



A STUDY TO ASSESS THE SOCIO DEMOGRAPHIC PROFILE, KNOWLEDGE, AWARENESS, MYTHS REGARDING INFERTILITY AND ITS IMPACT ON MARITAL RELATIONSHIP IN INFERTILE COUPLES ATTENDING OPD OF A TERTIARY CENTRE

Gynaecology

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ABSTRACT

Infertility is growing health issue in India. The percentage of population having infertility has increased dramatically in recent decades and is expected to increase. According to the Indian Society of Assisted Reproduction, infertility currently affects about 10 to 14 percent of Indian population. Nearly 27.5 million couples actively trying to conceive suffer from infertility in India.

AIM- This study was done with the aim to establish the socio-demographic profile, knowledge awareness regarding infertility in study population.

METHOD- The present study was conducted in department of obstetrics and gynaecology, S.N. Medical college, agra and total of 408 infertility couples attending infertility clinic over period of 1 year were included.

It was a cross sectional survey. A printed questionnaire was given to the participants and the data was collected.

RESULTS- This study revealed that mean age of study population was (20-29) year and maximum cases were having infertility of < 5 year duration. There was lack of knowledge regarding factors leading to infertility. Only 20% of the cases were having right information. Knowledge regarding Assisted Reproductive Technology was also deficient and it was not widely accepted due to social and economical reasons.

KEYWORDS**INTRODUCTION:**

Infertility implies apparent failure of couples to conceive for at least one year of trying to do so without using any means of birth control¹. Normally it is observed that -50% couples conceive within 3 months of regular unprotected intercourse, 75% in 6 months and 80-85% conceive within a year.²

An extended definition of infertility- includes women who can conceive but cannot carry a pregnancy to the full term, that is women who suffer repeated or habitual abortions (WHO, 1991).³ Infertility is a global health issue, affecting approximately 8-12% of couples worldwide during their reproductive age there by affecting 50-80 million people.⁴

India accounts for nearly 5 to 10 million of infertile couples and this number is constantly rising at the rate of 5% every 2 years (Nagaraj 2000)

The WHO Population Prospects: The 2017 Revision Report estimates that the fertility rate of Indians has plummeted by more than 50% from 4.97 during 1975-80 period to 2.3 for the current period of 2015-20. By 2025-30 the report projects the rate will nosedive further to 2.1. A fertility rate of about 2.2 is generally considered the replacement level, the rate at which the population would hold steady when the fertility rate dips below this number, the population is expected to decline 0.

The WHO estimates the overall prevalence of primary infertility in India to be between 3.9% to 16.8%. Estimates of infertility vary widely among Indian states from 3.7% in Uttar Pradesh, Himachal Pradesh and Maharashtra to 5% in Andhra Pradesh and 15% in Kashmir. Prevalence of primary infertility is different across tribes and cities within the same region in India.⁵

Infertility is a source of distress for couples as societal norms and perceived religious dictums may equate infertility with failure on a personal, interpersonal, emotional or social level. Women have been then burnt of these societal perceptions in most of the cases. Psychologically, the infertile women exhibits significantly higher psychopathology in the form of tension, hostility, anxiety, depression, self-blame and suicidal ideation⁶. Social stigma attached to infertility is especially common across South Asia for e.g. in Andhra Pradesh, India 70% of women experiencing infertility reported being punished with physical violence for their failure.⁷ Knowledge about infertility is inadequate in many parts of the world. A global survey of almost 17,5000 women (mostly of childbearing age) from 10 countries revealed that knowledge regarding infertility and biology of reproduction was poor.^{8,9} In addition to the low level of knowledge, there are a number of misconceptions regarding infertility all over the world. Research exploring the knowledge behavior, perceptions and practices regarding infertility or certain treatment options have been carried out in Nigeria, Iran, Wales, South Africa¹⁰ and other countries

but a very limited data is available from our country.

With this study we hope to achieve a better understanding of the level of awareness and misconception of infertility in India, which has not been explored.

AIM: To establish the prevalence of infertility, knowledge and myths regarding infertility and its psychological impact.

MATERIAL & METHOD: Cross sectional survey

The present study was carried in Deptt. Of Obst & Gynae S.N. Medical College, Agra over a period of 1 year (Oct '2017 to Oct '2018). A total of 408 infertile couples attending Gynae OPD were included in the study.

INCLUSION CRITERIA-

1. The infertile couples (Primary & Secondary infertility)
2. Who are willing to participate
3. Who are available during the collection

METHOD

After taking a written informed consent participants were interviewed one by one and privacy was ensured. The interview was conducted in their native language in using a structured pre-tested questionnaire and lasted between 12-15 minutes.

Following things were assessed using questionnaire-

- Knowledge regarding infertility
- Couples attitude towards infertility
- Effect of infertility towards marital outcome
- Prevailing myths regarding infertility in the society
- Knowledge regarding latest assisted reproductive techniques

RESULTS

A total of 408 infertile couples were included in the study. Mean age being (25 +3 years). According to their educational status they were divided into 2 levels-

- ü Level 1 (Below matriculation)
- ü Level 2 (Matriculation and above)

64.9% of study population belong to level 2.

61.27% of study population were hindu, 29% muslims and 9.32% were Christians. Maximum of number of cases were having infertility of < 5 years duration and only 23 couples were having infertility of > 15-20 years.

Table 1 – Socio – Demographic profile of the individuals interviewed

Knowledge regarding infertility

Only 30% participants were aware about when to label a couple

infertile .Others were having belief that it labeled either less than 12 months or more than 3 years .

(Figure 1) Other thing we inquired about the role of each partner in infertility . Majority (52%) had answered that it was because of female factor , 20 % blamed male factor and rest 28% responded that it is because of both male and female factor defect.

When we inquired about the main cause of infertility 68% of the participants correctly indentified menstrual irregularity, tubal blockage and genital infections as a cause of infertility .

Importance of fertile period, correct knowledge about fertile days was there in only 30% of the participants.

Common myths prevailing in the society regarding infertility were previous use of Oral contraceptives, Intrauterine devices use and role of Supernatural powers (Black magic).The less educated participants were more likely to attribute the causes of infertility to an evil power , while the educated ones held nutrition, marital and psychosexual factors responsible for their infertility **(Table 2)**

These findings were same as in other study done on Kuwatic population.

Infertility was also found to have impinged on the stability of marital relationships by causing conflicts in their relationship .This confirms the assertion made by Koenig et al ⁸(Era -8) that infertility has a link with conflicts in marital relationships.

On assessing their knowledge regarding ART (Assisted Reproductive Techniques) in our study population only 40.63% couples were aware about them. They have heard of IVF techniques only sources being newspaper (50%), Doctors (18%), friends (12%), internet (10%) and family (10%). The ART techniques were not widely acceptable cause being cost (30%) cases, social reasons(40%) cases , religious reasons (20%) cases and lack of surety/guarantee (10%) cases. In our study group 30% cases were IVF failures. There was paucity of knowledge regarding other Artificial reproductive techniques such as ICSI,IUI and GIFT in the study population. **(Table 3)**

DISCUSSION

On assessing the various factors related to infertility it was observed that there is paucity of knowledge regarding infertility in our society. The population is unaware about when to label a couple infertile and seek treatment. In our society max infertile couples were in the age group of (20-29)yr . The results were similar to the study by Adamson PC³ et al and Hassan KES¹⁵

In study by Adamson 45% had secondary education and 30% had primary education where as our study 52.69% were educated below matriculation level and 47.3%were educated above matriculation level

- Max couples were having infertility
- max population 61.27%were hindus
- < 5 yrs devation

Our study also indicates that there is lack of knowledge regarding infertility in general population . Various misconceptions were prevalent in study group (related with use of oral contraceptives and intra uterine devices)

The result of our study were similar to that of a large global survey conducted during the World Fertility Awareness Month (2006), which revealed that the knowledge regarding fertility and biology of reproduction was lacking throughout the world .⁹

Another important issue we had studied was couples altitude towards infertility . 80% of study couples believed that infertility is a disease and to be treated medically .40% says that it is the female partner which is responsible and to be treated first. Study conducted by Sami et al.¹³ 69 % of the secondary infertile women reported being blamed for infertility.

There was low awareness about ART . The most important factor in ART treatment , especially in developing countries where the treatment is privately funded in the midst of lack . Survey among the general population in Europe among the general population in Europe and US showed that 90% knew of IVF but less than 25%knew about

the chances of success .¹⁴(Milne B.1996)

There is widespread unawareness and misconception regarding ART among study population. Moreover the respondents are reluctant to the use of ART because of the fear of failure as no guarantee is given to the patients about the success rate of treatment.

Infertility was also found to have impact on marital relationships by causing conflicts in the relationship of participants. This confirms the assertion made by Koeing et al¹⁰ that infertility has a link with conflicts in marital relationships.

Tufts et al ¹¹ also reported that marital relationships may suffer especially when couples are dealing with infertility and may this avoid interactions with their friends particularly those who are pregnant as well as well as families who have children

CONCLUSION

Infertility is an under researched condition that is wrecking marriages and even peoples lives . Childbearing is considered an essential role in life and a yardstick by which womens worth is measured , so infertility invites social stigma . It is time we recognise it as a perilous personal and public health issue

Given the magnitude of the problem, India urgently needs to work on strong legislation. Passage of the Assisted Reproductive Technology (Regulation)Bill 2010 which has been five years in the makeup can go long way in streamlining the surrogacy industry.

Knowledge about ART (N =816)

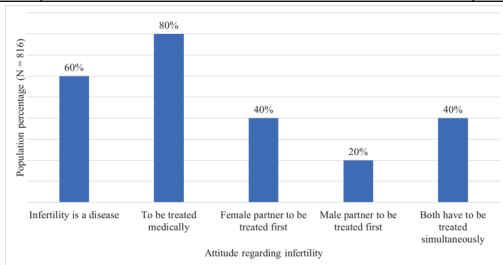
Sr. No.	Question		Number	Percentage (%)
1.	Do you know about Artificial Reproductive Technologies?	Yes	332	40.63
		No	484	59.31
2.	If yes, which one?	IVF		
		ICSI		
		IUI		
		ZIFT		
3.	How u came to know about it?	Internet		10
		Newspaper		50
		Doctors		18
		Friends		12
		Family		10
4.	Did you ever use the technique for conceiving?	Yes		30
		No		70
5.	If no, why?	Economic reasons		30
		Social reasons		20
		Religious reasons		40
		No guarantee		10
6.	If yes, where?	Outside state		Nil
		Within state		30
7.	What were the results?	Failed		30
		Successful		Nil

Socio-demographic characteristics of participants

Characteristic		Number	Percentage (%)
Age (in years)	20-29	650	79.65
	30-39	100	12.25
	40-49	66	8.08
Education level	Below matriculation	430	61.27
	Matriculation and above	386	47.30
Religion	Hindu	500	61.27
	Muslim	240	29.41
	Christian	76	9.3
Duration of infertility	< 5 years	510	
	5 – 10 years	200	
	10 – 15 years	60	
	15 – 20 years	46	

Knowledge of the participants regarding the factors which influence infertility

Sr. No.	Factors	Yes (%)
1.	Abnormal menses (ovulatory factors)	80
2.	Blocked tubes	90
3.	History of infection in females	75
4.	History of infection in males	70
5.	Smoking	20
6.	Previous use of contraceptive pills by females	60
7.	Previous use of intrauterine device by female	50
8.	Regular exercise	10
9.	Psychological stress	60
10.	Being obese	60



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