

# Stringent regulation of oocyte donation in China

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Currently in China, health regulations permit oocyte donation only from IVF/ICSI patients who have 20 or more mature oocytes retrieved from a single cycle, of which at least 15 must be kept for their own treatment. Oocyte donation from non-patients and commercial transaction of human gametes are strictly prohibited by law. Additionally, embryos derived from donated oocytes must be cryopreserved and cannot be transferred to prospective recipients, until donors have been screened to be free of communicable diseases after 6 months. Such overly stringent regulation has in turn led to a severe shortage of available donor oocytes in China. The situation is made worse by a cultural aversion to oocyte donation by the majority of patients, because biological kinship and blood relations are viewed as sacrosanct in traditional Chinese culture. The harsh social stigmatization of childlessness in Chinese society, increasing incidence of age-related female infertility in recent years and growing numbers of bereaved older women who have lost their only child to accidents, natural disasters and suicides would make it imperative to reconsider liberalizing the regulation of oocyte donation in China. In particular, the blanket ban on oocyte donation by non-patients should be lifted, as it is anticipated that there are many young healthy women in China who are generous and open-minded enough to consider altruistically donating their oocytes to childless couples.

**Key words:** donation / ethics / oocyte / recipients

In 2006, the Health Ministry of China promulgated a new set of legislation pertaining to oocyte donation (Han, 2006). According to Decree No. 44 of 2006 (Health Ministry of China, 2006), donor oocytes can only be procured from IVF/ICSI patients, and solicitation of oocyte donation from non-patients is explicitly forbidden. Furthermore, oocyte donation is permitted only if 20 or more mature oocytes are retrieved from the patient, with at least 15 oocytes being retained for the patient's own use and the remainder can be donated. Fresh embryos produced from donor oocytes must be cryopreserved and cannot be transferred in a fresh cycle. Six months later, oocyte donors must then be retested for the human immunodeficiency virus, hepatitis B virus, hepatitis C virus and other relevant communicable diseases. Only if the oocyte donor is tested and found to be negative for these communicable diseases, the cryopreserved embryos obtained from donor oocytes can be thawed and transferred to the prospective recipient. Any commercial transaction involving donor oocytes is prohibited, and approval must be obtained from the local provincial or municipal health authority before oocyte donation service is provided.

As expected, such overly stringent regulation has led to a severe shortage of available donor oocytes and consequently long waiting lists of prospective recipients at virtually all fertility clinics within China. It is rather uncommon to find IVF/ICSI patients with 20 or more retrieved mature oocytes. Even then, not all such patients are willing to share their excess oocytes with another patient, particularly if they are childless and attempting to conceive themselves. The situation is made worse by a cultural aversion to oocyte donation by the majority of Chinese patients. In traditional Chinese culture, biological kinship and blood relations are viewed as sacred, and it would be an insult to one's family and ancestors, as well as a personal tragedy to have unknown and unacknowledged biological descendants. It must be noted that Confucian and Taoist tradition place much emphasis on the 'spiritual connection' between ancestors and their biological descendants, through the rite of ancestor worship that is currently practiced by a large segment of the Chinese population.

Although there is always some social stigma associated with infertility, gamete donation and adoption in almost every human culture, stigmatization of childlessness is particularly harsh in Chinese society: it is seen

both as a curse and as a major failing in filial duty to one's parents and ancestors (Qiu, 2002) because the Confucian rite of ancestor worship would require living biological descendants to carry out prayer offerings for the deceased. It is not uncommon for childless couples to face embarrassing questions from close relatives and friends at social gatherings during major Chinese festivals, such as the Lunar New Year.

There is a much stronger aversion against child adoption in Chinese culture, when compared with Western societies where it is a more common and acceptable option for childless couples. This is because of the patriarchal nature of Chinese society, in which male bloodlines and clan ancestry are paramount to an individual's identity (Qiu, 2002). No doubt, oocyte donation entails a loss of genetic connectedness to the birth mother with its inherent psycho-social implications on the parent-child relationship (van den Akker, 2006; Purewal and van den Akker, 2007). Nevertheless, what really matters in the traditional Chinese family value system is that biological kinship to the father and patrilineal clan ancestry is preserved. Oocyte donation is thus very much preferable to the adoption of children from unrelated families in the Chinese cultural perspective. In fact, Confucian tradition sanctions adoption only among close relatives belonging to the same patrilineal clan or extended family, and sharing the same surname. However, rigorous implementation of the one-child policy (Mosher, 2006) in China over the past few decades has made it virtually impossible for childless couples to adopt from their close relatives.

Chinese patients requiring oocyte donation fall into four distinct categories: (i) women without functional ovaries, i.e. Turner's syndrome (Foudila *et al.*, 1999) or afflicted with premature ovarian failure (Kalanitaridou *et al.*, 1998); (ii) women with poor quality oocytes and recurrent IVF/ICSI failures, i.e. polycystic ovary syndrome (PCOS, Patel and Carr, 2008); (iii) older women who had either married late in life or deliberately delayed childbearing after marriage (Friese *et al.*, 2006); (iv) bereaved older mothers who had lost their children to traffic accidents, suicides and natural disasters. The first category of prospective recipients without functional ovaries or afflicted with premature ovarian failure is relatively rare in the Chinese population, and the second category is primarily composed of PCOS patients who constitute ~2–3% of Chinese women of reproductive age (Chen *et al.*, 2008). The third category, composed mostly of women attempting to have children in their late 30s or early 40s (Friese *et al.*, 2006), is becoming more common due to the increasing trend of highly educated urban Chinese women deliberately choosing to delay marriage and childbearing in pursuit of career and educational goals. This trend is further exacerbated by sky-rocketing property prices in large Chinese cities, which has prompted many newly wed couples to delay having children until they can stabilize their financial and housing situation. The fourth category, composed of bereaved older mothers is also becoming more common, due to China's one-child policy (Mosher, 2006), and the rising numbers of traffic-related deaths and suicides of young people in China. The escalating number of motor vehicles spurred by rapid economic growth and resulting congestion of China's roads and highways has dramatically increased the incidence of traffic-related deaths of young people in recent years (Yan-Hong *et al.*, 2006; Wang *et al.*, 2008). Additionally, suicide of young adults and children in their late teens is also becoming more prevalent (Liu and Tein, 2005; Jiang *et al.*, 2007), due in large part to a highly competitive college entrance examination system (*GaoKao*), which allows only an extremely small proportion of candidates to enter reputable colleges and universities

(Siegel, 2007). The bulk of successful candidates (~50–60%) entering higher education often have to contend with poorly funded sub-standard colleges and universities that provide bleak job prospects upon graduation (Plafker, 2004). As a result, many Chinese children are pushed extremely hard by their parents to excel academically at a young age, and their entire life often revolves around studies and examination. High parental expectation is further exacerbated by China's one child policy (Mosher, 2006), resulting in many parents and even grandparents pinning all their hopes and aspirations on only one child. Hence, it is not uncommon for many young people to feel a strong loss of self-esteem and meaning in life, if they were to fail academically, and subsequently contemplate suicide (Liu and Tein, 2005; Jiang *et al.*, 2007).

More recently, the Sichuan earthquake (May 2008) in south-west China, which led to the death of some 4700 school children (Branigan, 2008), brings home the point on much needed reforms in the regulation of oocyte donation. Many bereaved mothers who lost their only child in the earthquake are in their late 30s and early 40s and consequently have difficulties in conceiving another child. Although the Chinese central government has made an extraordinary effort in providing disaster relief and reconstruction of the affected areas, the lost children can never be brought back to life. Under such circumstances, the liberalization of oocyte donation would not only give hope to many bereaved older mothers in conceiving another child, but also provide an opportunity for young healthy women to help those bereaved mothers through oocyte donation.

There is also a risk that the requirement for prospective donors to have 20 or more retrieved mature oocytes may encourage the injudicious use of unnecessarily high gonadotrophin dosages on good prognosis patients (Heng, 2007). To maximize the number of retrievable oocytes, prospective donors will often be restricted to younger women with mild fertility problems (i.e. fallopian tube occlusion) or with male partner infertility (Heng, 2007, 2008), because such patients readily produce many oocytes under gonadotrophin stimulation. There has been recent scientific evidence that such good prognosis patients would do better either without exogenous gonadotrophins (natural cycle) or with minimal ovarian stimulation (Edwards, 2007; Ubaldi *et al.*, 2007). In their case, although fewer mature oocytes are retrieved, the quality is better (Fauser *et al.*, 1999), and there is also improved endometrial receptivity and luteal support for embryo implantation (Devroey *et al.*, 2004; Lindhard *et al.*, 2006). Additionally, high gonadotrophin dosages are associated with increased risks of ovarian hyperstimulation syndrome (Budev *et al.*, 2005) in 'good-responder' patients. It would thus be unethical to subject good prognosis younger women with mild fertility problems or male partner infertility to high hormone dosages, just for the sake of maximizing the number of retrievable oocytes available for donation. Also, it must be remembered that recombinant gonadotrophins used in fertility treatment are expensive and form a substantial portion of the medical fees (Gleicher *et al.*, 2003).

The tremendous shortfall of donor oocytes in China, coupled with the strong social stigma suffered by many childless couples, would make it imperative to re-examine the overly stringent regulation of oocyte donation, particularly the requirement for patients to have 20 or more retrieved mature oocytes in order to qualify as donors. Additionally, the blanket ban on oocyte donation by non-patients should also be reconsidered. It is anticipated that there are many young healthy women in China who are generous and open-minded

enough to consider altruistically donating their oocytes to aid in the conception of childless couples, if permitted to do so. In fact, there are more ethical challenges in soliciting oocyte donation from IVF/ICSI patients since they are attempting to conceive themselves and it would be a daunting prospect for them to fail at clinical assisted reproduction, while being unsure of whether their donation has resulted in a successful conception by another woman (Heng, 2008). The plight of bereaved older mothers who have lost their only child needs special consideration. Surely, these women deserve an opportunity to conceive another child through oocyte donation.

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