

Study of Infertility Cases in Kolhapur

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Abstract:

Infertility is the major global health issues and couples are unable to get it. Infertility affects approximately 8-10 %. It is a multidimensional problem with social, economic and cultural implication. Infertility may be associated with women or men and several factors affect fertility. Therefore, this study aims to investigate the infertility cases in Kolhapur city. The study showed that most women of the age group 26–30 years were affected. Women's infertility problems were double as compared to male infertility cases. This study highlighted that 27.4% of the cases were due to fallopian tube dysfunction, 20% due to menstrual disturbance, 9.1% due to problems of the uterus, 2.7% due to sexual disorders and another 2.7% because of age. This study states the major cause of infertility.

Introduction:

Infertility in couples is a health or medical condition caused by the psychological, physical and mental condition of the patient. Infertility is defined as not being able to get pregnant (conceive) after one year. In the world, in fertility is increasing and there are 60 million cases (Adamson et al., 2011; Stephen & Chandra, 1995). In couples, infertility is a health problem, social and emotional problem, which leads to divorce (Bhatti et al., 1999; Zeng et al., 2000). In primary infertility, couples have never been able to conceive. In secondary infertility, couples have difficulty conceiving after already having conceived. There is need for identification and calculation of primary infertility in the population (Dovom et al., 2014). Volgsten et al., (2008) reported the primary infertility in developed and developing countries as 6.6-26.4% and 5-25.7% respectively. In addition, 21.9 % of primary infertility were reported in the investigations (Safarinejad et al., 2008). According to WHO (World Health Organization), infertility in couples is due to reproductive system disorders where pregnancy does not occur with continuous intercourse for 12 months (Masearenhas, et al., 2012).

According to published data from WHO, the infertility frequency in people is around 17.5% and the ratio of 1 in 6 worldwide (WHO. 2023 link). Infertility is not always a women's problem. Infertility in men can be caused by different factors and is typically evaluated sperm count, motility and shape etc. Obstruction of different ducts, failure to deposit sperm in the vagina, errors in the seminal fluid, endocrine factors and smoking etc.

Material and Methods : In the present study, the infertility cases were in Kolhapur. The data is collected from the IVF centers and maternity hospitals in Kolhapur. This information is the record of

the hospitals and IVF centers by health workers. The information about infertility cases was recorded as per the information available from the patients.

Results and Discussion:

Infertility seems to be a multidimensional health issue which occurs not only due to health problems related to the fallopian tubes, the ovaries, and the endometrium, but it may also be a result of the choices imposed by the modern lifestyle, like the higher average age of people who get married, stress, non-conducive legal framework for assisted reproduction, etc. In the present study, 100 sources showed that a high proportion of women aged 20–40 years took part in a program of assisted reproduction, possibly because this is the reproductive age period among them. The distribution of age wise infertility in women from the 100 cases:- 21-25 age:- 18 cases, 26-30 age:- 46 cases, 31-35 age:- 26 cases, 36-40 age:- 9 cases, 41-45 age:- 1 cases (Table 1). As compared to female, the infertility in male is less. According to the study, the female has 40% more cases than males.

by a semen analysis. When a semen analysis is performed. The causes of women's infertility are fallopian tube abstraction, disorders of the menstrual cycle, uterus, age and ovarian failure. Male infertility associated problems are azoospermia, disruption of testicular functions, hormonal disorders, genetic disorders, malignant pituitary tumors, overweight or obesity, exposure to radiation, defective spermatogenesis, number of

Table 1. Analysis of Patients

Sr. No.	Age	Married For (In Years)	Infertility	Male Factors	Female Factors
	28	3 Y	1st		Uterus
1.	28	6Y	1st		Fallopian tube
2.	33	9Y	2nd		Fallopian tube
3.	29	5Y	2nd		
4.	26	10Y	2nd		Ovary
5.	27	8Y	2nd	HIV + VE	
6.	43	22Y	2nd		Ovary
7.	31	9Y	1st		
8.	20	9Y	1st		Ovary
9.	34	1Y	1st		
10.	28	13Y	1st		Ovary+Uterus
11.	29	4Y	1st		Tube
12.	25	4Y	1st		Ovary
13.	26	7Y	1st	Azoospermia	uterus
14.	31	5Y	2nd		
15.	30	8Y	2nd		uterus
16.	24	4Y	1st		
17.	26	4Y	2nd		
18.	35	8Y	1st		Ovary
19.	20	2Y	1st		
20.	37	15Y	2nd		Ovary
21.	33	11Y	2nd		uterus-Tube
22.	25	2Y	1st		Ovary
23.	31	10Y	2nd	Fertigate-M	
24.	37	12Y	1st	Varicocele	Ovary
25.	28		2nd		
26.	23		1st		uterus-Tube

27.	28	2.5Y	1st		Ovary+Uteru s
28.	39	10Y	2nd		Ovary
29.	21	3Y	1st		Ovary
30.	30	15Y	2nd		
31.	32		1st		
32.	30	4Y	1st		
33.	35		1st		Ovary
34.	28		2nd		Ovary
35.	24	4Y	2nd		
36.	36	14Y	1st		Ovary
37.	26	2.5Y	2nd		Ovary
38.	30	15Y	1st		Ovary
39.	31	4Y	4th		Ovary
40.	38	10Y	2nd		Ovary
41.	25	3Y	1st		Ovary
42.	28	9Y	1st		Ovary
43.	30	4Y	1st		Ovary
44.	32	5Y	1st		
45.	31		2nd		
46.	28	12Y	2nd		
47.	26	7Y	1st		
48.	30	9Y	2nd		uterus
49.	25	7Y	2nd		
50.	32	11Y	3rd		
51.	27	10Y	2nd		
52.	32		2nd		
53.	32	2.5Y	2nd		Ovary polyp
54.	28	5Y	1st		Ovary
55.	29	3Y	1st		
56.	26	5Y	1st		Ovary
57.	39	17Y	3rd		Ovary
58.	32	10Y	2nd	Azoospermia	Ovary
59.	33		1st		Ovary
60.	40	24Y	1st	Azoospermia	Ovary
61.	22		2nd		Ovary
62.	28	10Y	1st		Ovary
63.	30		2nd		Ovary
64.	27	3Y	1st		Tube
65.	21	2Y	1st		
66.	28	3Y	1st		
67.	30		2nd	HIV +VE	
68.	39	2Y	2nd		Ovary
69.	35	16Y	1st		Ovary
70.	27	5Y	1st		uterus
71.	21		1st		Left+ Ovary
72.	27	7.5Y	1st		
73.	29	3Y	2nd		
74.	21	2Y	1st		
75.	35	11Y	1st		Ovary +Tube
76.	36	10Y	1st		
77.	36	10Y	1st	Sever Oligospermia	Ovary tube
78.	25	10Y	1st		

79.	31	6Y	1st		Ovary
80.	21	1Y	1st		
81.	29	12Y	2nd		
82.	29	2Y	1st		
83.	34	17Y	1st		
84.	26	3Y	1st		
85.	21	3Y	1st		
86.	24	7Y	1st		
87.	29		2nd		
88.	25	4Y	2nd		
89.	22	2Y	1st		
90.	31	9Y	2nd		uterus
91.	27	3Y	1st		
92.	29	7Y	1st		
93.	28	7Y	1st		uterine tube
94.	28	8Y	2nd		
95.	29	12Y	1st		uterine tube
96.	30		3rd		
97.	29	4Y	1st		
98.	21	1Y	2nd		
99.	26		1st		

It is widely accepted that during the last twenty years, the average age of having children has increased and this is a key factor for infertility (Safarinejad, 2008). As the age of giving birth is increased, the reproductive capacity is decreased, the ovary becomes less efficient, the frequency of sexual intercourse is decreased and the possibility of chromosomal abnormalities and miscarriage is increased. The results also showed that the majority of women who took part in the study were employees in the public or the private sector. One possible interpretation of the finding is that women who work are in daily contact with other people, exchange ideas, are well-informed and receive various stimuli in the working environment, which makes them face assisted reproduction in a more positive way. As for the causes of female infertility, these relate mostly to the hypothalamus, the pituitary gland, the ovaries, the fallopian tubes, the body of the uterus, the cervix of the uterus and the vagina. The participants' responses were that problems related to the tubes are the primary cause of female infertility and other unknown cause. The main cause of infertility related to the fallopian tubes is any condition affecting the normal function and anatomy of the fallopian tubes and preventing the meeting of sperm with the ovum and the consequent conception. The development of ectopic intrauterine tissue occurs mainly in women aged 30-40 years old and occurs more often in advanced countries. This specific condition is more common among women that have given birth many times before and those that give birth at an older age. Finally, the use of contraception methods can also contribute to infertility because they can cause inflammation and destruction of the fallopian tubes (Wasti et al., 2017). The present showed that 10.4% did not know the cause of infertility. The failure to identify a clear cause of the infertility after a full screening of both partners is defined as infertility

of «unknown cause. In the present study, 20% of the infertility was due to menstrual disorders, which often occur as a result of metabolic diseases. It is known that the function of the thyroid gland is directly affected by the relationship of hypothalamic-pituitary gland-ovarian hormones. The increased function of the thyroid is likely to cause disorders in the menstrual cycle, and an increase or decrease in women's sexual activity. The second common cause (9.1%) of infertility was problems in the uterus. The main problems that are related to the body of the uterus and cause infertility are malformations, abnormal positions of the uterus, inflammation, intrauterine symphysis, atrophy of the endometrium, and malignant neoplasm. Other common problems are inflammation of the ovaries, endometriosis, polycystic ovarian syndrome and neoplasms. Also, infertility may be associated with impairment of the luteal phase where, after ovulation, the fertilized egg is not possible to be implanted in the uterus. Primary infertility in the population is more prevalent and consistent than secondary (Ganguly & Unisa, 2010, Allok et. Al., 2016; Safarinejad, 2018).

Conclusion:

Infertility is a health problem that requires appropriate treatment strategy. Modern medical science has developed advanced therapies to assist reproduction over the last 20 years. The main causes of female infertility are the problems related with health. The treatment for infertility was IUI, Laparoscopy and IVF was advice to the people. The infertility in population that about 1500 new cases a year. The female infertility factors are about 40%, male infertility factors around 20%, and combined factors are about 40%. In addition, there is lack of knowledge among couples and deficiency of data about infertility.

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