

Viewpoints of fertile women on gestational surrogacy in East Azerbaijan Province, Iran

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Abstract

The aim of this descriptive, cross-sectional study was to investigate the viewpoint of fertile Iranian women on gestational surrogacy. A convenience sample of 230 fertile women was invited to participate in the study and 185 consented. Data were collected via a 22-item scale that assessed the viewpoints of the participants in five domains related to gestational surrogacy. The viewpoints reported by the women were positive. However, a significant percentage of them believed that commissioning couples are not the biological owners of the baby, religious barriers need to be overcome prior to legal barriers, children born through surrogacy may face emotional issues, and the adoption of children may be a better option than surrogacy. The negative views of the women on some key aspects make it clear that public education is needed to increase the acceptability of gestational surrogacy.

Introduction

Infertility is defined as one year of unprotected intercourse without pregnancy (1). According to a World Health Organization report (2009), data from 47 developing countries (excluding China) show that in 2004, an estimated 187 million couples were infertile (2). The results of an Iranian population-based study have shown that 8% of women in the country are infertile during their reproductive years (3).

Infertility poses considerable challenges for many couples, as well as their families and society, worldwide (4). It can be a psychologically threatening experience that negatively affects multiple aspects of a couple's life. These include, but are not limited to, the couple's personal life, the quality of their emotional and sexual relationship, and their relationships with others (5–8). Studies have suggested that many infertile Iranian women experience anxiety or depression (9,10) and that their mental health is poorer than that of fertile women (11).

In recent years, there has been an improvement in the interventions being offered to infertile couples (12). One of the most popular forms of assisted reproductive technology (ART) is surrogacy (13,14). In surrogacy, a woman (surrogate mother) carries and gives birth to a child who is then handed over to other persons (the commissioning couple), on the basis of an agreement before conception (15,16). There are two types of surrogacy. The first is partial, or straight, surrogacy, in which the surrogate mother is inseminated with the commissioning male's spermatozoa. The second is full, or gestational,

surrogacy, in which the embryo is the genetic material of the commissioning couple and is implanted into the surrogate mother's womb (15,17,18). Although surrogacy offers several advantages, the procedure has given rise to ethical and legal issues (14).

Iran is an Islamic country in which gestational surrogacy has attracted the attention of many infertile couples seeking a solution to their problem. It should be noted that the majority of the Iranian population consists of Shiite Muslims and most Shiite scholars have accepted this form of ART (19). Iran currently boasts of approximately 50 *in vitro* fertilisation (IVF) clinics, one of the highest numbers in the Middle East and similar to the number of such clinics found in Egypt. Iran is the only Muslim country in which IVF using donor gametes and embryos has been accepted by the religious authorities and passed into law by parliament. It may be mentioned that despite religious acceptance, all types of surrogacy, including gestational surrogacy, were not legal in Iran and there is no approved law in Iran for any type of surrogacy (19,20).

Little empirical research has been conducted in Iran to explore public opinion on gestational surrogacy or the acceptability of this intervention among infertile and fertile women. In their study, Sohrabvand and Jafarabadi found that less than half of the infertile couples have an adequate knowledge of ART methods and a small number accept gestational surrogacy (21). The viewpoints of others, especially fertile women, greatly influence infertile women's use of gestational surrogacy. There have been no previous studies that investigate gestational surrogacy from the perspective of fertile Iranian women. This study aims to address this gap in the current research.

Methods

This descriptive, cross-sectional study was conducted between March and September, 2009. The participants were recruited through the Al-Zahra Hospital, which is affiliated to the Tabriz University of Medical Sciences. This hospital is a major centre for gynaecological services in the East Azerbaijan Province, a northwestern province of Iran, and one of the main centres for ART services. A total of 230 fertile women were invited to participate and 185 consented to enroll in the study (acceptance rate=80%). The inclusion criteria included having at least one child or being pregnant at the time of data collection and being 18 years of age or older.

The participants were asked to complete a written questionnaire, which consisted of three sections. The first section pertained to the demographic data and the second to the maternal history. The third section consisted of a 22-item scale aimed at investigating the participants' attitudes to gestational surrogacy, which was considered under five domains, including legal and religious issues (7 items), conditions for the use of surrogacy (4 items), children born through surrogacy (5 items), surrogate mother (2 items), and tendency to use surrogacy (4 items). Most of these items were derived from relevant studies conducted in the past (11,21–23). However, some items were added on the basis of the expertise of the research team and also, to ensure that the questionnaire was culturally appropriate. Each item was rated on the basis of a five-point Likert scale, with 1="completely disagree" and 5="completely agree." The scores for each item ranged from 1 to 5. A higher score for an item indicated a more positive view of gestational surrogacy with respect to that item. The questionnaire was reviewed by 15 academic staff members from the Tabriz University of Medical Sciences and revised accordingly in order to enhance the validity of the content. The test-retest reliability of the scale was established (0.92) following a pilot study that included 25 fertile women.

For data collection, two of the researchers visited the selected hospital daily to invite women who met the inclusion criteria to participate in the study. Women who chose to participate and were literate completed the questionnaire alone. However, for women who chose to participate and were illiterate, the researchers conducted a private interview in which they read out the questionnaire to the women and completed it on the basis of their responses.

The study protocol was approved by the ethics committee of the Tabriz University of Medical Sciences. All participants were free to participate voluntarily in the study and informed consent was obtained prior to enrolment in the study. Statistical analyses were performed using the Statistical Package for Social Science (SPSS), version 17.0.

Results

All the women who participated in the study were Muslim and married. The mean age and mean length of marital life were 30.6 (7.7) years and 9.38 (8.47) years, respectively. Over 90% of the women were housewives and 25.4% had a university degree. While 67.5% had at least one child, the others were pregnant.

The women's responses to each item of the questionnaire are presented in Table 1. In general, their views on surrogacy were positive, but there were some important exceptions. A significant percentage of the women believed that commissioning couples are not the legal parents. The majority thought that surrogacy should be the last resort and that adopting a child is a better solution for infertile women who want a child. A majority were of the opinion that children born through surrogacy should not be informed about their birth history and that if they were, they could experience emotional

problems. A significant percentage of the women reported that they would not recommend gestational surrogacy to infertile women. Religious barriers were identified as a major challenge to the acceptability of surrogacy and most of the women felt that these barriers needed to be addressed prior to addressing legal barriers.

Discussion

This is the first study to investigate the perspectives of fertile Iranian women on gestational surrogacy. Overall, the majority of the respondents viewed gestational surrogacy positively. This research complements previous research carried out in Iran to explore the perspectives of infertile women. Sohrabvand and Jafarabadi demonstrated that 95% of infertile couples in Tehran, the capital of Iran, had a negative attitude towards gestational surrogacy (21). In contrast, Rahmani et al found that the attitude of infertile women in Tabriz, where the current research was conducted, was positive (24). Some studies in Germany (25) and England (7) have found that surrogacy is considered an unacceptable option for infertile couples. In addition, in a study conducted in Turkey, only 24% of the infertile women surveyed had a positive attitude towards gestational surrogacy (16). It is highly likely that the differences in attitudes towards and the acceptability of gestational surrogacy are largely the result of cultural and religious differences (8,26).

Despite positive attitudes in each of the five investigated domains, some aspects of gestational surrogacy were not to the liking of the participants. The women's knowledge of the legal and religious aspects of gestational surrogacy was limited, and raising awareness could possibly raise the acceptability of this procedure. A considerable percentage believed that the surrogate mother, and not the commissioning couple, should be the legal guardian of the child. Also, the participants were of the opinion that religious barriers should be resolved prior to undergoing the procedure. According to the rules, the child that is born should be delivered to the commissioning couple (7). As mentioned earlier, there is no law pertaining to gestational surrogacy, or other types of surrogacy, in Iran.

It should be noted that, in contrast to many western countries, religious beliefs play an important role in shaping the views of Muslims on ART methods (19). While most Sunni scholars are opposed to surrogacy, Shiite scholars often have no objections, provided the commissioning couple is married (19,27). Some studies carried out in the Middle East have shown that the viewpoints of the religious leaders are reflected in those of the fertile and infertile couples in these countries. For example, studies have shown that many infertile Iranian couples, who are Shiite Muslim, have a positive attitude towards gestational surrogacy (24,28). In contrast, other studies carried out in Turkey, the population of which is predominantly Sunni Muslim, have demonstrated that infertile women have a negative attitude towards gestational surrogacy (16,29). These results indicate that religious beliefs play an important role in shaping the views of Muslims on gestational surrogacy. The Catholic Church is strongly opposed to surrogacy. The Anglican

Church is less inflexible in its views and has not condemned the practice of surrogacy (30). Some studies conducted in the western countries show that a significant percentage of people in these countries are against surrogacy (7, 25).

The results of this questionnaire indicate the need for further education of the community on the religious aspects of gestational surrogacy, as well as the need for government regulation of this procedure. Evidence demonstrating the benefits of surrogacy and dispelling the fear that children born through surrogacy may experience emotional problems could be important in generating support for gestational surrogacy. This, in turn, could play an important part in promoting changes in legislation.

The participants in the study believed that while children born through gestational surrogacy should be informed about their birth history, this knowledge may give rise to emotional problems. Infertile women in Iran have expressed similar concerns in previous research (24). A study of two-year-old surrogate children in the United Kingdom demonstrated that surrogate parents had more positive parent-child relationships than those who had conceived naturally, and that the children did not differ with respect to socio-emotional or cognitive development (31). In another study conducted by Van Den Akker, the majority of the mothers of children born through surrogacy reported that their children's mental and physical health and development were appropriate (32). The differences in the beliefs of Iranian women and western women regarding potential harm to children born through surrogacy suggests that the former may lack information, which gives rise to unjustified concerns.

The participants had positive attitudes towards surrogate mothers and did not believe that they were devoid of dignity or virtue. Kilic et al found that 58.3% of infertile Turkish women who had no objection to surrogacy approved of only their sisters, family members and friends being the surrogate mother (16). Similarly, Stern et al found that 89.5% of American respondents would accept only their family members and friends as the surrogate mother (33). Fischer and Gillman reported that surrogate mothers were no different from other women in terms of the social support they received, the quality of their attachment to the child, and their attitude towards pregnancy (34). These results showed that the attitude towards surrogate mothers is positive in Iran and could contribute to the acceptance of gestational surrogacy.

A considerable percentage of the participants in the study would not recommend surrogacy to infertile women and preferred adoption. Kilic et al reported that 59.6% of infertile Turkish women had a positive attitude towards adoption, and only 24% viewed gestational surrogacy favourably (16). This is consistent with a study by Baykal et al, who found that only 15.1% of infertile Turkish women consider surrogacy acceptable (29). Similar attitudes were documented by Rahmani et al, who found that the majority of infertile Iranian women (59.9%) would not recommend surrogacy, with 32.8% preferring adoption to surrogacy (24).

This study has certain limitations. Although the attitudes of fertile women were investigated, those of others, particularly men, were not. In addition, the study was undertaken in a single hospital, limiting the generalisability of its findings to other areas of Iran. Due to the lack of availability of a validated scale, a researcher prepared the instrument that was used. Therefore, this scale was not validated by factor analysis. This scale will undergo validation in future studies.

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Table 1
Viewpoint of fertile Iranian women on gestational surrogacy

Response to each item						
	n (%)					Mean (SD)
Items	Completely agree	Agree	Neutral	Disagree	Completely disagree	
Payment to the surrogate mother is unpleasant	3 (1.6)	11 (5.9)	26 (14.1)	48 (25.9)	97 (52.4)	1.78 (1.01)
Surrogacy should be legal	65 (35.1)	87 (47)	21 (11.4)	6 (3.2)	6 (3.2)	4.07 (0.94)
Surrogacy causes ethical problems in society	5 (2.7)	0 (0)	10 (5.4)	34 (18.4)	136 (73.5)	1.40 (82)
Surrogacy goes against religious beliefs	14 (7.6)	10 (5.4)	18 (9.7)	66 (35.7)	77 (41.6)	2.01 (1.19)
Commissioning couples are the legal guardians of the child	33 (17.8)	40 (21.6)	35 (18.9)	29 (15.7)	48 (25.9)	2.89 (1.45)
Religious barriers to surrogacy should be addressed prior to legal barriers	42 (22.7)	67 (36.2)	41 (22.2)	13 (7)	22 (11.9)	3.50 (1.25)
Government should regulate surrogacy and surrogacy clinics	20 (10.8)	10 (5.4)	25 (13.5)	72 (38.9)	58 (31.4)	2.25 (1.25)
Some costs of surrogacy should be paid for by the government	88 (47.6)	59 (31.9)	27 (14.6)	3 (1.6)	8 (4.3)	4.16 (1.02)
Single or fertile women should not be allowed to use surrogacy	95 (51.4)	41 (22.2)	6 (3.2)	12 (6.5)	31 (16.8)	3.84 (1.51)
Married woman should be the surrogate mother	17 (9.2)	35 (18.9)	26 (14.1)	40 (21.6)	67 (36.2)	2.43 (1.38)
Surrogacy should be the last resort for infertile women seeking assisted reproduction	81 (43.8)	57 (30.8)	12 (6.5)	12 (6.5)	23 (12.4)	3.87 (1.36)
Children born through surrogacy should not be informed of their birth history	64 (34.6)	71 (38.4)	6 (3.2)	30 (16.2)	14 (7.6)	3.76 (1.28)
A child born through surrogacy will have many somatic problems	18 (8.1)	16 (8.6)	45 (24.3)	87 (47)	22 (11.9)	2.54 (1.07)
A child born through surrogacy will have many emotional problems	27 (14.6)	80 (43.2)	24 (13)	30 (16.2)	24 (13)	3.30 (1.27)
A child born through surrogacy will not grow and develop normally	11 (5.9)	8 (4.3)	48 (25.9)	92 (49.7)	26 (14.1)	2.21 (1.03)
Parents will not love their surrogate child like their own	3 (1.6)	13 (7)	33 (17.8)	56 (30.3)	80 (43.2)	1.93 (1.01)
Surrogate mothers have no dignity	7 (3.8)	15 (8.1)	8 (4.3)	101 (54.6)	54 (29.2)	2.02 (1.01)
Surrogate mothers are not virtuous women	0 (0)	3 (1.6)	40 (21.6)	73 (39.5)	69 (37.3)	1.87 (0.80)
The use of surrogacy is praiseworthy	57 (30.8)	76 (41.1)	24 (13)	19 (10.3)	9 (4.9)	3.82 (1.12)
I would use surrogacy if I was unable to conceive	26 (14.1)	20 (10.8)	5 (2.7)	71 (38.4)	63 (34.01)	2.32 (1.40)
Adopting a child is a better option than surrogacy	36 (19.5)	33 (17.8)	39 (21.1)	55 (29.7)	22 (11.9)	3.03 (1.31)
I would not recommend surrogacy to other women	31 (16.8)	19 (10.3)	8 (4.3)	61 (33)	66 (35.7)	2.39 (1.47)
SD = standard deviation						

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