

Outcomes of surrogacy undertaken by Australians overseas

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In surrogacy arrangements using assisted reproductive technology (ART), embryos are transferred to the surrogate who carries the pregnancy. The embryo can be provided by the intended parents, or alternatively, donor eggs and/or sperm can be sourced privately or via a commercial gamete provider or ART clinic. In Australia and other countries where ART is subsidised by public funding, elective transfer of one embryo is becoming more common and has resulted in improved perinatal outcomes after using ART.^{1,2} In Australia and New Zealand, the proportion of cycles with single embryo transfer increased from 56.9% in 2006 to 73.2% in 2011. As a result, the rate of multiple birth decreased from 11.7% in 2006 to 6.9% in 2011.^{3,4} In the United States and Canada and other countries where ART is not subsidised, the average number of embryos transferred and multiple birth rates are significantly higher.⁵ In countries where data on outcomes of using ART are not reported, such as India and Thailand, the multiple birth rate is unknown.

In Australia, only uncompensated surrogacy, where the surrogate (and gamete donor, if applicable) does not receive payment, is permitted. Despite laws to deter intended parents from seeking compensated surrogacy overseas, such arrangements occur. Common destination countries are India, the US and Thailand.⁶ The practice of ART, including surrogacy, is less well regulated in these countries than in Australia. None of these jurisdictions have regulations on the number of embryos transferred.

Contemporary opinion and recommendations from ART counselors and professional organisations are that children should be told at a young age about the way they were conceived.⁷⁻⁹ In Australia, ART clinics are required to keep records of gamete donors, recipients and surrogates that allow children born as a result of donor procedures and surrogacy to access information

Abstract

Objective: To describe the outcomes of surrogacy among Australian intended parents who engage in compensated surrogacy overseas.

Design, setting and participants: Members of two Australian parenting support forums who were considering surrogacy or were currently or previously in a surrogacy arrangement were invited to complete an anonymous online survey during July 2013.

Main outcome measures: Destination countries; source of eggs; number of surrogates and embryo transfers; proportions who experienced pregnancy loss after 12 weeks' gestation, multiple pregnancy, prematurity, and live birth by destination country; and intentions regarding disclosure to children about the way they were conceived.

Results: Of 1135 potential participants, 259 (23%) completed the survey. Of these, 112 (43%) had undertaken at least one surrogacy attempt overseas. India and the United States were the two most common destination countries. Most respondents (95/112; 85%) had used donor eggs; half (57/112; 51%) had used more than one surrogate; and the mean number of embryo transfer procedures was 2.9. As a result of surrogacy, 85% (95/112) had at least one child; 55% (62/112) reported that their surrogate had a multiple pregnancy; 10% (11/112) reported that a pregnancy had ended in a late miscarriage or perinatal death; and 45% of births (35/78) were premature. Most respondents (80/112; 71%) were most comfortable with using an identity-release donor, and 87% (97/112) believed that this would also be in their child's best interests. Almost universally, parents were planning to disclose the use of a surrogate and/or a donor to their child.

Conclusions: Almost half of the intended parents via surrogacy who completed this survey had undertaken compensated surrogacy overseas; most of these used donor eggs, but few considered Australian donors. A high proportion of surrogates had multiple pregnancies and there was a high rate of premature birth. These adverse outcomes could be avoided if the surrogacy was undertaken in Australia. Removing some of the existing barriers to surrogacy in Australia may reduce the number of surrogacy arrangements carried out overseas.

about their origins when they reach adulthood.¹⁰ Furthermore, most Australian gamete donors and recipients favour disclosure of the use of a donor to a future child.¹¹ In the US, intending parents can choose to use an anonymous or an identity-release donor.¹² In many other countries, only anonymous gamete donation is permitted.¹³

We have previously reported findings about planned and actual behaviour in relation to surrogacy arrangements; the financial cost of such arrangements; and the impact on behaviour of state laws criminalising compensated surrogacy.⁶ In this article, we report the outcomes of surrogacy undertaken by Australian intended parents overseas and the intentions of parents via surrogacy regarding disclosure to their children about the way they were conceived.

Methods

Details of the online anonymous survey conducted in July 2013 and methods are described elsewhere.⁶ The 90-item survey included questions relating to compensated surrogacy arrangements overseas. Briefly, invitations with a link to the survey were emailed to past and current members of Surrogacy Australia (www.surrogacyaustralia.org) (616) and/or Gay Dads Australia (www.gaydadsaustralia.com.au) (695) online forums. Surrogacy Australia members pay a small annual fee. Gay Dads forums are free to access. The response rate was 27% (312/1135). Of the 312 people who responded, 24 (7.7%) were excluded because they were not Australian residents and/or were not considering surrogacy or in a current uncompensated or compensated surrogacy agreement,

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or had not been in such an agreement in the past.

Ethics approval was granted by the Monash University Human Research Ethics Committee.

Results

Sample characteristics

Of the 288 eligible respondents who commenced the survey, 259 completed it (90%). Of these, 112 (43%) had undertaken surrogacy overseas at least once. Their sociodemographic characteristics and previous experience of using ART in Australia are presented in Box 1. Participants were diverse in terms of sex and sexuality. A small proportion were single. Almost half had family annual incomes of \$182 000 or more. Among heterosexual respondents, 72% had attempted in vitro fertilisation treatment and 9% had attempted surrogacy in Australia before seeking surrogacy overseas. India and the US were the two most common destination countries.

Outcomes of compensated surrogacy

Sources of eggs; number of surrogates and embryo transfers; proportions of respondents who reported pregnancy loss beyond 12 weeks' gestation, multiple pregnancy, prematurity, and live birth by destination country are shown in Box 2.

Half of respondents had used more than one surrogate. Several sources of gametes were reported: 85% of respondents used donor eggs, 51% of heterosexual respondents reported using their own eggs and 21% transported their own embryos overseas. Of the 95 respondents who required donor eggs, 21 considered Australia as a source. For the 50 respondents for whom data were available, a mean of 2.9 embryo transfer procedures were undertaken. Of respondents who had engaged in surrogacy in India, a quarter reported five or more embryo transfer procedures. The mean number of embryo transfer procedures reported was lower among those who had undergone surrogacy in the US compared with India (2.0 v 3.1; $P = 0.006$).

One in 10 respondents (11/112) had experienced at least one pregnancy loss beyond 12 weeks' gestation. Overall, 55% of respondents reported that a surrogate had a multiple pregnancy; however, the number of multiple births is unknown. Gestational age was reported for 78 births, of which almost half (45%) were premature (<37 weeks' gestation). For one in seven respondents, overseas surrogacy did not result in the birth of a child.

Disclosure intentions

Almost all respondents with a child through surrogacy (90/95) reported that they planned to tell their child at a young age that a surrogate had carried him or her, and the remainder (5/95) intended to disclose this when their child was 16–18 years of age. Likely age of planned disclosure did not differ significantly according to sexuality of the parents.

Respondents who had used donor eggs were asked whether they planned to tell their child that an egg donor had been used, and at what age. Of those who had a child, most (73/81) intended to tell him or her at a young age. Of the remainder, 6/81 planned to tell their child when she or he was 16–18 years of age and 2/81 did not intend to inform their child of their donor origins unless there was a need for medical reasons.

Donor identification

Respondents were asked which type of gamete donor they were most comfortable with — an anonymous donor, with no opportunity for later access to information about the donor, or an identity-release donor, allowing access to information about the donor when their child reaches adulthood. They were also asked what type of donor they believed was best for their child. Most (80/112; 71%) reported that they were most comfortable with using an identity-release donor, and an even higher proportion (97/112; 87%) believed that using an identity-release donor was in the best interests of their child.

There was no difference between heterosexual and gay respondents in the proportion who reported being most comfortable with an anonymous donor (30% v 28%, respectively;

1 Sociodemographic characteristics and previous experience with ART of respondents who had engaged in a compensated surrogacy arrangement ($n = 112$)

Characteristic	No. (%) of respondents*
Age in years, mean (SD)	41.1 (7.3)
Sex	
Female	36 (32%)
Male	76 (68%)
Relationship status	
Married/de facto	105 (94%)
Single	7 (6%)
Sexuality	
Heterosexual	43 (38%)
Gay	69 (62%)
Household income	
< \$41 600–\$77 999	10 (9%)
\$78 000–\$129 999	26 (23%)
\$130 000–\$181 999	25 (22%)
\$182 000–\$259 999	20 (18%)
≥ \$260 000	31 (28%)
ART experience before engaging in compensated surrogacy overseas	
Attempted IVF	31 (72%)†
Attempted surrogacy	10 (9%)
Attempted IVF and surrogacy	6 (14%)†

ART = assisted reproductive technology. IVF = in vitro fertilisation. * Unless otherwise indicated. † Proportion of heterosexual respondents. ◆

$P = 0.759$). Respondents who used an egg donor were asked to rank the importance of 12 characteristics when selecting a donor. Of these, the donor's own and her family's health history were ranked most important; the donor's willingness to be identified and costs were ranked least important.

Discussion

This is the first study of outcomes of compensated surrogacy arrangements undertaken overseas by Australians. Strengths of this study include the large and diverse sample, which included women and men, gay and heterosexual people, and married and single individuals who had undertaken surrogacy in four destination countries. Typical online survey response rates are around 33% for university-administered research.¹⁴ Our lower response rate may be due to survey length, criminal laws in some states, and alias email addresses, used by some intended parents, that are unmonitored or

2 Outcomes of compensated surrogacy, by destination country

Outcome	No. of respondents			Total, no. (%)
	India (n = 66)	US and Canada (n = 37)	Thailand (n = 9)	
Source of gametes*				
Own eggs	11†	7†	4†	22 (51%)†
Donor eggs	58	31	6	95 (85%)
Transported own embryos	4†	3†	2†	9 (21%)†
Number of surrogates				
One	18	31	6	55 (49%)
Two	17	4	3	24 (21%)
Three or more	31	2	0	33 (29%)
Number of embryo transfers‡				
One	6	5	4	15 (30%)
Two	7	5	1	13 (26%)
Three	4	5	2	11 (22%)
Four	4	0	0	4 (8%)
Five or more	7	0	0	7 (14%)
Pregnancy loss (after 12 weeks' gestation§)				
One	7	2	0	9 (8%)
Two	1	1	0	2 (2%)
Multiple pregnancy¶	40	16	6	62 (55%)
Gestational age**				
≤ 28 weeks	2	0	0	2 (3%)
29–34 weeks	8	2	0	10 (13%)
35–36 weeks	11	11	1	23 (29%)
37 weeks	14	7	1	22 (28%)
≥ 38 weeks	2	19	0	21 (27%)
Number of children via surrogacy				
None	11	4	2	17 (15%)
One	25	17	5	47 (42%)
Two	21	12	2	35 (31%)
Three	8	3	0	11 (10%)
Four	1	1	0	2 (2%)

US = United States. * Some used both own eggs/embryos and donor eggs. Donor eggs were often sourced in destination countries. † Proportion of heterosexual respondents. ‡ Due to a scripting error, data are only available for 50 respondents. § Pregnancy loss before 12 weeks' gestation was not reported. ¶ There was no follow-up question about how many multiple pregnancies resulted in a live birth. ** Reported for 78 births. ◆

poorly monitored after surrogacy births.¹⁵ The use of online support groups as a sampling frame also means the results cannot be generalised to all Australians using overseas surrogacy.

Other limitations are the lack of data relating to the number of embryos transferred, pregnancy losses before 12 weeks' gestation and the number of multiple births. Furthermore, there is no information about method of delivery — although it is common practice in India and Thailand to use elective caesarean

section for surrogacy pregnancies.¹⁶ Despite these limitations, there are reasons to carefully consider the study findings, including the paucity of research in this area, the difficulties involved in making contact with people who travel overseas for surrogacy and the unregulated nature of overseas surrogacy.

Given it is illegal in Australia to compensate a woman for carrying a child, compensated surrogacy overseas is the route most Australian intended parents via surrogacy take. Our data suggest that this exposes

them, their babies and their surrogates to risks that are considered unacceptable in Australian ART practice.

All ART clinics in Australia and New Zealand are required to comply with the Reproductive Technology Accreditation Committee's code of practice, which stipulates that "the aim for multiple pregnancy rate should be less than 10%", and that "counselling by a suitably qualified counsellor with training and experience in assisted reproductive technology is mandatory for all donors, recipients and surrogates".¹⁷ The code also requires compliance with National Health and Medical Research Council guidelines, which ban anonymous gamete donation;¹⁸ therefore, record-keeping practice for donor-related treatment needs to ensure that children born as a result of donor conception can access information about the donor.

While counselling is an integral part of donor and surrogacy procedures in Australia and information about donors and surrogates is available for children born as a result of these procedures when they reach adulthood,¹⁰ this is often not the case in surrogacy destination countries. Although most respondents preferred an identity-release donor and thought this was in the best interests of their child, this option is not available when surrogacy is undertaken in places where gamete donation is anonymous.

The high rates of multiple pregnancy and premature birth reported in this study show that surrogates and babies born as a result of surrogacy in the destination countries are at higher risk of short-term and long-term adverse health outcomes than parties involved in surrogacy in Australia, where the multiple birth rate in surrogacy arrangements is only around 5%.³ It is highly likely that a proportion of the respondents' children will have ongoing health care needs related to multiple and premature birth, the costs of which will be borne by Australian taxpayers.

Such adverse outcomes could be avoided if access to surrogacy was facilitated within Australia. This may require Australian states to consider

reversing bans on advertising for a surrogate and on compensated surrogacy and reviewing current Australian regulations to better protect and balance the safety, interests and rights of surrogates, intended parents and children born through surrogacy.

Competing interests: Sam Everingham is on the management committee of Surrogacy Australia, a not-for-profit consumer association supporting research and advocacy in the field of surrogacy. He runs a professional market research consultancy and has received fees for conducting research and reporting time. Martyn Stafford-Bell is on the Steering Group of Reproduction and Collaborative Trials in Australia and New Zealand. Karin Hammarberg is a part-time staff member at the Victorian Assisted Reproductive Treatment Authority.

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