Is Assisted Reproductive Technique Shari’aa-compliant? A Case Study at a Fertility Centre in Malaysia

Ahmad Murad Z\textsuperscript{a}, Zailin Shah Y\textsuperscript{b}, Mansor S\textsuperscript{b}, Ahmad Irfan IH\textsuperscript{b}, Abdullah L\textsuperscript{b}

\textsuperscript{a}IIUM Fertility Centre, Kulliyyah Of Medicine, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia.
\textsuperscript{b}Centre for Modern Languages & Human Sciences, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang Kuantan, Pahang, Malaysia

ABSTRACT

Introduction: To investigate the questions that Muslim patients, embryologists, paramedics, clinical counsellor and doctors may have pertaining to the compliance of Assisted Reproductive Technique (ART) to Shari’aa. Methods: As a preliminary study, an open-ended survey was administered to participants. Participants for the survey comprised of 21 patients, 2 embryologists, 2 doctors, 4 paramedics and 1 counsellor. Results: Data analysis showed that most of the participants posed questions that fall into six classifications which are: Munakahat (Family Law), social Hukm, Fiqh Ibadah, Fiqh Qadha (Islamic Hukm), General Fiqh and Usul Fiqh. Conclusion: It is clear that even though the participants were rather familiar with some of the existing Fatwas pertaining to ART and IVF in Malaysia, there are still remaining doubts which need to be clarified. This indicates that there are challenges faced in seeking and providing ART treatment to Muslim patients. This needs to be addressed perhaps in the form of Shari’aa-compliant guidelines to provide a clear explanation of each process and procedure in fertility treatment.

KEYWORDS: Assisted Reproductive Technique, Fatwa, Shari’aa, guidelines

INTRODUCTION

Infertility occurs when a couple is unable to conceive naturally after a certain period of time. World Health Organization states that infertility is when after two years of regular sexual intercourse, without contraception or other reasons such as breastfeeding, a couple has not conceived.\textsuperscript{1} Primary infertility is infertility in a couple who have never had a child, while secondary infertility is failure to conceive following a previous pregnancy.\textsuperscript{2} It is further explained that infertility may be caused by various factors which include infection in the man or woman, but often there is no obvious underlying cause.

The decline in fertility rates could be an indicator of the rise of infertility in the world. Take the case of Malaysia for example, the fertility rate has declined from 2.3 in 2008 to 2.2 in 2011.\textsuperscript{3} It is suggested that the causes for the decline are due to increase in female education level and religion.\textsuperscript{4} Even though empirical studies have not been conducted to correlate the two; a newspaper article highlights that infertility problems may be the cause for the decline in fertility rates in Malaysia. The Minister of Health voiced concern over the rising number of patients seeking fertility treatment; claiming that in 2006 alone, it was estimated that about 300,000 new couples underwent fertility treatment in Malaysia.\textsuperscript{5} Being a predominantly Muslim country it can be assumed that many of the patients seeking treatment could be Muslims.

There are various fertility treatments patients are able to choose from, depending on the severity of their infertility, such as intrauterine insemination (IUI), in-vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI).\textsuperscript{6,7,8} However, what may concern Muslim patients most is if fertility treatment is permissible (halal) and which options are allowed in Islam. To answer this, scholars such as Sheikh Mustafa Zarqa’, Shaykh Dr. Muhammad Sa’id Ramadan al Butiy, Sheikh Jadul Jadul Haq Ali Haq and Sheikh Abdul Rahman Al Naja explained that in principal, fertility treatment is permissible since it can be considered as daruriyyah.\textsuperscript{9} In Islam, it is considered daruriyyah if there is extreme necessity or vital interest for an action for example when a female patient has to show her aurah during medical examination with a male doctor. The same principle applies to the need of married couples to have children, the natural instinct to have an heir either for...
It then adds that fertilization must be done within of marriage and without any third party involvement. This is applicable to seeking treatment for infertility. Thus, in many Muslim countries fertility treatment within marriage is allowed and guidelines to facilitate the process in line with Shari’aa have been issued.

The first fatwa, which is legal judgement on a certain issue which is in line with Shari’aa or Islamic law, on fertility treatment was issued in 1982 by Al-Azhar University after the successful birth of the first IVF baby was reported in the newspapers in July 1978. In Malaysia, several fatwas relevant to fertility treatment have already been gazetted and enforced.

1. The 5th Muzakarah (Conference) of the Fatwa Committee and National Council of Islamic Religious Affairs Malaysia held on 16-17th November 1982 discussed the issue of in-vitro fertilization (IVF). The committee decided that IVF babies from the ovum (eggs) of a wife and sperm of a husband which have been mixed using respectable means/ using methods that are not contradictory to Islam is valid (harus/ halal). In addition, a baby born through test tube method can be a guardian and is entitled to receive inheritance from the rightful family. On the other hand, if the eggs are not from a married couple then the procedure is invalid (haram).

2. The 55th Muzakarah Conference of the Fatwa Committee and National Council of Islamic Religious Affairs Malaysia held on 8th April 2003 decided that transferring embryo into the wife’s uterus after the death of the husband or after divorce is forbidden (haram).

3. The 56th Muzakarah Conference of the Fatwa Committee and National Council for Islamic Religious Affairs held on 7th May 2003 came to an agreement that the process of fertilizing the wife’s ovum with the husband’s sperm that were extracted before the solemnization of marriage is forbidden (haram) although the mixing process is conducted during the marital period.

4. The 80th Muzakarah Conference of the Fatwa Committee and National Council of Islamic Religious Affairs Malaysia held on 1-3rd February 2008 deliberated on the ruling over married couples using a surrogate mother to have a child. The Committee decided that surrogacy is forbidden (haram) in Islam even if the sperm and ovum were taken from a married couple as this will bring genetic confusion to the unborn baby.

The fatwas issued in Malaysia also clearly indicate that fertility treatment is permissible within the confines of marriage and without any third party involvement. It then adds that fertilization must be done within marriage and not before it or even after the husbands’ death. However, the fatwas are general in nature and did not deliberate on each procedure in the various ART treatment processes or even on the state of the drugs and medication. Furthermore, they mainly concentrate on IVF treatment as one general process and did not look at each of the procedures within the process and its compliance to Shari’aa. There is a need to investigate if patients, embryologists, paramedics, clinical counsellors and doctors face any problems with issues on whether ART treatment is fully Shari’aa-compliant.

Certain issues pertaining to the status of the various ART treatments, acceptable practices, as well as the drugs and medication used in ART and other matters involved in the process of treating the patient for the (fertility) problem need to be explored and explained in greater detail. In addition, further research must be conducted in order to develop a framework which underlines the ethical and religious aspects of IVF in Islam. Perhaps it could be elaborated on within the framework of maqasid Sharia’a in Islam. Maqasid are goals or objectives which are placed to ensure that the act done by a Muslim is according to Shari’aa. In principle, there are three maqasid Shari’aa or Shari’aa objectives which cover three main areas: maslahah daruriyyah (basic needs), maslahah hajjyyah (common needs) and maslahah tahsiniyyah (luxury needs). Imam Al Shatibi added five tenets that are of importance: maqasid Hifz al-Nasl (protection of posterity), Hifz al-Aql (protection of reason), Hifz al-Mal (protection of property). However the basic thrust of the maqasid is to ensure that every legislative and legal determination made by Muslims must uphold the boundaries and sacredness of religion, life, intellect, lineage and property.

As an initial step, it is important to investigate how widespread is the knowledge and understanding of the fatwas in Malaysia amongst Muslim patients seeking treatment and the fertility treatment providers. It proposes to find out problems or concerns faced by Muslim patients, embryologists, paramedics, clinical counsellors and doctors may have in regards to the compliance of ART to Shari’aa. The research questions guiding this study are:

1. What are the problems faced by Muslim patients, embryologists, paramedics, clinical counsellors and doctors in regards to the compliance of ART to Shari’aa?
2. Are there areas which need further clarification?

This study was conducted at one fertility centre in the east coast of Malaysia. The centre was chosen because almost 90% of the patients in its 4 years of operation are Muslims.
MATERIALS AND METHODS

This study was conducted from February 2012 to June 2013 at the International Islamic University Malaysia Fertility Centre (IIUM FC) which was established in January 2009. The centre provides ART treatment to infertile couples such as In Vitro Fertilization (IVF), Intraruterine Insemination (IUI), Intra-cytoplasmic sperm injection (ICSI), embryo and sperm freezing and storage, sperm retrieval from epididymis/testis - PESA/TESA, Seminal Fluid Analysis (SFA), hormonal tests, ultrasound scanning, cyst aspiration, counselling and training. The success rate of the centre is comparable to other centres in Malaysia.5

This main data collection instrument was an open-ended survey questionnaire. The questionnaire was administered to patients, embryologists, paramedics, clinical counsellors and doctors at a fertility centre. Due to the nature of the study, the questionnaire was administered only to Muslim patients who consented to become participants of the study. Participation was offered to the first 30 patients who sought treatment at this centre. This number was sufficient since the number of patients seeking fertility treatment is not large. Out of that number, only 21 patients consented to become participants and completed the survey and nine participants did not complete or return the survey form. In total there were 30 participants of which 21 were patients, four paramedics, one clinical counsellor, two embryologists and two doctors (Infertility specialists). The participants' demographic data are shown in Table I and Table II.

Table II illustrates that the patients in the study were between the age of 30 and 39 (66.5%) and have been married between 1 to 5 years 10 (47.6%). It also indicates that the paramedics, clinical counsellor, embryologists and doctors were mainly female, 7 (77.7%). In general, the paramedics, clinical counsellor, embryologists and doctors have had between 1 to 5 years of experience in handling fertility treatment, 7 (77.7%).

Patients were asked to answer the survey questionnaire after they had finished their treatment at the centre while the paramedics, clinical counsellor, embryologists and doctors responded during their free time in between patients or after treating patients. During the whole process a researcher was present to answer any enquiries or to guide participants as to what the questionnaire required of them. Apart from questions on demographic data, the open-ended questionnaire consisted of only two questions written both in English and Bahasa Melayu considering that most of the participants were Malay Muslims. The following were the questions asked:

1. As a Muslim do you have any problems or concerns in regards to your existing fertility treatment? Sebagai seorang Muslim adakah anda menghadapi apa-apa masalah atau kemusykilan berkaitan rawatan kesuburan yang anda jalani?
2. Please describe the problem/concerns faced before/during/after undergoing treatment. Sila huraikan masalah atau kemusykilan yang dihadapi sebelum/semasa/setelah menjalani rawatan?

Data Analysis

The demographic data were evaluated and calculated for descriptive statistics: frequency and percentages. The problems or concerns highlighted were qualitatively analysed according to emerging themes and categorized to correspond with the steps in ART specifically IVF. The data from the survey, in the form of problems faced or questions posed by participants, were categorized according to the steps in fertility treatment from consultation to after treatment with the corresponding classification in Islamic jurisprudence as indicated by the following categories: Munakahat (Family), Social Hukm (Muamalat), Fiqh Ibadah, Fiqh Qadha (Islamic Hukm), and General Fiqh.17

RESULTS

Table I. Demography of patients according to age and years of marriage

<table>
<thead>
<tr>
<th>Age</th>
<th>Years of marriage: Number (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 - 5 years</td>
<td>6 - 10 years</td>
</tr>
<tr>
<td>25 - 29</td>
<td>5 (23.8%)</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>30 - 39</td>
<td>4 (19%)</td>
<td>8 (38%)</td>
</tr>
<tr>
<td>40 &amp; above</td>
<td>1 (4.8%)</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>10 (47.6%)</td>
<td>9 (42.9%)</td>
</tr>
</tbody>
</table>
Table II. Demography of paramedics, clinical counsellor, embryologists and doctors according to gender and years of ART experience

<table>
<thead>
<tr>
<th>Gender</th>
<th>Years of ART experience</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 - 5 years</td>
<td>6 - 10 years</td>
</tr>
<tr>
<td>Male</td>
<td>0 (0)</td>
<td>2 (22.2%)</td>
</tr>
<tr>
<td>Female</td>
<td>7 (77.7%)</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>7 (77.7%)</td>
<td>2 (22.2%)</td>
</tr>
</tbody>
</table>

Table III. *Shari’aa*- related problems faced by participants in the study

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munakahat</td>
<td>9 (20.5%)</td>
</tr>
<tr>
<td>Social Hukm</td>
<td>6 (13.6%)</td>
</tr>
<tr>
<td>Fiqh Ibadah</td>
<td>11 (25%)</td>
</tr>
<tr>
<td>Fiqh Qadha</td>
<td>5 (11.4%)</td>
</tr>
<tr>
<td>General Fiqh</td>
<td>13 (29.5%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44 (100%)</strong></td>
</tr>
</tbody>
</table>

In total, 44 problems or concerns were highlighted by the participants and they fall into the five categories in *Shari’aa* (Table III). General *Fiqh* and *Fiqh Ibadah* related problems were found to be the most frequently asked questions, 13 (29.5%), along with questions on *Munakahat*, 9 (20.5%).

Table III illustrates that the most frequently asked questions in the questionnaire were in the General *Fiqh* category, 13 (29.5%) pertaining to: processing of the sperm, multiple-pregnancies abortion, halal state of the media and drugs as well as using excess embryo for future treatments. Similarly, many of the questions were in the *Fiqh Ibadah* category, 11 (25%), which included questions on: performing full body ablation (*ghusl*) after a fertility treatment procedure, fasting while undergoing a fertility treatment procedure, fasting when conducting a fertility treatment procedure on non-Muslims, performing prayers and fasting if a patient is bleeding after a fertility treatment procedure and deriving sample in the toilet. other category which had quite a number of questions is on *Munakahat* (Family Law), 9 (20.9%), category. The questions included concerns on: conditions which allow a couple to seek treatment for infertility, presence of a female assistant during a fertility treatment procedure, masturbation to derive sample, freezing and using excess sample, seeking husband’s permission to take fertility drugs and keeping frozen embryos in a lab belonging to a non-Muslim.

There were 6 (13.6%) questions on Social *Hukm* which were on boundary (aurah) limitations, presence of witness or husband during a fertility treatment procedure. In addition, there were 5 (11.4%) *Fiqh Qadha* (Islamic *Hukm*) questions on: accidentally mixing labels of samples and presence of a witness during the laboratory procedures. The category with the least questions was on General *Fiqh*, 2 (4.5%): bringing sample from home and presence of a witness during the procedure.

A summary of the questions posed by participants are reported according to respective categories in Table IV.
**Table IV. Shari’aa-related questions posed in the study**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>QUESTION (S) PERTAINING TO:</th>
</tr>
</thead>
</table>
| **Munakahat**  | 1. Conditions allowing a couple to seek treatment for infertility.  
2. Presence of a female assistant during doctor’s examination of a patient.  
3. Presence of a female assistant during insemination process in IVF/ICSI.  
4. Masturbation to derive seminal fluid sample.  
5. Masturbation to derive seminal fluid sample during fasting month.  
6. Freezing excess seminal fluid sample.  
7. Using frozen embryos for future pregnancies, regardless of time lapse.  
8. Keeping frozen embryos in a lab belonging to a non-Muslim.  
9. Seeking husband’s permission to take fertility drugs or contraceptive pills to regulate her menstrual cycle before fertility treatment. |
| **Social Hukm**| 1. Boundary (aurah) limitations between a female patient and male doctor during consultation.  
2. Boundary (aurah) limitations between a female patient and male doctor during ultrasound scan procedure.  
3. Boundary (aurah) limitations between a female patient and male doctor during ovum pick-up.  
4. Boundary (aurah) limitations between a male patient and female embryologist/paramedic during PESA/TESA.  
5. Presence of the patient’s husband to witness the doctor examining the wife during the initial examination.  
6. Coming to consultation with the doctor without the husband and the patient informs about her husband’s weaknesses/health problems with the intention of getting expert opinion. |
| **Fiqh Ibadah**| 1. Performing full body ablution (ghusl) after a vagina scan.  
2. Performing full body ablution (ghusl) after a ovum pick-up.  
3. Performing full body ablution (ghusl) after Embryo Transfer (ET).  
4. Undergoing vagina scan when fasting.  
5. Undergoing Intra-Uterine Insemination when fasting.  
6. Undergoing OPU when fasting.  
7. Doctor conducting IUI procedure on non-Muslims when fasting.  
8. Doctor conducting OPU procedure on non-Muslims when fasting Seminal fluid sample is taken in a toilet.  
9. Performing prayers and fasting if a patient is bleeding after OPU.  
10. Taking fertility injection when fasting.  
11. Deriving sample (eg sperm) in the toilet. |
| **Fiqh Qadha** | 1. Embryologists mixing labels of patient’s seminal fluids accidentally.  
2. Presence of a witness during seminal fluid analysis/ET/insemination process/process of embryo freezing.  
3. Samples get accidentally switched during IUI procedure.  
4. Presence of a third party during ET.  
5. Presence of a third party during process of embryo freezing. |
| **General Fiqh**| 1. Patient brings sample from home but clinician is unsure that the sample is the husband’s.  
2. Using someone else’s seminal fluid other than the husband’s is used in fertility treatment.  
3. Processing the sperm before being inserted into the uterus.  
4. Abortion when multiple-pregnancies occur as a result of fertility treatment and the doctor thinks the condition is dangerous to the mother.  
5. Halal state of the media used for embryo culture.  
6. Halal state of the media used for embryo transfer.  
7. Halal state of the media used in PESA/TESA.  
8. Halal state of the drugs used in fertility treatment  
10. Using excess embryo for future treatments.  
11. Disposing of excess embryo.  
12. Using excess embryo for research.  
13. Using the sample/frozen sample of a deceased husband/wife. |
DISCUSSION

Basically, from the questions posed by patients and doctors at the fertility centre indicate the challenges faced in seeking and providing fertility treatment to Muslim patients. In addition, it also suggests that patients and doctors were rather familiar with some of the existing fatwas in Malaysia which are fertility treatments such as IVF are permitted for legally married couple. They also knew that third party involvement in terms of surrogacy is prohibited.

However, from the questions it could be clearly seen that the participants in the study were not familiar with the existing fatwas on implantation of eggs after the death of the husband or divorce because there were questions regarding this. Interestingly, there were also questions on general issues, for example seeking treatment from a medical doctor of the opposite gender, were asked. This is common knowledge that when it is dhururat the rule of mahram, person/s in which the aurah is permissible, is more lenient to allow patients to seek medical treatment even from a doctor of the opposite gender. Apart from that, the participants were concerned about specific procedures in each fertility treatment process. For example, there were queries on whether there is a need for ghusl, full body ablation, after undergoing procedures such as ovum pick-up or embryo transfer. There were also questions on the drugs and media used as well as on the use of non-halal drugs and media. In addition, participants also asked about issues pertaining to ethics related to laboratory procedures and need for the husband or witness to be available during procedures.

Clearly, the findings in this study indicate that there are a number of problems which need to be tackled by the authoritative bodies issuing the fatwas in Malaysia. The questions from participants suggest that the existing fatwas gazetted do not explain in detail each fertility treatment process and procedures from the perspectives of Islam. In regards to dissemination of information to the public, the lack of explanation and elaboration leaves a lot of room for concerns and interpretations which may result in actions against Shari’aa. This requires special attention and clarification as was highlighted in another paper that recommends a thorough research on ART from the perspectives of Islam is conducted so that such concerns can be allayed.

Thus, even though fatwas exist in Malaysia there are still a lot of issues pertaining to fertility treatment, which are not included in the fatwas. This investigation is thus timely and will serve as a basis for further investigation into the process and procedures of fertility treatments as well as ensuring that they are Shari’aa-compliant. A comprehensive guideline that is derived from the investigations of the current status quo such as done in this study and clarifications from religious experts is urgently needed. This comprehensive guideline will be a method to disseminate accurate and relevant information to Muslim patients seeking fertility treatment and for both Muslim and Non-Muslim embryologists, paramedics, clinical counsellor and doctors providing the treatment.

Implications for future research
This study is a part of a longitudinal study on fertility treatment and establishing Shari’aa-compliant guidelines for fertility treatments. A further, in-depth investigation could serve as the basis for the establishment of fertility treatment guidelines. Investigations on the issues of maqasid, ethics, process and procedures of each fertility treatment, the halal status of drugs and media as well as presence of husband or witness during treatment are some of the concerns that require immediate attention. Thus further investigations are recommended to ensure that Muslim patients will have comprehensive and Shari’aa-compliant fertility treatment guidelines.

One major limitation of this study is the small sample size which makes generalization to the broader community not viable. However, since this case study was aimed at analytical rather than statistical generalization the in-depth description in the report is sufficient at explaining the uniqueness of this case for readers to make analytical generalizations.

CONCLUSION

It is clear that even though the participants were rather familiar with some of the existing Fatwas pertaining to ART and IVF in Malaysia, there are still remaining doubts which need to be clarified. This indicates that there are challenges faced in seeking and providing ART treatment to Muslim patients which need to be addressed perhaps in the form of Shari’aa-compliant guidelines that can provide a clear explanation of each process and procedure in fertility treatment.

ACKNOWLEDGEMENTS

This study was fully supported by Endowment type B (EDW B11-285-0763) grant from International Islamic University Malaysia, Gombak, Selangor.

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