive dissonance of the biogenetic distance with the child by cognitively restructuring new interpretations of third-party assisted conception families (van den Akker, 2007). In order to do this effectively, accurate health information and education is necessary at a global level.

Research, policy and practice together

I have tried to show that the interaction between reproductive health and regional, governmental, economic, cultural, social and psychological factors is complex. Reproductive health inequalities are rife, and gender inequalities in particular are responsible for much unjustifiable harm. Internationally, family building using donated gametes, mitochondria or a borrowed or ‘leased’ uterus from a third party is set to be increasingly used now that some countries benefit economically from the industry. This leads to changes in the genetic footprint and/or gestational environment of new generations.

Research on the psychological effects and consequences of these modes of family building, of kinship and identity is only scratching the surface. Treatments using these advances in technology and medicine are brought to society via government policy, and they have implications at economic, cultural, social and psychological levels. However, research, policy and practice do not always work well together in matters concerning reproductive health.

Reproductive healthcare services need to reflect the specific and lifetime shifting needs of the populations they serve and not only predict but support the psychological effects and psychosocial consequences. True globalisation requires a more harmonious interaction between scientific research, technological innovation, policy and practices. This cannot be done until worldwide inequalities are tackled first.

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