Bioscene

A Descriptive Study to Assess the Knowledge and Attitude Regarding in Vitro Fertilization (IVF) among Infertile Couples in Gynaecology OPD Of SMGS Hospital, Jammu (J&K)

Jyoti Kapoor

M. Sc Nursing (Obstetrics & Gynaecological Nursing)
Govt. Medical College, Bakshi Nagar, Jammu
Jammu & Kashmir (India)

Dr. Rita

M.B.B.S, MS Lecturer
Department of Gynaecology/Obstetrics,
SMGS Hospital, Jammu (J&K)

Abstract:*Infertility affects both men and women of reproductive age in all parts of the world. In some regions infertility is found to be widespread and its prevalence reaching such proportions that it can be considered a public health problem affecting the life of the whole society. In India, 18.5% of married women are childless. As a whole there are 5.6% of woman in the 30-49 age group who are childless and the percentage in rural and urban areas are almost the same. Knowledge about infertility is inadequate in many parts of the world. A global survey from 10 countries revealed that knowledge regarding fertility and biology of reproduction was poor. The desire for motherhood leads the couple to search for the possible alternative solutions for infertility such as surrogacy, ZIFT, GIFT and IVF. Among all of these, IVF itself presents the most viable and reliable alternative for infertility. The present conducted to assess the knowledge and attitude regarding in vitro fertilization among infertile couples in gynaecology OPD of SMGS Hospital, Jammu. The sample consisted of 100 infertile couples. Purposive sampling technique was used to select the subjects. Socio-demographic profile, a structured knowledge questionnaire and a attitude scale regarding IVF was used to collect personal information. The results revealed that majority (87%) of infertile couples had average knowledge, (11%) had good knowledge and only (2%) had poor knowledge regarding IVF. Majority (62%) of infertile couples had negative attitude and only (38%) had positive attitude regarding IVF. **Keywords:** Infertile couple, In vitro fertilization, Gynaecology OPD*

1. Introduction

To be the part of creation, the most beautiful and cherishing experience that a person ever has. Nature has bestowed this productive capacity only in the lives of the women and every woman cherishes this experience of motherhood. To become a mother is like a flowering process which is considered as fulfillment of life. Though it is counted as the most dignified moments and experience in life, many women remain in the great depression and sorrow for not being able to be a mother due to infertility problem.[1]

Infertility affects both men and women of reproductive age in all parts of the world. In some regions infertility is found to be widespread and its prevalence reaching such proportions that it can be considered a public health problem affecting the life of the whole society. Recently published studies revealed that infertility affects about 1 in 6 couples during their lifetime and is more frequent in obese. On the other hand, the mood disorders may exacerbate the hormonal disturbances and worsen the effectiveness of infertility management.[2]

In India 18.5% of married woman are childless. As a whole there are 5.6% of woman in the 30-49 age group who are childless and the percentage in rural and urban areas are almost the same. Infertility is surrounded by many mistaken beliefs about its causes, such as witch craft and possession by evil spirits, and these beliefs negatively affect its management. Social stigma regarding infertility is especially common across South Asia.[3]

The risk factors for infertility include smoking, obesity, alcohol consumption, advanced maternal age, sexually transmitted infections, and many others. Women facing infertility exhibit significantly more tension, hostility, anxiety, depression, self-blame, and suicidal ideation. Many women are verbally or physically abused in their own homes, deprived of their inheritance, sent back to their parents, ostracized, looked down upon by society, or even have their marriage dissolved or terminated if they are unable to conceive. Increasing the level of knowledge of these factors may help to decrease the incidence of infertility by allowing women to avoid certain risk factors that might lead to it. This knowledge may also help wider society to understand and empathize with the infertile women, which may lead to a decrease in the psychological burden to that affected.[4]

Knowledge about infertility is inadequate in many parts of the world. A global survey of almost 17,500 women (mostly of childbearing age)

from 10 countries revealed that knowledge regarding fertility and biology of reproduction was poor.[5]

The desire for motherhood leads the couple to search for the possible alternative solutions for infertility such as surrogacy, ZIFT, GIFT and IVF. Among all of these, IVF itself presents the most viable and reliable alternative for infertility.[6]

IVF procedures used to treat infertility or genetic problems and assist with the conception of a child. During IVF, mature eggs are collected (retrieved) from a woman's ovaries and fertilized by spermatozoa in the laboratory.[7]

The pioneering work of Patrick Steptoe and Robert Edwards gave birth to "In-vitro fertilization" and Louise Joy Brown, the first test tube baby, was born on the 25th of July, 1978. Since then, the science of IVF has taken the world by storm and this technology with its various processes are now been made available in almost every country though the developing countries still lag behind.[8]

In Nigeria, few government and private establishments have successfully adopted and promoted this technological process and it is operational. Still, the populace is not well informed about its presence and availability and trying to do this has been another herculean task.[9]

Objectives

1) To assess the knowledge regarding IVF among infertile couples.
2) To assess the attitude regarding IVF among infertile couples.
3) To determine the correlation between knowledge and attitude regarding IVF among infertile couples.

2.   Methodology

For the present study, **Descriptive research approach** and **Non Experimental research** design was used. The research setting was **Gynaecology OPD of SMGS Hospital, Jammu (J&K).** The sample consisted of 100 infertile couples. Purposive sampling technique was used to select the sample. Prior to the data collection procedure, formal permission was obtained from the Superintendent of hospital. Socio-demographic profile, a Structured knowledge questionnaire and a Attitude scale regarding IVF was used to collect personal information. Socio-demographic profile included age, religion, educational status, family income (in rupees), type of family, duration of marriage, number of

attempts to infertility treatment. The review of literature, expert's opinions and investigator's own experience provided the basis for construction of tool.

Data collection was done in the month of October 2017. Prior to interview the questionnaire to the infertile couples, investigator gave self introduction to the subjects and explained the purpose of gathering information. A good rapport was established with the subjects. They were assured that their responses will be used kept confidential and the information will be used only for research purpose. Formal consent was taken from subjects. The time taken by each respondent for filling the tool was average for 15-20 minutes. The data gathered was analyzed and calculated by percentage, mean, standard deviation and chi square.

Description of tools

Part II: Structured knowledge questionnaire regarding IVF

Structured knowledge questionnaire was prepared to assess the knowledge regarding IVF among infertile couples. It consists of 18 multiple choice questions each having three options. Each correct answer carries 1 mark and wrong answer carry 0 mark. Maximum knowledge score was 18 and minimum knowledge score was 0.

Structured knowledge questionnaire regarding IVF was categorized into 3 levels.

Level of knowledge	Score	(%)
Good	13-18	≥72%
Average	7-12	34-71%
Poor	0-6	≤33%

Part III: Attitude scale regarding IVF

Attitude scale was divided into 2 categories i.e Positive (≥40) and Negative (<40).

Attitude	Total score
Negative attitude	<40
Positive attitude	≥40

3. Results

Section-I

Sample Characteristics

Table-1

Frequency and percentage distribution of sample characteristics

N=100

Demographic variables	Frequency (n)	Percentage (%)
Age (in years)		
35-40	49	49
41-45	40	40
46-50	11	11
Above 50	0	0
Educational status		
Primary	0	0
Middle	0	0
Matric	16	16
Senior secondary	49	49
Graduate or above	35	35
Religion		
Hinduism	38	38
Islam	0	0
Sikhism	38	38
Christianity	24	24
Family income (in rupees)		
Upto 5000/-	0	0
5001-10,000/-	6	6
10,001-15,000/-	42	42
Above 15,000/-	52	52
Type of family		
Nuclear	52	52
Joint	48	48
Duration of marriage		
1-5 years	67	67
6-10 years	24	24
11-15 years	9	9
Above 15 years	0	0
Number of attempts to infertility treatment		

1	33	33
2	45	45
3 and above	22	22

Table 1 reveals that majority of infertile couples were in the age group 35-40 years, passed senior secondary, had family income above 15,000 rupees per month and belonged to nuclear families. Majority of infertile couples had marriage duration of 1-5 years belonged to Hinduism/Sikhism and already had taken infertility treatment 2 times

Section-II

Objective Wise Analysis

Objective 1: To assess the knowledge regarding IVF among infertile couples

Table 2

Frequency, percentage and mean distribution of infertile couples according to level of knowledge regarding IVF

				N= 100
Levels of knowledge	**N**	**(%)**	**Mean**	**SD**
Good (≥ 72%)	11	11		
Average (34-71%)	87	87	10.45	1.97
Poor (≤33%)	2	2		

Maximum score= 18
Minimum score= 0

Table 2 reveals the frequency, percentage and mean distribution of infertile couples according to their level of knowledge regarding IVF. Majority (87%) of infertile couples had average knowledge, (11%) had good knowledge and only (2%) had poor knowledge regarding IVF.

Hence, it was concluded that majority of infertile couples had average level of knowledge regarding IVF.

Objective 2: To assess the attitude regarding IVF among infertile couples.

Table 3

Frequency, percentage and mean distribution of infertile couples according to attitude towards IVF.

				N=100
Attitude	**N**	**(%)**	**Mean**	**SD**
Positive (≥40)	38	38	39.42	7.82
Negative(<40)	62	62		

Positive attitude = ≥40
Negative attitude = <40

Table 3 depicts frequency, percentage and mean distribution of infertile couples according to their attitude regarding IVF. Majority (62%) of infertile couples had negative attitude and only (38%) had positive attitude regarding IVF.

Objective 3: To determine the correlation between knowledge and attitude regarding IVF among infertile couples.

Table 4

Correlation between knowledge and attitude regarding IVF among infertile couples

			N=100
Variables	**Mean**	**SD**	**r**
Knowledge	10.45	1.97	0.67^{NS}
Attitude	39.42	7.82	

Maximum score = 18
Minimum score = 0
Positive attitude
=   ≥40
Negative attitude = <40

NS=Non significant

Table 4 represents the correlation between knowledge and attitude regarding IVF among infertile couples. The coefficient of correlation between knowledge and attitude was calculated by using Karl Pearson correlation

coefficient formula which was found to be non-significant i.e. (r=.067) at p<0.01 and weakly positive correlated with each other.

Hence, it was concluded that as the knowledge of infertile couples increases, attitude also changes the same and vice versa.

4. Discussion

Objective1: To assess the knowledge regarding IVF among infertile couples.

The analysis of data about knowledge among infertile couples regarding IVF revealed that 87% of the infertile couples had average knowledge whereas 11% were had good knowledge and only 2% were had poor knowledge regarding IVF. So majority of the infertile couples were having average knowledge regarding IVF. Similar study conducted on knowledge and attitude of infertile couples about assisted reproductive technology in Tehran. A self structured questionnaire was used to collect data from 400 infertile couples which revealed that less than half i.e 44.3% couples had average knowledge and 55.7% had poor knowledge regarding Assisted reproductive technology.[10]

Objective 2: To assess the attitude regarding IVF among infertile couples.

The analysis of data regarding IVF attitude among infertile couples revealed that majority (62%) of infertile couples had negative attitude and only (38%) had positive attitude towards IVF. These findings were consistent with the study on IVF staff attitude towards oocyte donation: A multi-centric study from Iran and Turkey. A general demographic information and 20 questions on knowledge and attitude was used to collect data from 163 individuals which revealed that 66% subjects had completely disagreed and had negative attitude towards IVF.[11]

Objective 3: To determine the correlation between knowledge and attitude

regarding IVF among infertile couples.

The correlation between knowledge and attitude regarding IVF among infertile couples was found to be significant which means that as the knowledge of infertile couples increases the attitude also and vice versa. A cross sectional study conducted on knowledge, attitude and practices of infertility among Saudi couples. A previously validated interview questionnaire was used to collect data from 277 infertile couples. The revealed that there was neutral attitude of couples towards IVF but as per our study is concerned the attitude was positive probably due to more awareness among couples and due to impact of mass media.[12]

5.   Conclusion

Based on the findings of the study it is concluded that there was a knowledge deficit existed among infertile couples. Thus, continuous reinforcement is needed by the health professionals by giving health education through various means will improve the knowledge, develop favourable attitude and practice on management of infertility.

References

1. Malini Kalkal, Surrogacy from a feminist perspective. Indian Journal   of Medical Science (IJME). 2010; 5(4):232

2. T. Kanagalakshmi1, Koushal Dave2, Molly Babu3, Daisy Thomas4 Study

3. www.slideshare.net

4. www.ncbi.nlm.nih.gov

5. Overview - In vitro fertilization (IVF) - Mayo Clinic.

6. www.mayoclinic.org.

7. Sohrabvand F, M.D., jafarabadi M, M.D., knowledge and attitudes of infertile couples about assisted reproductive technology. Iranian journal of reproductive. 2005;3(2): 90-94.

8. BBC. The birth of the world's first 'test-tube baby' has been announced in Manchester (England). Louise Brown was born shortly before midnight in Oldham and District General Hospital.1978.

9. Habbema JDF (2008) Is affordable and cost-effective assisted reproductive technology in low-income countries possible? What should we know to answer the question? Hum Reprod 2008; 8(1): 21-24.

10. Sohrabvand F, Jafarabadi M. Knowledge and attitudes of infertile couples about assisted reproductive technology. Iranian Journal of Reproduction Medicine. 2005; 3(2): 90-94.

11. Ali Khalili M. Isikoglu M et al. IVF staff attitude towards oocyte donation: A multicentric study from Iran and Turkey. ResearchGate; 2008.

12. Abolfotouh M. A Alabdrabalnabi A et al. Knowledge and practice of infertility among Saudi couples. International Journal of General Medicine. 2013; vol.6: 563-73.