

DETERMINATION OF THE ATTITUDES OF TURKISH INFERTILE WOMEN TOWARDS SURROGACY AND OOCYTE DONATION

Selim Kilic¹, Muharrem Ucar², Hakan Yaren³, Mahir Gulec⁴, Adnan Atac⁵, Fatma Demirel⁶, Ceren Karabulut⁷, Ozlem Demirel⁸

ABSTRACT

Objectives: To determine the attitudes toward gestational surrogacy and egg donation amongst the Turkish married infertile females.

Methodology: This descriptive study was carried out in a maternity hospital. Patients were 250 married women who had applied for infertility treatment.

Results: Of the participants (n=250), 60 females (24.0%) answered positive attitude for surrogate motherhood and 65 (26.0%) for egg donation. Among the participants who stated positive response, 30 (50.0%) females stated that identity of the surrogate mother was not important. Among the participants who stated positive response to accept egg donation from someone (n=65), "only from someone whom I do not know" was the most common answer (n=30, 46.2%).

Conclusions: We consider that, oocyte donation and surrogate motherhood will have the potential to empower women and increase their status in society in near future. These techniques also have frightening potential for deepening their exploitation and unsolved ethical dilemmas.

KEY WORDS: Oocyte Donation, Gestational Surrogacy.

Pak J Med Sci January - March 2009 Vol. 25 No. 1 36-40

How to cite this article:

Kilic S, Ucar M, Yaren H, Gulec M, Atac A, Demirel F et al. Determination of the attitudes of Turkish infertile women towards surrogacy & oocyte donation. Pak J Med Sci 2009;25(1):36-40.

-
1. Selim Kilic,
2. Muharrem Ucar,
3. Hakan Yaren,
Dept. of CBRN Defence
4. Mahir Gulec,
Dept. of Public Health,
Gulhane Military Medical Academy,
Etlik, Ankara, 06018, Turkey
1,4: Adnan Atac,
2,5: Dept. of Medical History and Deontology,
6. Fatma Demirel,
7. Ceren Karabulut,
8. Ozlem Demirel,
6-8: Gulhane Military Medical Academy,
School of Nursing, Etlik, Ankara, 06018, Turkey.
Correspondence
Selim Kilic, MD
E-Mail:drselimkilic@yahoo.com
- * Received for Publication: September 1, 2008
* Revision Received: December 29, 2008
* Revision Accepted: December 30, 2008

INTRODUCTION

Although in vitro fertilization (IVF) techniques have been providing hope to infertile couples, male and female gametes and a healthy woman with a healthy uterus are required to apply these techniques. Donation programs have become a resource for couples who cannot produce the requisite gametes.¹ Gestational surrogacy may be the solution for a healthy uterus need. A surrogate mother is defined as a woman who becomes pregnant, carries and delivers a child on behalf of another couple.² But there is still debate for the legal, social and ethical aspects of oocyte donation and surrogacy almost all over the world.³⁻⁶ Although oocyte donation and

surrogate motherhood are now more common in the world,^{7,8} infertile Turkish couples can not use both surrogacy and egg donation because Turkish legislation forbids third-party reproduction. There are not many studies in Turkish society on surrogate motherhood and oocyte donation.^{1,9}

In this study, we aimed to determine the attitudes toward gestational surrogacy and egg donation amongst the infertile married females who were being followed up at Etlik Maternity Hospital.

METHODOLOGY

This descriptive study was approved by our Institutional Ethics Committee, and was conducted between March and April 2008. Study group was the infertile married females who were being followed up as an outpatient or inpatient at Etlik Maternity Hospital. None of the participants had any child and they were all Muslims. The information was collected by a self administered questionnaire which was performed by face to face interviews. The questionnaire included seven questions related with sociodemographic characteristics and five more questions in order to understand the participants' attitudes towards surrogate motherhood and oocyte donation. The personnel who collected data via face to face interviews were educated before applying questionnaire. All of the infertile females were informed about surrogate motherhood, oocyte donation and aim of the study before the interviews. During interviews complete privacy was assured, and voluntary participation was emphasized. A written informed consent was obtained from all participants. Statistical evaluation was done by SPSS for Windows 11.5 (Chicago, IL, USA). Descriptive statistics were presented as

Table-I: Descriptive characteristics of participants (Ankara, 2008)

	<i>n</i>	%
Educational level		
Primary school	90	36.0
Secondary school	47	18.8
High school	88	35.2
College	25	10.0
Mother's educational level		
Primary school	217	86.8
Secondary school	15	6.0
High school	16	6.4
College	2	0.8
Father's educational level		
Primary school	182	72.8
Secondary school	27	10.8
High school	31	12.4
College	10	4.0

frequency, proportion, mean± standard deviation, median (min-max). Chi square test was used to evaluate the significance of difference. A p value of <0.05 was accepted as statistically significant.

RESULTS

The number of the study group was 250. The mean age of the participants was 28.0 ±7.2 years. Primary school graduates and high school graduates were biggest groups (36.0%, 35.2% respectively). Most of the participants' mothers and fathers were graduate from primary school (86.8%, 72.8% respectively, Table-I). Almost all of the participants were in low income group.

We asked the participants' preferences if they learned that they were unable to have a baby. The most common answer was adoption of a child (n=149, 59.6%). Among the participants,

Table-II: Answers of the participants for the question "which choice do you prefer for having a baby?" * (Ankara, 2008)

<i>Answer</i>	<i>n</i>	%
I will do nothing	64	25.6
I adopt a child	149	59.6
I accept someone as surrogate mother	60	24.0
I accept egg donation	65	26.0

*Participants have been marked more than one choice.

60 females (24.0%) answered positive attitude for surrogate motherhood and 65 (26.0%) for egg donation. Almost one fourth of participants stated that they will do nothing (Table-II).

The number of the infertile females that stated they would never accept a surrogate mother was 190 (76.0%). Among the participants who stated positive response, 30 (50 %) females stated that identity of the surrogate mother was not important, 8 females (13.3%) stated that surrogate mother should be somebody whom they do not know, and 20 (33.3%) stated that they would only accept their sister as a surrogate mother (Table-III).

Of the participants 185 (74.0%) stated that they would never accept egg donation. Among the participants who stated positive response to accept egg donation from someone (n=65), "only from someone whom I do not know" was the most common answer (n=30, 46.2%) (Table-IV).

We also compared the probable relationship between the choice of having a child and participants', mothers', and fathers' educational level and participants' age. There was no statistically significant relationship ($p>0.05$).

DISCUSSION

In this study, conducted at a maternity hospital among infertile women, most of them stated adoption as the first choice if they had learned that they would never have a child in their future life (59, 6%, n=149). Swanberg et al., reported the proportions of the respondents who stated positive and negative attitudes for "adoption as the first choice if she is infertile" as 19% and 47% respectively in a study

Table-III: Answers of the participants for the question "whom do you accept as a surrogate mother for your baby?" * (Ankara, 2008)

Answer	n	%
Sister	20	33.3
Close relative	6	10.0
Close friend	9	15.0
Anonymous or unknown	8	13.3
Anybody	30	50.0

*Participants have been marked more than one choice.

conducted in Sweden among a randomized sample of 1000 women aged 25-35 years study.¹⁰ The reason for the negative considerations related to new reproductive techniques on ethical issues is that these techniques are accepted against to nature. People who advocate new reproductive techniques are contradictory not only to nature but also human nature suggest them as a threat for mankind's future.¹¹ However adopting a child is not only suitable for human nature but also accepted as a commendable action in all cultures. Our finding wherein most of the infertile females stated adopting a child as the first choice indicates that this option is still considered a privilege in Turkish society.

The proportion of females who would accept surrogate motherhood was 24.0% in our study group. Baykal et al., reported as 15.1% in another study conducted in Turkey.¹ In a study conducted among PID patients, infertile patients, women who practiced family planning, and medical students in Germany, where surrogate motherhood is not illegal like in Turkey, while the PID group and students were strictly against the idea to be a surrogate mother by themselves, members of the infertile group as well as those women who were practising family planning were more indifferent regarding this question of surrogate motherhood.¹² Mac Callum et al. reported that couples had considered surrogacy only after a long period of infertility or when it was the only option available.¹³ In Chliaoutakis et al.'s study 69.5% of their respondents stated that they would not opt to become commissioned couple and 73.1% did not want to become surrogate in Greece.¹⁴

Table-IV: Answers of the participants for the question "from whom do you accept eggs donation?" * (Ankara, 2008)

Answer	n	%
Sister	24	36.9
Close relative	12	18.5
Close friend	4	6.2
Anonymous or unknown	30	46.2
Anybody	4	6.2

*Participants have been marked more than one choice.

In our study the proportion of positive attitude was found higher than Baykal's study¹ and lower than German and Greek studies.^{12,14}

In this study group proportion of positive attitude towards oocyte donation was found 26.0%. The result was almost the same as in Baykal et al. study 23.3%.¹ In another study conducted in Turkey by Isikoglu et al., the proportion of positive respondents towards oocyte donation was nearly 85%. The proportions were 82.3% among fertile individuals and 86.7% among infertile ones. Oocyte donation was considered as a better choice than adoption in this study group.⁹ Chliaoutakis et al., reported the acceptability of oocyte receipt and donation was almost half of their study group (48.7 and 50.8% respectively).¹⁴ Westlander et al reported that in their study group infertile women were more in favor of donating oocyte compared to fertile ones.¹⁵ Schroder et al., reported 40.9 %, and 40.0 of PID patients, infertile patients, respectively, would accept oocyte donation¹² Swanberg et al reported that 17% of the respondents were positive for donating oocyte, whereas 39% opposed this, and 44% were doubtful.¹⁰ Purewal et al. found some empirical support for specific factors influencing cultural differences in gamete donation among British Asian and Caucasian samples in the UK.¹⁶

Reproduction is a complex issue which has cultural, religious, ethical and legal aspects and may differ from society to society. When we consider the pace of changes taking place in lower socioeconomic group it is low. The attitude towards surrogate motherhood and oocyte donation might be accepted as favorable for these newly applied medical techniques. When we consider the lack of trust among people because of the low level of information about these techniques, religious factor and legal position, it may predict that social importance about surrogate motherhood and oocyte donation may change in the days to come.

We asked one more question to those who stated positive attitude towards surrogate motherhood. When asked whom do you accept as a surrogate mother anybody was the

most common answer (%50.0, n=30). Sister was the second one. Surrogate mothering allows infertile parents who otherwise remain childless to have children. However, it may be the source of different problems in addition to ethical problems. There is still debate on who is the mother of the baby? Does the baby belong to gestational mother or to genetic mother? Accepting to bear a child for her sister may eliminate most of the issues discussed. A sister who makes a sacrifice for her sister who can not have a baby eliminate the other issues related to personal benefits. The other approaches except altruism may become controversial to deliver a baby for another person. Delivering a baby for her sister may resolve the issue as to who is the real mother, genetic or gestational? Thus, it is found in our study that being a surrogate motherhood for her sister is apparently more acceptable.

Among the participants who stated positive attitude towards receiving oocyte, sister and anonymous were the most common choices (36.9%, 46.2%, respectively). Chliaoutakis et al. reported in their study that the proportions of the respondents who would accept to donate her oocytes to her close relatives/friends was 30.3% and who would accept to receive oocyte from close relatives/friends was 21.9%.¹⁴ In Swanberg et al. study, almost half of the respondents were of the opinion that the oocyte donor and the receiving couple should be anonymous (unknown) to one another. In our study almost half of participants stated that the oocyte donor should have some relationship (family/friend) with the receiving couple but in Swanberg et al. study the proportion of positive attitude was only 6.0%.¹⁰ In another study conducted in Sweden by Westlander et al. a great majority would prefer anonymity of both if they were donors and if they were recipients and majority of them were more motivated to donate/accept oocytes from a close relative.¹⁵ In the study conducted in UK by Fielding et al., the sample of female donors contained only a small group of women who were donating to sisters and friends.¹⁷ Our result showed a high level of approval for oo-

cyte donation. Even though the law enforcement act on assisted reproduction treatment, oocyte donation is banned in Turkey and only IVF treatment is allowed for married couples, these findings are meaningful.

We had some limitations in our study group. Almost all of them were from low income group. We also could not learn the attitudes of their husbands. But the husbands whom we met in the hospital were all negative for surrogacy and oocyte donation.

In our study, which is one of the first studies conducted on oocyte donation and surrogate motherhood among infertile women, the proportions of women who had positive attitude were considerably high although these technologies are not still legal in our country and religious factor may have a great effect on decision. We consider that, oocyte donation and surrogate motherhood will have the potential to empower women and increase their status in society in the near future. These techniques also have frightening potential for deepening their exploitation and unsolved ethical dilemmas. We believe, more studies should be conducted in different geographic regions and among different socioeconomic groups which will be beneficial to evaluate and interpret the attitude of the Turkish society towards these issues.

ACKNOWLEDGEMENTS

This manuscript was not supported by any grant. We thank Troy McCarthy for his most helpful review of the manuscript.

REFERENCES

- Baykal B, Korkmaz C, Ceyhan ST, Goktolga U, Baser I. Opinions of infertile Turkish women on gamete donation and gestational surrogacy. *Fertil Steril* 2008;89(4):817-22.
- Chang CL. Surrogate motherhood. *Formos J Med Humanit* 2004;5(12):48-62.
- Mayeda M. Present state of reproductive medicine in Japan - ethical issues with a focus on those seen in court cases. *BMC Med Ethics* 2006;5;7:E3
- Chen KC, Ng HT. Legal and ethical considerations of assisted reproductive technology and surrogate motherhood in AOFOG countries. *J Obstet Gynaecol Res* 2001;27(2):89-95.
- Arbach O. Ethical considerations in Syria regarding reproduction techniques. *Med Law* 2002;21(2):395-401.
- Sharma BR. Forensic considerations of surrogacy - an overview. *J Clin Forensic Med* 2006;13(2):80-5.
- Gleicher N, Weghofer A, Barad D. Update on the comparison of assisted reproduction outcomes between Europe and the USA: the 2002 data. *Fertil Steril* 2007;87(6):1301-5.
- Heng BC. The advent of international 'mail-order' egg donation. *BJOG* 2006;113(11):1225-7.
- Isikoglu M, Senol Y, Berkkanoglu M, Ozgur K, Donmez L, Stones-Abbas A. Public opinion regarding oocyte donation in Turkey: first data from a secular population among the Islamic world. *Hum Reprod* 2006;21:318-23.
- Svanberg AS, Lampic C, Bergh T, Lundkvist O. Characterization of potential oocyte donors in Sweden. *Hum Reprod* 2003;18(10):2205-15.
- Bukun N. Assisted reproductive technology and postmenopausal pregnancy regarding the biomedical ethics. *High-tech Medicine and the Physician Patient Relationship*. Istanbul, 2006;383-93.
- Schroder AK, Diedrich K, Ludwig M. Attitudes toward oocyte donation and surrogate motherhood are strongly influenced by own experiences. *Zentralbl Gynakol* 2004;126(1):24-31.
- MacCallum F, Lycett E, Murray C, Jadva V, Golombok S. Surrogacy: the experience of commissioning couples. *Hum Reprod* 2003;18(6):1334-42.
- Chliaoutakis JE, Koukouli S, Papadakaki M. Using attitudinal indicators to explain the public's intention to have recourse to gamete donation and surrogacy. *Hum Reprod* 2002;17(11):2995-3002.
- Westlander G, Janson PO, Tagnfors U, Bergh C. Attitudes of different groups of women in Sweden to oocyte donation and oocyte research. *Acta Obstet Gynecol Scand* 1998;77(3):317-21.
- Purewal S, Van Den Akker Ob. British women's attitudes towards oocyte donation: ethnic differences and altruism. *Patient Educ Couns* 2006;64(1-3):43-9.
- Fielding D, Handley S, Duqueno L, Weaver S, Lui S. Motivation, attitudes and experience of donation: a follow-up of women donating eggs in assisted conception treatment. *J Community Appl Soc Psychol* 1998;8(4):273-87.