

Opinions of French Women on Surrogate Pregnancy

Souhail Alouini*, Anna Ramos and Pascal Megier

Department of Obstetrics and Gynecologic Surgery, Regional Hospital Center of Orleans, 14 Avenue de l'hôpital, Orleans, 45100, France

*Corresponding author: Souhail Alouini, Department of Obstetrics and Gynecologic Surgery, Regional Hospital Center of Orleans, 14 Avenue de l'hôpital, Orleans, 45100, France, E-mail: alouini.s@orange.fr

Received date: February 28, 2019; Accepted date: March 15, 2019; Published date: March 22, 2019

Copyright: © 2019 Alouini S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Objective: Surrogate pregnancy is prohibited in France and in many other European countries. We aimed to investigate the opinions of French women on surrogate pregnancy before the revision of the Bioethics Laws.

Methods: An anonymous questionnaire with 15 items was proposed to 200 women after delivery concerning their opinions about surrogacy. The study was conducted in the maternity department of the Regional Hospital Centre of Orleans.

Results: 114 women (59%) stated that the surrogate pregnancy was ethically acceptable. 175 women (88.8%) stated that it should be legalized in France for infertility, refusal of adoption or homosexual couples' request.

65.5% of women of French origin, 34.8% from North Africa and 31.8% from Sub Saharan Africa stated that surrogacy was ethically acceptable ($p < 0.01$). 64.6% of Catholic and 28.6% of Muslim women respectively ($p < 0.01$).

Among the reasons listed by participants in support of legalized surrogate pregnancy: its authorization in other countries (17%), generosity of the surrogate mother (37%), the importance of education of the child by the receiver couple (37%) and the fact that in many cases, the surrogate mother has no genetic bond with the child (34%). Reasons that women listed against legalization include unclear filiations (7%), religious prohibition (9.5%) and the psychological trauma of the surrogate mother and the child (26%).

50% of women thought that the surrogate mother should continue to have a relationship with the child. 137 participants (68.4%) believed the surrogate mother should have financial compensation. 82.8% of participants supported an age limit for the surrogate mother and 67.7% supported an age limit for the receiver couple.

Conclusion: Most participants thought that surrogate pregnancy was ethically acceptable and was favorable to its legalization in France. Infertility was considered as the major reason for access to surrogacy.

Keywords: Surrogate pregnancy; Bioethic laws; Infertility; Assisted reproduction technology

Introduction

Although all assisted reproduction technologies are available in France, surrogate pregnancy remains prohibited as in many countries in the world. Gestational surrogacy is legal in a few countries in Europe like the United Kingdom and Greece and in some states in the USA [1,2]. In most countries where surrogacy is legal, the main indication is infertility of the couple especially in cases of congenital or acquired absence of a uterus [3].

Surrogacy usually involves the transfer of an *in vitro* fertilization (IVF) embryo of a commissioning couple into the uterus of a woman who serves as the surrogate mother. After delivery, the child is given to the commissioning couple who are the genetic parents in most cases.

However, other possibilities exist as well. The surrogate mother can be inseminated by spermatozooids of the male of the commissioning couple or by donors; in this case, the surrogate is also the genetic mother.

Finally when the embryo is provided from donors; neither the surrogate nor the commissioning couple has genetic bonds to the child.

In France, the Laws of Bioethics of 1994 and the Civil Code [4,5] prohibit the surrogacy. However, a real demand for surrogacy exists, especially in the cases of infertility.

Each year, approximately 400 French couples travel to foreign countries (USA, Canada) to have a baby by surrogacy [6].

When they return to France with the child, they are not legally recognized as the parents.

Before the Laws on Bioethics are revised, gestational surrogacy has become a common topic of discussion in public forums and in medical and political institutions in France [7-9].

We wanted to know the opinions of our patients about the ethical and legal aspects of surrogate pregnancy. The aim of this study was to contribute to the debate on surrogacy before the revision of the French Bioethics Laws.

Materials and Methods

We proposed an anonymous questionnaire to 210 patients who presented for obstetrical or gynecological consultation or who were in the post-partum period.

As our questionnaire was anonymous, non-invasive and concerned the opinions about surrogacy an assisted reproductive technology already offered in many countries, no institutional review board was required. After the presentation of the content of the questionnaire, the women had the choice to accept or refuse to answer the questionnaire. Consent was obtained from each patient before answering it.

This study was conducted in the department of obstetrics and gynecology at the Regional Hospital Center of Orleans between December 2010 and May 2011.

Each participant received an introduction to the questionnaire that explained what surrogate pregnancy was and described the context of the study (i.e., the pending revision of the Bioethics Laws). Participants completed the form privately without additional assistance or refused to complete it.

The form consisted of 15 questions concerning the following items:

- Socio-demographic information (age, geographic origin, religious affiliation, previous obstetrical history, number of children)
- Opinions of women about the ethical and legal aspects of surrogacy (its ethical acceptability and legalization)
- The conditions of access to surrogacy; e.g. the limit of age for the surrogate mother or for the intended couple, the financial compensation of the surrogate mother
- The reasons for or against its acceptability and legalization
- Motives for access to surrogacy other than sterility such as refusal of adoption or for homosexual couples
- Opinions about the financial aspects of surrogacy

- The relationship between the surrogate mother, the child and the intended couple

Patients older than 50 years of age were excluded from the study as the questionnaire included a question that asked if one would agree to be a surrogate mother. Patients who came for treatment of gynecologic cancers were excluded from the study as we considered that surrogacy was not their primary interest and they were more concerned about their serious pathologies. Women who did not clearly understand the French language were also excluded from the study.

An independent center, the Regional Health Observatory entered the results from the questionnaires using the Epi Info program (3.5.1, 2008 version) and conducted analysis using Stata software (version.10). The chi-squared test was used, a p-value<0.05 was considered to be statistically significant. Some questions had multiple choice answers, and, therefore, the sum of result percentages was not equal to 100 in these cases. Observatoire régional de Sante Centre, Mme A. Eloy, C. Leclerc

Results

General characteristics of the participants

In total, 200 women agreed to complete the questionnaire. The majority of participants' ages ranged from 15 to 44 years (88.5%); 71.5% were of French origin; 12% were from North Africa and 11.5% from Sub Saharan Africa. 41.5% of patients presented for consultation in gynecology or obstetrics and 58.5% had just delivered. 51.5% declared to be Christians, 21.5% Muslims and 5% Jewish. Some participants did not report a religious preference.

Approximately 85% of the participants had one or more children and 15% stated that they have undergone at least one abortion. The general characteristics of the participants are shown in Table 1.

General characteristics of participants	n Participants (n=200)
Age	
15-25 years	45 (22.5%)
26-35 years	120 (60%)
36-44 years	30 (15%)
≥ 45 years	5 (2.5%)
Are you currently pregnant?	
Yes	60 (30%)
No	23 (11.5%)
I have just delivered a baby	117 (58.5%)
Religious preference	
Catholic	98 (49%)
Protestant	5 (2.5%)
Muslim	43 (21.5%)
Jewish	1 (0.5%)

Other or none	39 (19.5%)
Blank	14 (7%)
Geographic origin	
French	143 (71.5%)
Maghreb (North Africa)	24 (12%)
Sub-Saharan Africa	23 (11.5%)
Other	10 (5%)
Number of previous children	
0	29 (14.5%)
1	67 (33.5)
2	73 (36.5)
3	20 (10%)
≥ 4	11 (5.5%)
Previous abortion	
Yes	30 (15%)
No	170 (85%)
Note: Percentages are valid percent's (number of related participants/total number of participants who answered the question)	

Table 1: General characteristics of the participants are shown.

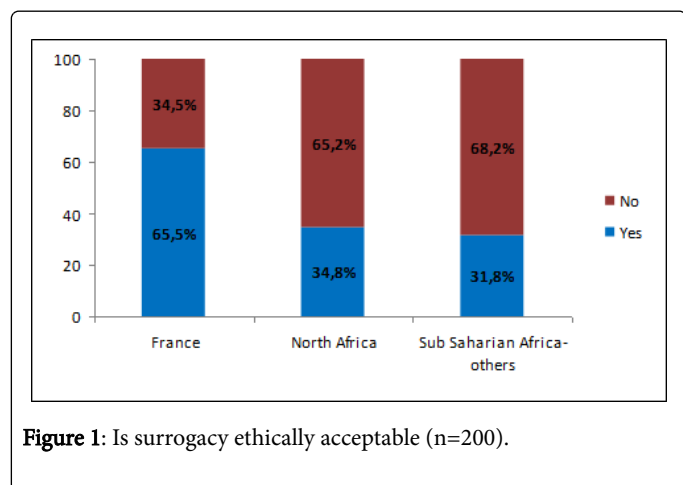


Figure 1: Is surrogacy ethically acceptable (n=200).

Opinions of women about gestational surrogacy

One hundred fourteen women (57%) responded that surrogacy was ethically acceptable, whereas 80 women (40%) believed that it was not and 6 did not answer.

Twenty four women (12%) stated that they would consider becoming a surrogate mother for another couple.

Regarding geographical origin, 65.5% of women of French origin, 34.8% from North Africa and 31.8% from Sub Saharian Africa or from other countries stated that surrogacy was ethically acceptable.

Women of French origin were more likely to state that surrogacy was ethically acceptable than women from other origins. These differences were statistically significant ($p < 0.01$) (Figure 1).

With regards to the religious identity of participants, 64.6% of Catholic women and 28.6% of Muslim women thought that surrogacy was ethically acceptable. This difference was statistically significant ($p < 0.01$).

Concerning the legalization of surrogate pregnancy, 175 women (88.8%) stated that surrogate pregnancy should be legalized in France, whereas 22 (11.2%) believed it should not.

Three patients did not answer this question.

Infertility was the leading reason to legalize surrogate pregnancy followed by the failure of adoption request and requests by homosexual couples (Figure 2).

92.8% of Catholic women and 71.4% of Muslim women stated that gestational surrogacy should be legalized in France. This difference was statistically significant ($p < 0.01$).

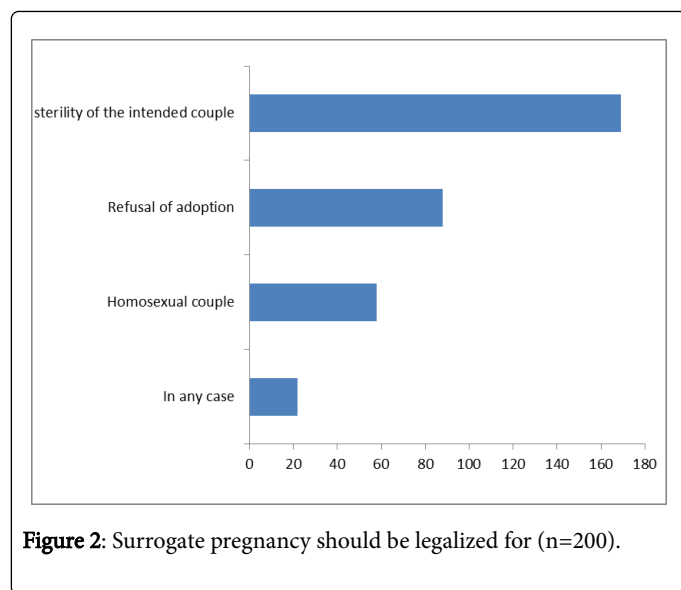


Figure 2: Surrogate pregnancy should be legalized for (n=200).

Women listed reasons against or for the legalization of surrogacy (Figure 3). The reasons listed by participants in support of legalized surrogate pregnancy include the following ones: its authorization in other countries (17% of participants), the generosity of the surrogate mother (37%), the importance of education of the child by the receiver couple (37%) and the fact that in many cases, the surrogate mother has no genetic bonds with the child (34%).

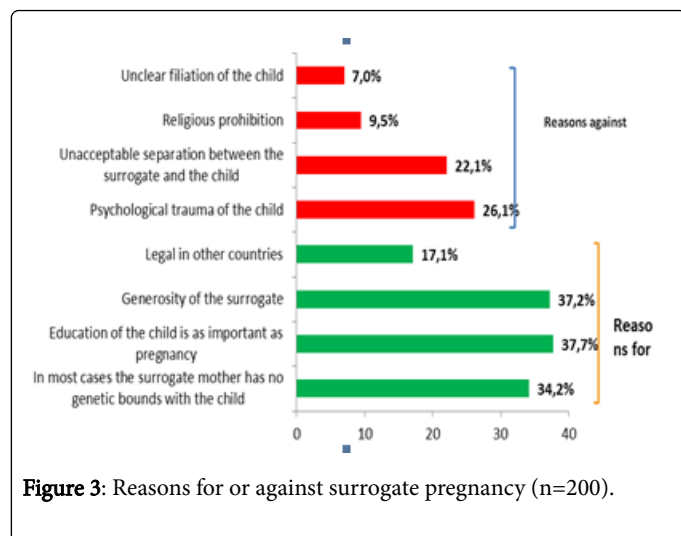


Figure 3: Reasons for or against surrogate pregnancy (n=200).

Reasons that women listed against legalization include unclear filiation (7%), religious prohibition (9.5%) and the psychological trauma of the surrogate mother and the child (26%). 158 patients (82.8%) supported an age limit for the surrogate mother and 129 (67.7%) supported an age limit for the receiver couple. Eight women did not answer this question. 100 women (50%) thought that the surrogate mother should continue to have a relationship with the child. Conversely, others believed that the surrogate mother should not maintain a relationship with the child (38%) or with the couple (33.5%) after the delivery. Six women did not answer the question. A total of 137 participants (68%) believed that the surrogate mother should have a financial compensation either via insurance coverage of healthcare costs (45%) or from the receiver couple (24%). However, 85

(40%) participants stated that surrogate mothers should not have financial compensation. Ten women did not answer this question.

Discussion

In our survey most women stated that surrogate pregnancy is ethically acceptable and should be legalized in France. It is the first study which explored the opinions of French patients on surrogacy. It showed that our patients are largely favorable to gestational surrogacy in the context of revision of the French Bioethics Laws [9]. However, the surrogate pregnancy should be continued to not be authorized in France [9,10].

Half of the participants had just delivered and the majority of the women were mothers of at least one child. This finding could partially explain why many couples wished to share the happiness of raising a child. On the other hand, these women were very attached to their children after the delivery, thus, we could have expected a high rate of disapproval of surrogacy. In some cases, such as infertility after hysterectomy, surrogacy could be a solution for couples in distress, especially with low financial means; however it is not the case in France, thus these couples go in other countries where surrogacy is allowed [9,11].

The rate of approval of surrogacy varies according to the characteristics of the studied population. In Germany, the approval rate was 43.7% among 2110 men and women between 18 and 50 years old [12]. A Turkish study of sterile women found an approval rate of 15% [13,14]. Poote et al. [15] women who are not interested in becoming a surrogate scored significantly more negative attitudes towards surrogacy.

As noted by Isikoglu et al. [16], the use of Assisted Reproduction Technology (ART) is decided by society through legislation. The French Senate discussed authorization of surrogate pregnancy in a legal form but not in a contractual form [7].

Among our participants, Catholic women and those of French origin were more likely to accept surrogate pregnancy than were Muslim women and those of African origin. Baykal et al. [13] found that geographic origin, religious and ethical values influence the acceptance of Assisted Reproductive Technology (ART) procedures. These differences in results may be explained by a lack of understanding of techniques used in ART [13]. In our study, we provided our patients with clear and concise information on gestational surrogacy. Moreover, the majority of our participants had been exposed to information about surrogacy via television, newspapers and other public forums in the context of the revision of the Bioethics Laws.

In our study, the sterility was the primary reason identified by participants in support of the legalization of surrogate pregnancy in France. According to public opinion in numerous other countries, surrogate pregnancy is likewise considered a solution to infertility [17]. Congenital or acquired absence of the uterus and the failure of ART are typical indications for surrogacy [3]. Strong demand for surrogacy, especially in cases of uterine infertility, exists in France [9,18]. Many French infertile couples who are interested in surrogate pregnancy must travel to foreign countries for treatment. Surrogate pregnancy is expensive and thus leads to unequal access to treatment. Indeed, only a few wealthy people have access to this option in foreign countries [8,11].

For our patients, the absence of genetic links in most cases between the surrogate mother and the child was a reason to legalize surrogacy. For Van den Akker [19] women who could use their own genetic materials considered that the genetic link was important contrary to those who could not.

Refusal or difficulty with adoption was the second reason that participants listed for allowing surrogacy. As it could be "associated with" infertility, it is recognized as an indication for gestational surrogacy in some countries [3].

More than one-third of participants were in favor of allowing surrogacy for homosexual couples as allowed in some other countries. According to the French Senate [7,8], if surrogate pregnancy is authorized in France, it could only be applied to heterosexual couples. For Henrion [20], in case of legalization of surrogacy for homosexual couples, the long term risks of substitute mothers and infants should be evaluated.

Another reason to legalize surrogacy was the previous legalization by other European countries and some states of the USA. However, gestational surrogacy is also not allowed in many other European countries, including Germany and Italy [1,2].

Most participants believed that surrogate mothers should receive financial compensation. In many countries, financial compensation is allowed for surrogates [21,22]. Surrogacy is a kind of exploitation of poor women. In the U.K. there is no financial compensation for the surrogate mother [22]. If surrogacy is legalized in France, the surrogate mother will have financial compensation framed by the law [8].

In our study, more than ten percent of women would be interested in becoming a surrogate mother. Generosity and self-sacrifice were identified by half of our participants to explain the motivation to become a surrogate mother. Other respondents evoked the limited role of the surrogate as only a carrier of pregnancy as in most cases the embryo is from the commissioning couple. Education of the child is also as important as the pregnancy. However, the commercial aspect of surrogacy is a reality. Indeed, high demand for surrogate mothers creates a "market price" for their services.

Personal motivations of surrogate mothers and intended couples must be known to make information about surrogacy more accurate [23].

A low number of participants were against the legalization of surrogate pregnancy. Some women evoked the psychological trauma caused by the separation of the surrogate mother and the child. Guichon [24] stated that if the surrogate mother was also the biological mother, she would have more difficulty with separation from the child. The guilt of abandoning and depression occur more frequently in these cases. Söderström-Anttila et al. [25] found that some surrogate mothers had post-partum depression. Van den Aker [26] surveyed 61 surrogate and 20 intended mothers. No evidence of post-natal depression amongst the groups studied was found. For Golombek et al. [27] there is no psychological risk for a child born after surrogacy in the first year of life. However, other studies are necessary to evaluate the psychological trauma of children in the long term.

The religious prohibition of surrogacy evoked by some patients was reported in other studies [28]. According to Isikoglu [16], "legislation is based on the socio-cultural values and religious beliefs of the society.

Unclear filiation of the child was also a reason identified by those against legalization of surrogacy. Indeed, according to French law, the

mother is the woman who delivers the baby. This fact explains the difficulties faced by parents who sought services from surrogate mothers when they returned to France. These parents are not recognized as the legal parents of a child born from a surrogate pregnancy.

In our study, most women were of the opinion that a surrogate mother should continue to have a relationship with her child after birth. In the U.K., the surrogate is the legal mother until 6 months after delivery and she is allowed to breastfeed the baby. Some surrogate mothers have post-partum depression after separation from the child [26]. In Greece, the separation of the surrogate mother and the child is effective immediately after delivery and allows the intended couple to quickly "appropriate" the child [29].

Jadva et al. [30] reported that the emotional problems of the surrogate mother decrease with time and there is no relational problem between the surrogate mother and the intended couple. For Serafini [31], the gestational carrier would provide potential environmental benefits for the infant.

Most participants in our study supported an age limit for the surrogate mother and the intended couples. In many countries where the surrogacy is allowed, there is an age limit for the surrogate and she must not have any previous obstetrical pathologies. Indeed, older pregnant women have more complications than younger women during pregnancy and delivery. Older genitors have also more fetal chromosomal abnormalities than younger.

Participants of our study were of child-bearing age. The three monotheist religions were represented. Most women were of French origin and Christians with an average of two children (the average number of births per woman in France). Other geographic origins of our participants included North Africa, Sub-Saharan Africa, and Eastern Europe. Therefore this sample of the population is representative of multi-cultural and multi-ethnic French society.

Our study had limitations because it included only the women in a fertile age. Neither older women were interviewed, nor men, because our study included only patients who presented to our Department and who might have eventually considered becoming surrogates. Although this subject concerns the legislators, health professionals, and men, we believe that women are of first concern because some may become surrogate mothers or seek such services due to sterility; therefore, their opinions are of great importance.

Conclusion

In our study, most participants stated that surrogate pregnancy is ethically acceptable and should be legalized in France. Infertility is the leading reason for supporting surrogacy. Age limits for both the surrogate mother and intended couple are supported. Financial compensation for the surrogate mother and the continuity of a relationship between the surrogate mother and the child are widely approved.

The authors report no conflicts of interest.

References

1. Marietta GA (1997) American Surrogacy Center. Legal overview of surrogacy laws by state. TASC.
2. Cohen J, Jones HW Jr, Weissman A, Howless C, Shoham Z, et al. (2004) Textbook of assisted reproductive techniques. 2nd ed. London: Taylor and Francis 9: 483-491.

3. Brinsden PR (2003) Gestational surrogacy. *Hum Reprod Update* 9: 483-491.
4. Law n° 94-653 of 29 (1994) Of the respect of the Human Body.
5. Civil code (2006) Chapter II: Of the Respect of the Human Body 2: 268.
6. France (2010) living-a-conservative-revolution.
7. De Montgolfier S, Mirkovic A (2009) Maternity for others: from desiring a child to desiring a child at any price. *Med Sci* 25: 419-422.
8. Henrion R, Bergoignan-Esper C (2009) Gestational surrogacy. *Bull Acad Natl Med* 193: 583-618.
9. France (2018) Conseil d'Etat. Revision of the bioethics law: What options for tomorrow 262 .
10. Opinion of the CCNE (2017) On societal applications for medically assisted procreation.
11. Nisand I (2010) Surrogacy: Legal considerations. *Gynecol Obstet Fertil* 38: 226-229.
12. Stobel-Richter Y, Goldschmidt S, Brahler E, Weidner K, Beutel M, et al. (2009) Egg donation, surrogate mothering, and cloning: Attitudes of men and women in Germany based on a representative survey. *Fertil Steril* 92: 124-130.
13. Baykal B, Korkmaz C, Ceyhan ST, Goktolga U, Baser I (2008) Opinions of infertile Turkish women on gamete donation and gestational surrogacy. *Fertil Steril* 89: 817-822.
14. Suzuki K, Hoshi K, Minai J, Yanaiharu T, Takeda Y, et al. (2006) Analysis of national representative opinion surveys concerning gestational surrogacy in Japan. *Eur J Obstet Gynecol Reprod Biol* 126: 39-47.
15. Poote AE, Van den Akker OB (2009) British women's attitudes to surrogacy. *Hum Reprod* 24: 139-145.
16. Isikoglu M, Senol Y, Berkkanoglu M, Ozgur K, Donmez L, et al. (2006) Public opinion regarding oocyte donation in Turkey: first data from a secular population among the Islamic world. *Hum Reprod* 21: 318-323.
17. Pilka L, Rumpik D, Pilka R, Koudelka M, Prudil L, et al. (2009) Surrogate maternity-literature review and practice. *Ceska Gynekol* 74: 144-147.
18. Raudrant D, Madelenat P, Salle B (2018) Uterus transplant or gestational surrogacy: Is there a possible choice? *Gynecol Obstet Fertil Senol* 46: 385-387.
19. Van den Akker O (2000) The importance of a genetic link in mothers commissioning a surrogate baby in the UK. *Hum Reprod* 15: 1849-1855.
20. Henrion R (2014) Commission X (reproduction et développement); Commission XVII (Ethique et droit). Surrogate pregnancy with regard to marriage between persons of the same sex. *Bull Acad Natl Med* 198: 917-950.
21. Ber R (2000) Ethical issues in gestational surrogacy. *Theor Med Bioeth* 21: 153-169.
22. Semba Y, Chang C, Hong H, Kamisato A, Kokado M, et al. (2010) Surrogacy: donor conception regulation in Japan. *Bioethics* 24: 348-357.
23. Chliaoutakis JE (2002) A relationship between traditionally motivated patterns and gamete donation and surrogacy in urban areas of Greece. *Hum Reprod* 17: 2187-2191.
24. Guichon J (2007) The body, emotions, and intentions: Challenges of preconception arrangements for health care providers. *CMAJ* 176: 479-481.
25. Soderstrom-Anttila V, Blomqvist T, Foudila T, Hippelainen M, Kurunmaki H, et al. (2002) Experience of in vitro fertilization surrogacy in Finland. *Acta Obstet Gynecol Scand* 81: 747-752.
26. Van den Akker OB (2007) Psychological trait and state characteristics, social support and attitudes to the surrogate pregnancy and baby. *Hum Reprod* 22: 2287-2295.
27. Golombok S, Murray C, Jadv V, Mac Callum F, Lycett E, et al. (2004) Families created through a surrogacy arrangement: parent-child relationships in the first year of life. *Dev Psych* 40: 400-411.
28. Chliaoutakis JE, Koukouli S, Papadakaki M (2002) Using attitudinal indicators to explain the public's intention to have recourse to gamete donation and surrogacy. *Hum Reprod* 17: 2995-3002.
29. Mavroforou A, Koumantakis E, Mavrophoros D, Michalodimitrakis E (2007) Medically assisted human reproduction: the Greek view. *Med Law* 26: 339-347.
30. Jadv V, Murray C, Lycett E, MacCallum F, Golombok S, et al. (2003) Surrogacy: The experiences of surrogate mothers. *Hum Reprod* 18: 2196-2204.
31. Serafini P (2001) Outcome and follow-up of children born after IVF-surrogacy. *Hum Reprod Update* 7: 23-27.