

Gestational surrogacy: Viewpoint of Iranian infertile women

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Abstract

Background: Surrogacy is a popular form of assisted reproductive technology of which only gestational form is approved by most of religious scholars in Iran. Little evidence exists about the Iranian infertile women's viewpoint regarding gestational surrogacy. **Aim:** To assess the viewpoint of Iranian infertile women toward gestational surrogacy. **Setting & Design:** This descriptive study was conducted in infertility clinic related to Tabriz University of Medical Sciences, Iran. **Methods & Materials:** The study sample consisted of 238 infertile women whom selected with eligible sampling. Data collected using a researcher developed questionnaire which included 25 items based on five-point Likert scale. **Statistical analysis:** Data analysis was conducted by SPSS statistical software using descriptive statistic. **Results:** viewpoint of 214 women (89.9%) was positive. 36 (15.1%) women considered gestational surrogacy against their religious believes. 170 women (71.4%) did not supposed the commissioning couple as owners of baby. 160 women (67.2%) said that children who born with surrogacy is better not to know about it, and 174 women (73.1%) believed that children born through surrogacy will face mental problems. **Conclusion:** Iranian infertile women have positive viewpoint regarding the surrogacy. However, to increase the acceptability of surrogacy among infertile women further efforts are needed.

Keywords: Infertility, assisted reproductive technology, surrogacy

Introduction

Infertility, which is defined as inability to conceive after 12 month of regular unprotected intercourse,^[1] affects approximately one in 10 couples over the world.^[2] Infertility rate is relatively higher in Iran with about 21% to 22% of Iranian women experience primary infertility during their marital life.^[3]

Infertility has been conceptualized emotionally stressful and psychologically threatening experience and reaction to it have been compared with grief. It negatively affects different aspects of couples' life which includes, but not limited to, disruptions in couples' personal life, quality of emotional and sexual relationships, as well as their relationship with co-workers, family and friends.^{[4],[5],[6]} Abedini et al. (2003) reported that 40.8% of infertile women referred to infertility clinic in Tehran, capital city of Iran, were depressed and 86.8% of them were anxious.^[7] Similarly, Behdani et al. (2008) in another study in Mashhad, a metropolis city of Iran, found that infertile women suffer from anxiety (44/1%) and depression (30.4%).^[8] Also Besharat and Hossein-Zadeh Bazargan (2006) reported that the mental health of infertile women was less than fertile women.^[9]

Social transformations as well as medical science advances regarding infertility treatment has resulted in increasing demand of infertility services.^[10] Today, advances in assisted reproductive technologies (ART) can offer hope to many couples with infertility.^[2] The need for ART has been increased and probably continuing to rise in many countries.^[11] ART has enabled both parents to have their own genetic children. One of the most popular ART methods is surrogacy.^[12]

The practice of surrogacy, whereby one woman bears a child for another woman, is one of the most popular method in the field of ART associated with plenty of controversies.^[13] In surrogacy, one woman (surrogate mother) carries a children for another persons (commissioning couples), based on an agreement before conception requiring the child to be handed over to commissioning couples following birth.^{[14],[15]} It takes two forms; first, partial or straight surrogacy where the host is inseminated with the commissioning male's

spermatozoid. Second, full or host surrogacy where the embryo is the genetic material of the commissioning couple. ^{[10], [15], [16]} Although, surrogacy offers several advantages, this procedure has given rise to some ethical and legal issues. ^[12] However, Gestational surrogacy as a treatment for infertility is being practiced in some well-known medical institution in Tehran and some other cities in Iran. ^[17]

One important thing in using of ART, like surrogacy, by infertile couples is their viewpoint regarding this technology which may influence the future legislation for ART methods. Little empirical research has been conducted in Iran to explore the viewpoint of infertile women toward surrogacy. Therefore, the aim of present study was to assess the Iranian infertile women's viewpoint regarding gestational surrogacy.

Materials and Methods

This descriptive study was conducted in the infertility clinic of Al-Zahra hospital related to Tabriz University of Medical Sciences, the only clinic providing ART services in North West of Iran. The study group consisted of 238 infertile married women with definite diagnosis of infertility that attended in the infertility clinic from March to September in 2009 and were selected by eligible sampling method. All women accepted to participate in our study. None of them had undergone ART services before completing the questionnaire. The researcher developed questionnaire consisted of three sections which assesses demographic data, maternal history, and the viewpoint of the infertile women. Third section included 25 items considering participants' viewpoint in 5 domains covering legal and religious issues (7 items), conditions for using surrogacy (6 items), children borne by surrogacy (5 items), surrogate mother (2 items) , and tendency to use surrogacy (5 items). Most of these items were derived from pervious relevant studies, ^{[5], [11], [13], [14], [18]} however some items were added by researchers according to their experience and considering cultural issues. Each item was rated based on a 5-point Likert scale from completely disagree (1) to completely agree (5). The scores ranged from 25 to 125, higher scores represented positive viewpoint regarding gestational surrogacy. Scores 25 to 75 was considered as negative

viewpoint and scores equal to and above 76 were considered as positive viewpoint. In each item, scores 1 to 3 was considered as agree and scores 3.01 to 5 considered as disagree.

The validity of the prepared questionnaire has been established by content validity for which 15 academic members of Tabriz University of Medical Sciences revised the questionnaire. Then, the questionnaire was edited after receiving the academic members' comments. Test-retest reliability of the questionnaire was established by Cronbach's alpha coefficient (0.89) following a pilot study on a sample of 25 infertile women.

Two of researchers involved in data collection in the infertility clinic every day before data collection, the necessary information about gestational surrogacy was given to all study subjects. Liberated subjects filled out the questionnaire and only in the case of the need for guidance they were helped out, but about the illiterate subjects and the ones with lesser level of education the questionnaires were filled out by interviewers.

Ethics committee in Tabriz University of Medical Sciences approved the study. Participation in the study was voluntary and informed consent was obtained from all respondents before enrollment in the study.

Statistical analyses were performed using the software Statistical Package for Social Science (SPSS) version 17.0. Descriptive statistics, including frequencies, mean and standard deviation considered analyzing data.

Results

All participants were Shiite Muslim and the mean age of 238 infertile women was 26.9 ± 5.8 years. The mean of their marriage age was 20.3 ± 5.2 years, and the mean of infertility period was 6.6 ± 4.9 years. Other demographic characteristic and maternal history of participants is reported in table 1.

Infertile women's response to each item of questionnaire and their overall viewpoint is presented in Table 2. As can be seen in table 2, 214 women (89.9%) have positive viewpoint about gestational surrogacy.

Discussion

Results of present study showed that 89.9% of infertile women had positive viewpoint towards gestational surrogacy. In a similar study, which is the only published study in this field in Iran, Sohrabvand and Jafar-Abadi (2005) reported contradictory results which 95% of infertile couples in Tehran had negative viewpoint toward gestational surrogacy. However, they assessed the knowledge and attitude of infertile couples about all ART methods with a few questions without considering all aspects of couples' attitude.^[18] It sounds that infertile women's attitudes towards surrogacy practice have changed during next years. In other words, the popularity of surrogacy as ART method might be increasing in Iran. The results of some studies which have been done in other countries show negative public attitudes toward this method. In a similar study from a mainly Muslim country, Turkey, Kilic et al. (2009) reported that only 24% of Turkish infertile women had a positive attitude regarding gestational surrogacy.^[14] Poote and Van-den Akker (2009) revealed that the majority of British women had a negative attitude toward surrogacy.^[5] Similarly, Stobel-Richter et al. (2009) found that only 43.7% of German respondents have positive attitude toward surrogacy and approved this method less than other ART methods.^[19] It should be noted that attitudes toward infertility and the treatment services can be affected by religious and cultural beliefs and values as well as ethical and legal factors,^[14] Acceptability of surrogacy may be different among different cultural and religious groups.^[20] We expected that in present study many of infertile women had a positive viewpoint toward surrogacy, because we only assess the viewpoint of infertile women regarding gestational surrogacy. The results might be different if we had investigated public's opinion or infertile women's viewpoint that decided not to use the infertility clinic services or chose to use traditional treatments. In general, viewpoint toward ART methods in which the children are genetically related to both of their parents are more positive than other methods.^[21]

Regarding legal aspect of gestational surrogacy, most infertile women agreed with activity of institutions in the field of surrogacy and surrogacy laws. Most of them opposed to money paying to surrogate mothers. Similarly, Jadvva et al.

(2003) concluded that only 3% of British surrogate mothers considered payment as their main motivation for accepting surrogacy. ^[13] It should be noted that due to absence of clear surrogacy laws most Iranian women accept to be surrogate mothers because of payment. However, many of respondents didn't know commissioning couples as owner of children born with gestational surrogacy. It is possibly related to effects of pregnancy in creation a sense of motherhood. Qualitative research is needed to better explain the rationale behind this perception.

Concerning religious issues, result showed that most women considered gestational surrogacy with no conflict with religious and moral issues. This perception is likely due to the fact that most of the partisans were Shiite and surrogacy has been approved by Shiite scholars. It seems that religion scholars have an important role in improving acceptability of ART methods such as gestational surrogacy. A significant percentage of these women believed that religious problems should be resolved before the legal barriers. It should be noted that this viewpoint might be due to lack of awareness. While most Sunni scholars are opposed to surrogacy, Shiite scholars often agree with gestational surrogacy, if done for legally married couples. These results indicate the need for further informing of community on religious aspects of surrogacy.

In conditions of surrogacy application, most of these infertile women accepted surrogacy only for infertile couples. Also, participants believed that married women should not be as a surrogate mother. In other word, 60.9% of infertile women believed that surrogacy should be used as the last method of ART. Genuis et al. (1993) showed that 74% of American people believed that the surrogacy should be used only for therapeutic purposes and only for married infertile couples. ^[20]

Regarding attitude toward children born with surrogacy, the infertile women had a positive viewpoint toward these children and believed that it is better these children wouldn't know this matter. Though, many of these women believed that these children may face mental problems. It is not clear why they believed that these children are at risk of psychological problems. Possible reason for this viewpoint is that they believed children's knowing about surrogacy may associate with a devastating impact on mental health of them. This result is different with the results of studies conducted in Western

countries; Jadva et al. (2003) found that British surrogate mothers believed it is better that children born with surrogacy better being be award of it. ^[13] Also, Genuis et al. (1993) showed that most American people believed that children born with this method should be informed about it. ^[21] Concerns about the health of children born with surrogacy and other ART methods always exist. However, results of many studies have shown children born through surrogacy as healthy one. ^{[22], [23], [24]}

Regarding viewpoint to surrogate mothers, the most of infertile women considered them chaste and had a positive viewpoint toward them. The results of Kilic et al. (2009) study showed that 58.3% of Turkish infertile women who agreed with surrogacy only approved their sisters, family members, and friends as a surrogate mother. ^[14] Also, Stern and colleagues (2002) declared that 89.5% of respondents in USA had accepted only their family and friends as a surrogate mother. ^[25] Fischer and Gillman (1991) reported that surrogate mothers weren't different from other women in social support, quality of attachment, and attitude toward pregnancy. ^[26]

Regarding tendency to use surrogacy, the infertile women believed surrogacy better than adoption or not having children. However, 43.1% of the women expressed that they would not advise surrogacy to other women. This view is consistent with their view of using surrogacy as a last ART method. Kilic et al. (2009) found that 25.6% of Turkish infertile women have no tendency to use any form of ART methods, 59.6% accepted the adoption, and only 24% accepted the gestational surrogacy. ^[14] Consistently, Baykal et al. (2008) study results also showed only 15.1% of Turkish infertile women confirming surrogacy. ^[27] Although Turkey like Iran is mainly a Muslim country and most of the Turk people is Sunni Muslims and as already discussed Sunni Scholars do not approve Surrogacy which partially explain a negative attitude towards surrogacy in this country. These result isn't consistent with the results of present study. We think that due to the impact of cultural, social, religious, and economic factors on viewpoint toward surrogacy it is predictable to obtained different results from various countries.

Although the infertile women had a positive viewpoint regarding gestational surrogacy, a significant percentage of them believed that gestational surrogacy is against Sharia (the sacred law of Islam) and didn't accept the commissioning

couples as owners of child. In general, increasing acceptability and implementation of gestational surrogacy in community need further efforts. Increasing public' awareness about this fact that surrogacy provides infertile women an opportunity to have their genetic child, may improve acceptance of commissioning couples as owners of a surrogate child in the society. Using media awaring public about various aspects of gestational surrogacy, particularly the religious and legal aspects and availability of results of studies conducted about children born with this method to public is suggested. Also, lawmakers should try to pass more legislation about surrogacy.

This study has some limitations that should be considered when using the results of the study. First, the infertile women were selected with eligible sampling method. Second, the data gathered with self-report of infertile women. Third, this study didn't assess the viewpoint of the husbands of infertile women. This issue is particularly important in Middle Eastern cultures where men often make health related decisions in the family. Further, stigma against surrogate mothers, children born through surrogacy and the commissioning couples impedes applicability of surrogacy. The viewpoint of public about the gestational surrogacy and other forms of ART methods should be investigated. Culturally competent interventions to reduce the related stigma against surrogacy may improve acceptability of this method.

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Table 1: demographic characteristics of infertile women	
Characteristics	no(%) of respondents
Education	
Up to primary schooling	116 (48.7)
Diploma or high schooling	95 (39.9)
University degree	27 (11.3)
Job	
Unpaid employment	219 (92)
Paid employment	19 (8)
Previous information about surrogacy	
Yes	203 (85.3)
No	35 (14.7)
Pervious treatment for infertility	
Yes	195 (81.9)
No	43 (18.1)
Hope for treatment of infertility	
low	27 (11.3)
Moderate	81 (34)
High	130 (54.6)

Table 2: Attitudes of study participants towards gestational surrogacy

Items (n=25)	Respondents (n=238)	
	Agree	Disagree
Total viewpoint	214 (89.9)	24 (10.1 %)
legal and religious issues		
Payment to surrogate mother is obscene.	14(5.9%)	224(94.1%)
The law should be legislated by the parliament	197(82.8%)	41(17.2%)
Surrogacy causes ethical problems in society.	61(25.6%)	177(74.4%)
Surrogacy is against my religious beliefs.	36(15.1%)	202(84.9%)
Commissioning couples are owners of baby.	68(28.6%)	170(71.4%)
Religious barriers need to be solved prior to legal barriers.	148(62.2%)	90(37.8%)
Government should control surrogacy clinics.	24(10.1%)	214(98.9%)
Conditions for use surrogacy		
Only infertile couples should use surrogacy.	159(66.8%)	79(33.2%)
Some fees should be paid by the government.	193(81.1%)	45(18.9%)
Single or fertile persons should not be allowed to use surrogacy.	177(74.4%)	61(25.6%)
Only a married woman could be a surrogate mother.	79(33.2%)	159(66.8%)
Surrogacy should be a last resort for infertile couples.	145(60.9%)	93(39.1%)
Child born through surrogacy		
Children Born through surrogacy better not to know about it.	160(67.2%)	78(32.8%)
Children born through surrogacy have many somatic problems	65(27.3%)	173(72.7%)
Children born through surrogacy are at risk of developing mental problems	174(73.1%)	64(26.9%)
Children born through surrogacy do not have normal growth	80(33.6%)	158(66.4%)
Parents do not bind a surrogate- born child like their own child	28(11.8%)	210(88.2%)
Surrogate mother		
Surrogate mothers obliterated the dignity of mothers	54(22.7%)	184(77.3%)
Surrogate mothers are not virtuous women	29(12.2%)	209(87.8%)
Tendency to use surrogacy		
Surrogacy is praiseworthy as it soothe infertile couples.	159(66.8%)	79(33.2%)
I would never use surrogacy.	87(36.6%)	151(63.4%)
An adopted child is better than a child born to surrogacy.	78(32.8%)	160(67.2%)
I would advise surrogacy to any person.	105(44.1%)	133(55.9%)