A DESCRIPTIVE STUDY WAS CONDUCTED TO ASSESS THE KNOWLEDGE OF INFERTILE FEMALES REGARDING INFERTILITY AT SELECTED HOSPITALS OF NELLORE, ANDHRA PRADESH

Mrs. K. Sridevi* | Dr. Kuldeep Singh Gurjar**

*Ph.D Nursing Student, Mangalayatan, University, Aligarh, Uttar Pradesh, India.

**Professor, Supervisor, Mangalayatan, University, Aligarh, Uttar Pradesh, India.

DOI: <http://doi.org/10.47211/trr.2021.v07i02.001>

ABSTRACT

Infertility is a global health issue. It is not merely a health problem. It is also a matter of social injustice and inequality. Infertility affects relatively large number of couples at some point in their reproductive lives. The Objectives of the study are: To assess the knowledge of infertile females regarding infertility, to find out the association between the knowledge of infertile females on infertility and selected demographic variables. Infertility varies across regions of the world and is estimated to affect 8 to 12 per cent of couples Total infertility is divided into primary and secondary infertility. Definitions of primary infertility vary between studies, but the operational definition, put forth by the WHO, defines primary infertility as the "Inability to conceive within two years of exposure to pregnancy (i.e. - sexually active, non-contraceptive, and non-lactating) among women 15 to 49 yr old". Secondary infertility refers to the inability to conceive following a previous pregnancy. Globally, most infertile couples suffer from primary infertility. Without accurate, region-specific data, it is not possible to identify and comprehensively treat infertile men. Therefore, to bridge this gap in knowledge, we have consolidated current data and, where recent information is lacking, estimated rates of male infertility using pre-existing data on female infertility in areas around the world. Methods: Descriptive study design was used to achieve the objectives of the study. One hundred and fifty infertile female were selected by purposive sampling method and data were collected from them by using close ended questionnaire. Analysis of the data was done by using descriptive and inferential statistics. Analysis of findings revealed that the total level of knowledge on infertility revealed that the highest 120 (80%) percentage of the infertile females had inadequate knowledge and 30 (20%) moderate knowledge. The overall mean knowledge of the infertile females' was 14.52 and S.D 6.14.

Keywords: infertile female, Nellore, female infertility.

ABOUT AUTHORS:

Author Mrs. K. Sridevi is Ph. D Scholar at Mangalayatan, University, Aligarh, Uttar Pradesh, India.

Author Kuldeep Singh Professor, Supervisor at Mangalayatan, University, Aligarh, Uttar Pradesh, India.

INTRODUCTION

Having a child is the most wonderful thing. In Indian society, if a woman does not conceive within one year after marriage, it is considered as a great failure of her fertility. In all countries, being pregnant or to produce a child is considered as a major and expected event in the family.

Infertility is a global health issue. It is not merely a health problem. It is also a matter of social injustice and inequality. Infertility affects relatively large number of couples at some point in their reproductive lives.³

Globally between 50-80 million couples (WHO), it is estimated that 10-20% of these couples will be unable to conceive after one year of trying to become pregnant, hence suffering from primary infertility. According to Delhi IVF fertility research centre, infertility affects as many as 1 in 6 couples in India. Males are found to be solely responsible for 20-30% of infertility cases and contribute to 50% of cases overall. However, this number does not accurately represent all regions of the world. Indeed, on a global level, there is a lack of accurate statistics on rates of male infertility. Our report examines major regions of the world and reports rates of male infertility based on data on female infertility. (Sumita Dutta et. al. 2007)⁹

India - Total fertility rate In 2020, fertility rate for India was 2.2 births per woman. Fertility rate of India fell gradually from 5.5 births per woman in 1971 to 2.2 births per woman in 2020. Birth rate: 17.4 per 1,000 people. Male infertility statistics India All India Institute of Medical Sciences (AIIMS) have reported that over 12–18 million couples in India are diagnosed with infertility every year. They have reported that while the sperm count of a normal Indian adult male used to be 60 million/ml three decades ago, it now stands at around 20 million/ml by 14-Jan-2019

The Objectives of the study are:

- To assess the knowledge of infertile females regarding infertility.
- To find out the association between the knowledge of infertile females on infertility and selected demographic variables.

Need for the study:

The national family health survey (NFHS) estimates childlessness as 2.4% of currently married women over 40 years age of India. (Ranjith. Guha et.al.2007)¹⁰

Infertility can be attributed to many causes. Statistically 35-40% of infertility causes are attributed to women, 35-40% to men and the rest of a mix with unexplained factors. (Supriya Benzbaauruah, 2007)¹¹

There are several causes involved in infertility for both men and women. A woman's chances of becoming pregnant decreases as she grows older. Younger couples are more likely to seek infertility treatment, since a healthy 30 years old woman's chances of becoming pregnant drops from 20% to 5% .(Centre for disease control, 2005)¹²

A study was conducted on 16000 semen samples from 6 laboratories in 5 Indian cities reported diversity in the prevalence of azoospermia, it was extremely high in Kurnool in Andhra Pradesh and in Jodhpur, in Rajasthan (38.3% and 37.4% respectively). fifty-one percent of Andhra Pradesh people especially Kurnool district had more prevalence of infertility due to oligozoospermia .(Supriya Benzbaauruah, 2007)¹³. The childlessness was not voluntary by the fact that more illiterate women (6.2%) were childless compared to educated women (5.62%) and that the levels of childless were similar in rural and urban areas. (Dr.Sharma. 2010)¹⁴. According to the IIPS (International Institute of Population Services) Study, Tamilnadu fared the worst among Indian states with almost 11% of married women being childlessness compared to the national average of 6.3%. Infertility is considered as an emerging problem in Chennai, Hyderabad, Manipur as 1 in 4 (nearly 20%) women were being childless. (Dr Usharam, 2010).¹⁵

A study was conducted on infertility problems (low sperm count, problems in the vagina and the hymen, uterus and fallopian tube defects) among IT professional couples in Bangalore. Results have shown that in India infertility has largely become more of lifestyle problem than a medical problem, due to the fast paced life style, stress, long working hours, night shifts and other causes which affect health may result in decreased fertility among young couple residing at cities. (sahana charan, 2007)¹⁶

A community based survey was conducted on perceptions, causes and consequences of infertility among the chenchu tribes of India. The study stated that their treatment seeking behaviour, dietary habits are based on their traditional knowledge of herbs and spiritual beliefs. The actual causes of infertility are related to STDs, abortions and adolescent sterility. The study concluded that infertility has been considered as both a health and a social

problem in India. So there is a pressing need for imparting both preventive and curative medical care. (Meera Guntupalli. 2004)¹⁷

Andhra Pradesh has a high incidence of childlessness compared to the rest of India. A study was conducted on treatment seeking of childlessness among married women aged 20 years or more Rangareddy district in Andhra Pradesh. Results have shown that the rate of childlessness was 5% on average. They started allopathic treatment and traditional treatments. About ten percent had adopted children. The study concluded that there was a clear need for infertility investigation and treatment to be included in the reproductive health programme in India. (Sayyed Unisha, 2002).¹⁸

A large number of women experienced negative social consequences including marital instability, stigmatization and abuse. The delivery of good infertility care in a community requires awareness of the implications of infertility and insight into the context in which these occur. Since many of the negative social implications of infertility are probably rooted in low status women in the developing world, effective intervention will ultimately require social, economic and political changes. (Abrahams 2009)¹⁹

Infertility varies across regions of the world and is estimated to affect 8 to 12 per cent of couples worldwide. Underlying these numbers exists a core group of couples, estimated to be 3 to 5 per cent, who are infertile due to unknown or unpreventable conditions. A prevalence of infertility above this level suggests preventable or treatable causes⁴. Infertility tends to be highest in countries with high fertility rates, an occurrence termed "barrenness amid plenty"⁵. Many studies have been conducted in the Africa, where the reported prevalence of infertility ranges from 9 per cent in Gambia to 30 per cent in Nigeria⁶.

Total infertility is divided into primary and secondary infertility. Definitions of primary infertility vary between studies, but the operational definition, put forth by the WHO, defines primary infertility as the "Inability to conceive within two years of exposure to pregnancy (i.e. - sexually active, non-contraceptive, and non-lactating) among women 15 to 49 yr old"⁷. Secondary infertility refers to the inability to conceive following a previous pregnancy. Globally, most infertile couples suffer from primary infertility⁸.

Sexually transmitted infections (STIs) are generally considered the leading preventable cause of infertility worldwide, especially in developing countries^{2,6}. STIs cause approximately 70 per cent of all pelvic inflammatory disease (PID) cases, which often result in tubal damage. A large study conducted by the WHO in 25 countries, with over 5800 couples, found that over 85 per cent of the infertility among African women was attributable to infection, compared to only 33 per cent in women worldwide.

Among Indian women reporting primary infertility and PID, STI prevalence was high³. The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 and 16.8 per cent⁴. Estimates of infertility vary widely among Indian states from 3.7 per cent in Uttar Pradesh, Himachal Pradesh and Maharashtra¹¹, to 5 per cent in Andhra Pradesh¹², and 15 per cent in Kashmir¹³. Moreover, the prevalence of primary infertility has also been shown to vary across tribes and castes within the same region in India. However, it should be noted that many of these estimates use different definitions of infertility and consider different time periods, which makes direct comparisons difficult between any studies.

There are sparse data on the prevalence of primary infertility in India³ and almost none from southern India. The objectives of this study were to estimate the prevalence and describe the epidemiologic correlates of primary infertility within a sample of sexually active reproductive-age women in Mysore, the second largest city in the State of Karnataka, India.

Infertility is a worldwide problem, and according to Sharlip et al, it affects 15% of couples that have unprotected intercourse [1]. Although this statistic is commonly cited, it is an amalgamation of numbers taken from around the world and thus does not reflect rates in specific countries and regions. On a global scale, accurate information regarding rates of male infertility is acutely lacking, and has not been accurately reported.

Calculating regionally based male infertility rates is challenging for a number of reasons. First, population surveys generally interview couples or female partners of a couple who have unprotected intercourse and wish to have children. This is a very specific population. As such, data from a significant number of infertile individuals is never included, which may bias the data.

Second, unlike female infertility, male infertility is not well reported in general but especially in countries where cultural differences and patriarchal societies may prevent accurate statistics from being collected and compiled. For example, in Northern Africa and Middle East, the female partner is often blamed for infertility. Men, therefore,

do not usually agree to undergo fertility evaluation, resulting in underreporting of male infertility. Furthermore, polygamy is a common practice in many cultures. One of the reasons for polygamy is to overcome infertility and increase the probability of having children. Additionally, in some African countries, the tradition of "Chiramu" allows an infertile male to bring in a brother or a relative to impregnate his wife. In this way, the man retains his masculine identity and status in his community's eyes.

A third challenge stems from the fact that male infertility has never been defined as a disease, which has resulted in sparse statistics. Additionally, demographic and clinical studies vary in epidemiological definition of infertility. While many clinical studies have examined infertility over the course of a year, several demographic studies examine infertility over a five-year projection. Finally, while some studies only examine females, others only examine the men presenting to infertility clinics, which are generally small groups who are not representative of the larger population of infertile men.

Without accurate, region-specific data, it is not possible to identify and comprehensively treat infertile men. Therefore, to bridge this gap in knowledge, we have consolidated current data and, where recent information is lacking, estimated rates of male infertility using pre-existing data on female infertility in areas around the world.

Methods: Descriptive study design was used to achieve the objectives of the study. One hundred and fifty infertile female were selected by purposive sampling method and data were collected from them by using close ended questionnaire. Analysis of the data was done by using descriptive and inferential statistics.

The findings are:

1. Analysis of findings revealed that the total level of knowledge on infertility revealed that the highest 120 (80%) percentage of the infertile females had inadequate knowledge and 30 (20%) moderate knowledge. The overall mean knowledge of the infertile females' was 14.52 and S.D 6.14.
2. Highly significant association was found between educational qualification and the knowledge of the infertile females and there was no significant association was found between knowledge scores and demographic variables age, income of the family, duration of infertility and source of information.
3. The highest mean score (6.09) 35.8% was obtained for the area of concept of infertility. The lowest mean score (1.76) for the area on investigations of infertility. The age group 20-25 years of infertile females got highest mean score (Mean=15.98, S.D=6.67). The graduation and above studied infertile females were more knowledgeable (Mean=19.47, S.D=7.35) on infertility.

The following conclusions were made on the basis of the findings:

1. The infertile females had inadequate and moderate knowledge on infertility.
2. The knowledge of the infertile females was associated with their educational status.

Based on the results following implications were made:

- Nurses can give emphasis on infertility and motivate the infertile females to improve their knowledge.
- Nurse educator can find opportunity to provide appropriate information to infertile females about concept, causes, investigations, treatment, and prevention of infertility.
- It helps the nurses to plan pre-conceptional care to infertile females.
- The findings can be utilized for conducting research on factors affecting the knowledge on infertility.
- Research needs to be done in this area to find out the consequences and preventive measures taken by infertile females.

The following recommendations were made based on the findings:

- A study can be conducted to assess the knowledge on infertility among couples at selected areas.
- A study can be done to assess the knowledge on factors affecting treatment of infertility among infertile females at selected hospitals
- A prospective study can be conducted to assess the factors affecting the treatment of infertility at selected hospitals of infertility.
- A retrospective study can be done to assess the factors affecting the treatment of infertility at selected infertility clinics.
- A comparative study can be done to assess the knowledge on infertility among women in rural and urban areas.

- A comparative study can be done to assess the knowledge on infertility among teenage and elder women in selected areas.
- A study can be conducted to assess the prevalence of infertility among people in selected areas.
- A study can be conducted to assess the attitudes of women on infertility in selected areas.
- A study can be conducted to know the effectiveness of stp on infertility among infertile females in selected hospitals.
- A study can be conducted to know the effectiveness of video assisted programme on infertility among infertile females

REFERENCES:

1. Emily MC Donald Evens. A global perspective on infertility: Carolina papers-international Health, no: 18; 2004.
2. Sumita dutta. A clinical-anatomical study on the common etiological factors pertaining infertility in females using some common investigative procedures. Journal of anatomy. soci. India, 56(2) 14-17; 2007.
3. Shireen .J.Jeebhoy. Infertility in India - levels, patterns and consequences: Priorities for social science research. Journal of Family Welfare. June 1998. 44(2).P. 15-24
4. .Neelofer sami. psycho-social consequences of secondary infertility in Karachi ,department of community health sciences, Agakhan university. Karachi.vol.56,Jan 2006.
5. Kollie.E, Effects of infertility on married couples and nurses interventions, department of nursing sciences, babcock university ,nigeria. vol.3 (1):132-136; 2009.
6. Stewart DE Infertility and assisted reproduction in Denmark, epidemiology and psychological consequences. Dan med bull, Nov 2001; 53(4):390-417.
7. Schmidt L. Communication and coping as predictors of fertility problem:stress. Human Reprod.2005 Nov; 20(11):3248-56.
8. Peterson B.D. longitudinal impact of partner coping in couples following 5 yrs of unsuccessful fertility treatment. 2009 July, 24(7):1656-64.
9. Forti.G. Evaluation and treatment of infertile couples. Journal of clini.endocrinol.metabol.1998 december; 83(12); 4177-88.
10. MC.Donnell J. Total fertilization failure and idiopathic sub fertility. Reprod boil.endocrinol,2009 Jan;17-20.
11. Morris JK. Factors that affect outcome of In-vitro fertilisation treatment. 1996 Nov.23:348(9039): 1402-6.
12. Devroey.P. Approaches to improve the diagnosis and management of infertility. Human reproduction, 2009 Jul-Aug; 15(4):391-408.
13. Silke dyer. Psychological distress among men suffering from couple infertility in South Africa. July 2009.
14. Farnaz sohrabvand M.D Knowledge and attitudes of infertile couples about assisted reproductive technology. Iranian journal of reproductive medicine, vol.3:90-95; 2005.
15. Bunting L,Bovin J. Knowledge about infertility risk factors ,myths, beliefs of healthy habits in young couples. Human Reprod; 2008 Aug; 23(8):1858-64.
16. S.J.Dyer. Infertility in South Africa: women's reproductive health knowledge and treatment-seeking behaviour for involuntary childlessness. Journal of human reproduction, vol.17, 1657-62, June 2002.
17. Quench S.Infertility knowledge and attitudes in urban school students. Fertility sterility journal, 2008 Dec; 90(6):2099-106.
18. D. Kumar. Prevalence of females' infertility and its socio-economic factors in tribal communities of central India .Rural remote health seven: 456, May 2007.
19. N.N.Mahajan. Adjustment to infertility. dept of obstetrics and gynaecology& research centre, Chandigarh, India, 2008 December,24(4):906-912.
20. Susan Shanthi George. Factors predicting the outcome of ICSI for infertility. The national medical journal of India, vol.16, jan-feb 2003.
21. Venkateshan Latha. Self-concept in infertile women," Nursing journal of India, March 2005.