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SOCIODEMOGRAPHIC PROFILE OF INFERTILITY IN A TERTIARY CARE CENTRE OF RAJASTHAN

Monica Soni Associate Professor, Department of Obstetrics & Gynaecology, Sardar Patel Medical College, Bikaner, Rajasthan, India

Santosh Kumari* Senior Resident, Department of Obstetrics & Gynaecology, Sardar Patel Medical College, Bikaner, Rajasthan, India *Corresponding Author

ABSTRACT

Infertility, a common health problem in developing countries, found to be associated with the various socioeconomic factors. The aim of the present study was to show the association of some sociodemographic factors with infertility in northern population of Rajasthan. The study was done among 325 infertile couples from infertility clinic of a tertiary care hospital of Rajasthan in one year duration. It has been found that early marriages and younger age group were more associated with infertility. Factors responsible for this abnormal sociodemographic pattern in Rajasthan are early marriages and lesser awareness about education among women. The focus of public health programs have been on controlling population growth without consideration to such arising problem of fertility faced by younger population. Therefore some amount of attention should also be given to this problem.

INTRODUCTION:

A couple that fails to conceive after 12 months of regular cohabitation, without using any contraceptive, is defined as an infertile couple. Shah et al., (2003) reported that one in every six couples wants to have baby falls into this category[1].

Infertility is a global health issue, affecting approximately 8-10% couples worldwide[2].World Health Organization (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertility[3].As per study, published at the end of 2012 by WHO, one in every four couples in developing countries had been found to be affected by infertility[4].The incidence of female infertility is rising and varies from 10 to 20%[5].In India, the burden of primary infertility among couples ranged between 4 to 17 percent[6,7].In 1981, approximately 13 percent of ever-married women of reproductive age were childless, which increased to nearly 16 percent in 2001[8]. Though a large number of women are affected with infertility, very few field based epidemiological studies have been undertaken to find out the prevalence and correlates of infertility and the data available is very scarce especially in Rajasthan where sociodemographic pattern varies from the other states. In Rajasthan there is low education priority among women, their early marriages and low socio economic status alters the sociodemographic pattern which affects the fertility.

Infertility is multifactorial with either predominance of female factor or male factors or combination of both. Causes of infertility remain unexplained in a significant number of cases (approx. 20% of cases)[9].Infertility can be affected by age, obesity, anatomical problems, hormonal causes, infectious diseases and genetic causes[10].Many other associated factors responsible for infertility are physical factors, professional background, education, socioeconomic factors etc[2] which have a profound impact on a person's health status. Some studies have reported relationship of socioeconomic conditions with infertility in India[11,12]

MATERIALS AND METHODS:

325 infertile couples that were referred to specialized infertility clinic of tertiary care centre of Bikaner, Rajasthan during Sept 2016 to Aug 2017 were included in the study.

Data regarding age, age at marriage, education, religion and place of living were recorded, compiled and systematically analysed.

RESULTS:

Age of females:

Major proportion of the infertile women was in age group 21-25 years followed by the age group of 25-30 years (Table 1).

Age of females at the time of marriage:

Maximum proportion of the infertile women was married before 30 years of age (Table 2).

Religion of the couples:

It was observed that 53.53% of infertility was found in couples following Hinduism as compared to those following Islam 45.23%. It signifies that Religion has no significant relation with infertility (Table 3, S.no I)

Educational status of the female:

Association between infertility and education status of female was also found to be non significant (Table 3, S.no. II)

TABLE 1: TABLE SHOWING AGEWISE DISTRIBUTION OF INFERTILE WOMEN

S.NO	AGE	NUMBER	Percentage%
I	21-25	181	55.69%
II	26-30	98	30.15%
III	31-35	35	10.76%
IV	36-40	8	2.46%
V	>40	3	0.92%
TOTAL		325	100

TABLE 2: SHOWING DISTRIBUTION OF INFERTILE WOMEN ACCORDING TO AGE AT MARRIAGE

S.NO	AGE AT MARRIAGE	NUMBER	Percentage%
I	<20	215	66.15%
II	21-25	96	29.53%
III	26-30	11	3.38%
IV	31-35	3	0.92%
TOTAL		325	100

TABLE 3: SHOWING DISTRIBUTION OF INFERTILE WOMEN ACCORDING TO RELIGION, EDUCATION AND RESIDENCE

S.NO	VARIABLES	NUMBER	Percentage%
I	**RELIGION**		
A	HINDU	174	53.53%
B	MUSLIM	147	45.23%
C	OTHERS	4	1.23%
II	**EDUCATION**		
A	ILLITERATE	159	48.92%
B	LITERATE	166	51.07%
III	**RESIDENCE**		
A	RURAL	72	22.15%
B	URBAN	253	77.84%

DISCUSSION:

In our study, age of females, age at the time of marriage and socioeconomic status of the couples were found to be associated with infertility. In our study majority of the infertile women (55.69%) were in age group 21-25 years followed by 30.15% in the age group of 25-30 years. Our study has little variance from the study conducted by Adamson et al on the prevalence and

correlates of primary infertility among young women in Mysore, India, where he founds that the mean age of women with infertility was 25.9 ± 3.12 year[13]. The difference may be due to early age of marriage in Rajasthan. In our study where majority of the women (66.15%) are married before 20 years while 29.53% of women were married between 21-25 years of age group. This again can be explained by the fact that in Rajasthan majority of the women are getting married at younger age. These younger women present cases of female infertility as proceeding from psychological problems such as vaginismus due to traumatic early sexual experiences. Younger girls are also less aware of hygiene which leads to vaginal and urinary tract infections that later presents as PID & infertility. Our study is similar to the study conducted by Abu Baker et al in Central Sudan in which it has been emphasized that early marriage was associated with infertility[14]. Shamila et al observed that educational status was the most important variable and women with secondary school education and above had markedly lower average fertility ($p<0.01$) than the less educated15 while our study has result similar to the study conducted by Larsen[21] . Larsen (1995) reported that in Cameroon and Nigeria, socio-economic status, education, and occupation are not significantly related to infertility[16]

Most of the infertile couples were Hindus and Muslims followed by others (Sikhs, Jain etc). This seems to be in proportion to their population in the studied area. Hence, the religion of the couples has no strong relationship with Infertility[17].

CONCLUSION:

It is a global health problem which requires appropriate treatment and management. Infertility is becoming a health challenge in developing countries. In spite of various causes, socioeconomic factors are considered significant. Evidence shown in different studies that the significant risk factors for infertility are education level, age, religion and socio economic status. The present study addresses socioeconomic issues of infertile couples and draws a certain conclusion. In our study, we found that the significant association between age, age at marriage, place of living with infertility. It is, therefore, important that these factors should be considered in formulating specific policies for infertile couples.

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