

## Infertility and Assisted Reproductive Technologies In Jordan A Social Study.

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**Abstract.** A huge breakthrough in the treatment of infertility happened after the birth of Louise Brown the in 1978 the first IVF (In Vito Fertilization) in the world. This development led to the spread of ART(Assisted Reproductive Technologies) around the globe ,and ever since infertility and ART have raised a lot of attention. This study tries to discover the social context and the social motivations that may have contributed in the infertile couples's decision to seek medical help. A questionnaire was distributed on 30 patients in two hospitals in Amman ( ALISRAA, The Specialty). The patients mean age was 33.5 years with a variety of nationalities which are all from Arabic countries. After the analysis of collected data the study found: some stigma and secrecy surrounded the patient situation, the society pressure was influential in the experience of infertility and women relatively endured a bigger burden than men in the Jordanian society.

**Keywords:** infertility, Assisted Reproductive Technologies, Jordan, sociocultural context, medical sociology.

### 1 INTRODUCTION

Since the beginning of time it's always normal to get married and have children who are valued in all societies for social psychological, economical and emotional reasons. However when a couple face difficulty in conceiving they try to overcome it by any means necessary including medical treatment which developed rapidly in the last couple of decades. In September 1995 published an issue surrounding the biggest inventions that changed the face of humanity in the last century and mentioned the following : automobile, cinema, computer and a few medical inventions which included - one of ARTs- IVF , whereof indicates Assisted reproduction scientific and human importance (Rennie,1995). Assisted reproduction is worldwide phenomena, but the medical symmetry doesn't impose a parallel social reaction around the globe, on the contrary ARTs are treated differently in each culture according to the social cultural and religious context. Previous studies covered the medical, religious, legal and psychological infertility aspects, but a few dealt with social aspects and maybe none – in the limit of knowledge – were in the Arabic world by Arabs. So this study is an effort to fill the gap and explore the social dimension of the research problem.

### 2 REVIEW OF LITERATURE

#### 2.1 Infertility

In a normal population of active sexual women who are not using contraceptives 25% will be pregnant by the first month of marriage, 63% within 6 months, and 80% within the first year (Gerrity,2001) if pregnancy was delayed the couples or one of them may suffer from infertility. Infertility is the failure to achieve pregnancy after 12 months or more of

unprotected sexual intercourse (Moura-Ramous,2012). Infertility affects 8-32% of the world population, and according to world health organization WHO infertility becomes a public health issue when it accedes 15% of married couples in the country (Philippove,et al.,1998). Infertility is two types primary infertility where pregnancy never happened before and secondary infertility in which pregnancy happened once but didn't happen again (Sundby,2002).

## **2.2 Assisted Reproductive Technologies**

The center for disease control and prevention (CDC) defines ARTs as follows “ all treatments or procedures that involves surgically removing eggs from a women ovaries and combining eggs with sperm to help a women become pregnant. ARTs types are : In vitro fertilization, Gamete Intrafallopian Transfer and Zygote Intrafallopian Transfer “(Harwood,1996). Success rates vary from 20% (Inhorn,2002) to 25% live birth for each IVF cycle until the age of 34 when a women's fertility starts to decline (Fathallah,2001) . Although PGD or Preimplantation Genetic Diagnosis is one of the ARTs and it was originally developed to prevent sex related diseases , sometimes it is utilized to choose the sex of the baby due to social and cultural reasons which usually doesn't favor females (Serour,2001).

## **2.3 Sociocultural Context**

Procreation and fertility are subjects related to family which is considered privet and sensitive issue in the Arabic world, and in general the experience of infertility treatment is more sensitive in the developing countries than in the developed countries, moreover in the developed world infertility is considered a” normal” health problem (Inhorn,2002) . the cultural influence is evident on the academic research as Greil ,et al.(2012) found on one hand studies of infertility in the developing countries highly consider sociocultural context, on the other hand studies on the same issue in the developed world treat infertility as a medical and psychological issue. In the middle east the fact that people there put a great value for children and fertility may justify the sensitivity, stigma and secrecy which are relatively associated with infertility and ART procedures (Serour,2001.Inhorn,2002.Sundby,2002).

## **3 THEORETICAL FRAMEWORKS**

This study depends on the hypothesis of relatively Sex Role Theory(Ralph Linton) and mainly on Social Exchange Theory(Homans,1950.Blau1964) which states that a person enters an interaction with others to fulfill an unmet need, in the process he calculates the expected cost and value , tries to maximize the gained value and minimize the lost cost . this theory is an effort to explain decision making process which can be applied on fertility decision making in the family (Williams,1988), it is probable that infertile couples seeking ART want to have children and accomplish this desire , though they might suffer from the emotional, psychological and financial cost but they believe that the outcome in having a child will surpass the costs even with low success rates (Silva and Machado,2011), however the gained value could be to adapt in the society and better social relationships, But this value and its importance may vary between societies. Social exchange theory finds that the society may offer the individual with alternatives to achieve his need, and in the case of infertility these

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alternatives may include adoption, divorce, polygamy and because our society denies adoption – as all of Arabic societies- because of the importance of kinship in the Arabic Islamic Culture, so the couples have no way but ART , polygamy , divorce and remarriage

(Inhorn,2002). However it is much stigmatized situation to be divorced no matter to reasons with a contrast between sexes that men are less judged in a divorce, under these circumstances couples may seek ART as the first and last Resort as Williams(1988) puts it:

“ To what extent is the couples motivations and hence the market of IVF is socially constructed?” a question this study tries to answer among others.

#### 4 METHOD

In the current study a questionnaire was designed by the researcher and then judged by members of the sociology department faculty in The University of Jordan (JU) and by Marcia C. Inhorn, . Professor of Anthropology and International Affairs ,Yale University. The questionnaire included demographic and social and economic characteristics, treatment history, social and cultural aspect. The Questionnaire consisted of 65 Questions and used Likert Teriary Scale (1=disagree, 2= uncertain, 3= agree). Two different questionnaire were designed one for each sex, and it was distributed based on convenience to 30 patients who are the sample for this study during the period from January to March 2013 in ALISRAA HOSPITAL and THE SPECIALITY HOSPITAL in IVF units or “Infertility clinics” as known in Jordan, the hospitals are located in Amman. Both granted approval to the researcher. After the collection of data process was finished SPSS16.0 was used to find the descriptive data of the sample (frequency, percentage..etc), and to find if any relation existed between independent variables such as (sex,age..) and dependent variables such as ( male or female attitudes ...) using Chi Square test .

#### 5 RESULTS

##### 5.1 Demographic, Social and Economic Profile:

###### 5.1.1 Age and Sex

This study included 30 patients 15 male and 15 female, who were 13 couples and 2 males came alone from outside Jordan (Arabic countries). The respondent’s age distribution is found in Table no1 below.

Table 1. age and sex

Age	Minimum	Maximum	Mean
Male	24	51	37.7
Female	21	46	29.3

### 5.1.2 Continuance

When asked “are you willing to continue the treatment even if the current trial failed?” %73.3 intended to proceed ,%26.7 were uncertain and none of the patients disagree to continue.

### 5.1.3 Education, Nationality

: most of the respondents finished under graduate studies , however there was neither elementary nor illiteracy, the sample included different nationalities from Jordanian, details of the respondents education level is and their nationalities are found in Table no2, and Table no3.

Table 2. education

Education	Frequency	percent
Secondary	3	% 10
High school	6	% 20
Diploma	6	% 20
Undergraduate	12	% 40
Postgraduate	3	% 10
Total	30	% 100

Table 3. Nationality

Nationality	Frequency	percent
Jordanian	20	% 70
Saudi Arabian	4	% 14
Libyan	2	% 8
Palestinian	1	% 4
Yemeni	1	% 4
total	30	% 100

### 5.1.4 Income and Financial Cost

There was a variety in the economic status for the sample at hand but most were in the 200-400 JD monthly who are considered to belong to low middle class, and on the other side most couples have spent 500-2000 JD on the infertility treatment , those expenses might become a heavy load in the case of low resources. Economic characteristic of the sample are seen in figure no1 (. Monthly Income) and figure no2(ART cost)

Fig. 1. Monthly Income.

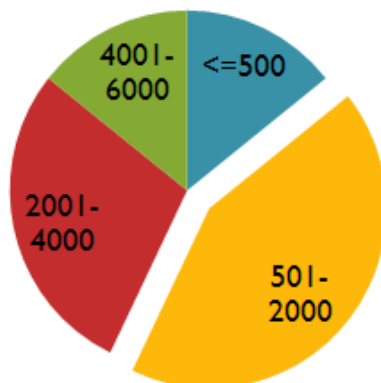
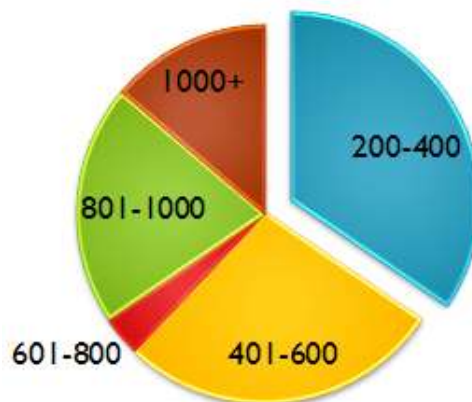


Fig. 2. ART cost



## 5.2 Treatment History

A total of %54.2 of the patients went to IVF units before the first year of marriage ended , in such a situation infertility maybe didn't exist at all , but this percent demonstrate a relatively social pressure to conceive in the first year of marriage. In context the period of treatment ranged from 0(first visit)-17 years. The reason behind seeking ARTs wasn't different between male factor(%20) and female factor(%23), and some couples seek PGD(%10) to choose the sex of the baby these patients were less sensitive and more open probably because they were fertile, some said he have a girl but wants a boy, others have many girls and one boy and wants more boys, but some were infertile earlier but had a girl throw ART now they return to have a boy. The rest was infertility reason unknown(%34) or both had infertility causes(%13).

## 5.3 Social Motivations and attitudes

### 5.3.1 Society Pressure

In total 66.1% agreed on statements indicates the existence of social pressure to procreate quickly and treat infertility.

### 5.3.2 Stigma and Secrecy

Over all 58.5% agreed on statements represents feelings of stigma and secrecy surrounding Infertility and ART.

### 5.3.3estimated cost and expected value

Over In six statements the main hypothesis was:" ART is costly financially and physically but the value of a child accedes the cost" .analysis showed that 70% of respondents indicated a belief in the hypothesis.

### 5.3.4 Women carry a bigger burden

Some statements were stated to measure burden difference according to sex,Overall 78.5% thought women do carry the big burden in infertility and treatment.

### 5.3.5- Male Preference

Some statements were designed to measure if respondents are motivated to have a boy throw PGD test. the analysis showed 63.3% participants attitudes were towards male preference even if they already had girl.

To have a better understanding toward the social motivations and attitudes the following sentences were taken from the questionnaire ,the respondents response to them and which variable they represent in Table no4 below.

Table 4. social attitudes and motivations

Variable	Sentence	Agree%	Uncertain %	Disagree %
Society pressure	People usually expect pregnancy during the first year of marriage.	%93	%3.3	%3.3
<i>Stigma and Secrecy</i>	When I meet new people I intentionally don't mention undergoing IVF cycles	%72.9	%6.9	%20.7
Cost & value	Although ART is expensive and tiring, I won't stop my trials until I have a child.	%86.2	%6.9	%6.9
Women bigger burden	In the case of infertility even its male factor , society usually blames the wife	%78.5	%1.9	%19.75
Male Preference	If an IVF cycle results with a girl I will repeat it in order to have a boy	%63.3	%10	%26.7

## 5 CONCLUSIONS

The study found that the usual preference in marrying younger women is still practiced in Jordan , there was an indication that Jordan is medically advanced which explain the diversity in nationalities found. IVF and IUI and other ART procedures are found among different economic status which means that the lower classes is going under society pressure to have a child regardless to the financial cost. The position of infertility in Jordan the Arabic society is relatively: sensitive, stigmatized, confidential, a female suffering and a male seeking. However the results may be an indicators, but remains limited to the sample, this sample is a small sample as a result to the difficulties that faced the researcher such as the rejection of a number of hospitals to maintain patients privacy, rejections of a big number of patients and other difficulties there is no room to explain it here. a further research is advised to explore

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the medical staff in IVF units opinions in the issue of infertility and ART from the service provider point of view.

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