Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20163378

Treatment seeking pattern among infertile couples in a rural area

Chethana R.¹, Shilpa²*

¹Department of Community Medicine, Kempegowda Institute of Medical Sciences, Bangalore, Karnataka, India ²Department of Community Medicine, Vydehi Institute of Medical Sciences and Research Centre, Bangalore, India

Received: 09 August 2016 **Accepted:** 07 September 2016

*Correspondence:

Dr. Shilpa,

E-mail: shilpams1985@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: According to DLHS survey Karnataka, women who had primary and secondary infertility constitute 5.9 and 1.7 percent respectively of ever married women between 15-49 years. Main objectives of the study were to describe the socio demographic characteristics prevailing among infertile subjects of the study population and to describe the treatment seeking pattern among the infertile couples of the study population

Methods: Cross- sectional descriptive study was conducted at rural field practice area of tertiary hospital, Bangalore, India. Complete enumeration of entire Primary Health center area covering 26,190 populations. In depth interview using a pretested pre-structured questionnaire was conducted enumerating all couples with infertility in the entire Primary Health Centre area and their treatment seeking behaviour.

Results: Total population covered under the study is 26,190. Among them number of couples were 5210. Among 5210 couples, total number of eligible couples was 4120. Eligible couples are currently married couples where the women are in the reproductive age group between 15-49 years. Among the eligible couples only 1379 were exposed the risk of pregnancy. Couples who are exposed to risk of pregnancy include those who are cohabitating and not using any approved methods of contraception, where women is not pregnant and not in lactational amenorrhoea. Prevalence of primary infertility is 4.5%. Prevalence of secondary infertility is 3.6%. So the prevalence of infertility is 8.1%.

Conclusions: Most common treatment seeking pattern was allopathy followed by traditional healers. Most common reason for not taking treatment was economic hardship among those with primary infertility and in those with secondary infertility was that they wanted to wait for spontaneous conception.

Keywords: Primary infertility, Secondary infertility, Prevalence, Rural, Treatment seeking pattern

INTRODUCTION

Infertility has been recognized as a public health issue worldwide by the World Health Organization (WHO).1The 1981 census of India estimated infertility to be in the range of 4-6%. According to DLHS survey Karnataka, women who had primary and secondary infertility constitute 5.9 and 1.7 percent respectively of ever married women between 15-49 years.

Infertile couples seek various traditional methods and religious practices, including visits to temples, abstaining

from visiting a place where women has delivered a child, observing tantric rites, wearing charms, participating in rituals and visiting astrologers. Irrespective of who the infertile person is, it is the woman who usually initiates the first contact with the physician. Couples with primary infertility are usually more interested in treatment than those with secondary infertility.³

The problem of infertility has not given its due attention in India because it is not a life threatening condition. Patterns of treatment-seeking depend on the couple's socio-economic status, decision-making within the family, the level of information and accessibility of treatment.⁴ All infertile couples do not seek treatment. An estimated 51 percent of couples with primary infertility and 22 percent with secondary infertility seek treatment.⁵

Findings from District level household survey on infertility and treatment seeking in India show that a very high proportion of women (83%) sought treatment for infertility from any source of medicine. High percentages of women are going for allopathic treatment. Majority of women who have undergone allopathic treatment have availed it from private sector and treatment was not available in most of the government service centres in India.⁶

More recent studies have identified allopathy as the first treatment sought. Couples also follow religious practices with such treatment, either simultaneously or subsequently. Either before or when allopathic treatment does not work, they seek other methods, such as Ayurveda, Homeopathy, Unani and other traditional methods, or visit holy places and spiritual healers. While assisted reproductive technology centers are the first ones to be visited by some, others seek assistance from religious people or quacks.⁷

After getting married some couples wait for years, others seek assistance within months. Many times it is only women, who seek advice, as there is family pressure. There is ignorance about causes of infertility. Advice seeking is not limited to regular health systems. Women go through various treatments seeking modes to avoid the adverse consequences of childlessness.⁷

When allopathic treatment does not work, women seek other methods as a last resort such as Ayurveda, Homeopathy, Unani and other traditional methods, or visit holy places and spiritual healers. Most couples seek treatment after trying to conceive for one to four years.⁸

Medical management is more or less similar all over the world. Treatment depends on the cause of infertility. It may range from simple education and counseling to the use of medicines that treat infection or promote ovulation to highly sophisticated medical procedures like in vitrofertilization. In the fast moving world of today, Assisted Reproductive Technologies have become a procedure of choice in the management of infertility. It includes intra uterine insemination to some sophisticated techniques like Gamate intrafallopian transfer (GIFT), Zygote intrafallopian transfer (ZIFT), Intracytoplasmic Sperm Injection (ICSI). Thousands of babies are born using this techniques.

High costs sometimes results in discontinuation of treatment or resort to unqualified practitioners. Traditional beliefs about women being possessed by evil spirits also inhibit women from seeking appropriate treatment. The public health system does not offer access to adequate preventive, curative and counseling services.

Though infertility treatment is theoretically available at government facilities, effective treatment is often difficult to access as there is little coordination between gynaecologists, infertility specialists, surgeons and laboratory technicians. Services are available in the private sector but are of varying quality and costs. ¹⁰

In this background present study will be undertaken to describe the treatment seeking pattern among infertile couples in rural practice area of Kempegowda Institute of Medical Sciences, Bangalore, India.

Objectives

- To describe the socio demographic characteristics prevailing among infertile subjects of the study population.
- To describe the treatment seeking pattern among the infertile couples of the study population.

METHODS

Preliminary discussions were held with medical officer of Kumbalgodu Primary Health Centre, health worker male and female, ASHA (Accredited Social Health Activist) and Anganwadi workers of Kumbalgodu PHC. Medico social workers of the department of Community Medicine (Kempegowda Institute of Medical Sciences) were also involved in the study. Discussions were held explaining them the objective of the study and assuring them that the identity of the couples will be kept confidential.

Area map of PHC with details of two sub centre (Kumbalgodu and H. Gollahalli) and 16 villages was obtained. Pre-designed, pretested, structured proforma in English was translated to local language Kannada with the consultation of Department of Kannada (V V Puram College of Arts and Commerce) and back translation was done from Kannada to English with consultation of Department of English (V V Puram College of Arts and Commerce).

The study protocol was reviewed and approved by the ethics committee of the teaching Institute and informed consent was obtained from study subjects ensuring them that all the information will be kept strictly confidential and will be used only for research purposes.

A total of 26,120 people were accessed from 6,335 households. Kumbalgodu sub centre was covered first and then H Gollahalli sub centre was covered. House to house survey was done covering all the villages coming under these sub centers so as to completely enumerate the eligible couples.

Among these eligible couples those who are exposed to the risk of pregnancy were considered and couples with inability to conceive despite cohabitation and exposure to the risk of pregnancy (in the absence of contraception) for two years or more (as per WHO Epidemiological definition) were included and considered to have primary infertility and those with inability to conceive despite cohabitation and exposure to risk of pregnancy (in the absence of contraception, post-partum amenorrhoea) following previous child or abortion for a period of two years or more were considered to have secondary infertility.

These couples were included in the study after they fulfilled inclusion criteria. Data regarding sociodemographic and treatment seeking pattern were collected using a pre-designed, pretested, structured proforma.

RESULTS

Total population covered under the study is 26,190. Among them number of couples were 5210. Among 5210 couples, total number of eligible couples was 4120. Eligible couples are currently married couples where the women are in the reproductive age group between 15-49 years. Among the eligible couples only 1379 were exposed the risk of pregnancy.

Table 1: Distribution of infertile couples according to religion and type of family.

Religion	Total eligible couples (n=4120)	Couples with primary infertility (%) (n=62)	Couples with secondary infertility (%) (n=49)
Hindu	3237	47 (01.45)	33 (01.02)
Muslim	0662	14 (02.11)	11 (01.66)
Christian	0221	01 (0.45)	05 (02.26)
Family	Total eligible	Couples with primary	Couples with secondary infertility
	couples (n=4120)	infertility (%) (n=62)	(%) (n=49)
Nuclear family	2568	41 (01.60)	33 (01.29)
Joint family	0890	17 (01.91)	09 (01.01)
Three generation family	0662	04 (0.60)	07 (01.06)

Note: Figures in parenthesis indicates percentages.

Couples who are exposed to risk of pregnancy include those who are cohabitating and not using any approved methods of contraception, where women is not pregnant and not in lactational amenorrhoea. Prevalence of primary infertility is 4.5%. Prevalence of secondary infertility is 3.6%. So the prevalence of infertility is 8.1%. The analysis showed that most males 21 (33.9%) among couples with primary infertility were in the age group of 25-29 years and females were highest 26 (41.9%) in 20-24 yrs. Males among couples with

secondary infertility were highest 13 (26.5%) in 30 -34 years and females were highest 17 (34.7%) in the age group of 25-29 years. Most of males 16 (25.8%) and females 18 (29.0%) among couples with primary infertility had educational qualification up to high school. Majority of males 19 (38.78%) with secondary infertility had education up to high school and 14 (28.57%) females had education till middle school. Majority of males among infertile couples were labourers and females were housewives.

Table 2: Distribution of infertile couples according to whether they have approached health care facility.

Availed health care		Males	Females
Primary infertility (n=62)	Yes	43 (69.35)	50 (80.65)
	No	19 (30.65)	12 (19.35)
Secondary infertility (n=49)	Yes	25 (51.02)	31 (63.27)
	No	24 (48.98)	18 (36.73)
Investigations done		Males	Females
Primary infertility (n=62)	Yes	34 (54.84)	42 (67.74)
	No	28 (45.16)	20 (32.26)
Secondary infertility (n=49)	Yes	25 (51.02)	29 (59.18)
	No	24 (48.98)	20 (40.82)

Majority of primary infertile couples 47 (1.45%) belong to Hindu religion whereas 14 (2.11%) of couples belong

to Muslim religion and very few 1 (0.45%) of couples belong to Christian religion among couples with primary infertility (Table 1). 33 (1.02%) of Hindu couples, 11

(1.66%) of Muslim couples and 5 (2.26%) of Christian couples had secondary infertility (Table 1). Majority 41 (1.60%) of couples with primary infertility belonged to nuclear family. 33 (1.29%) of couples with secondary infertility belonged to nuclear family (Table 1). Among couples with primary infertility, 34 (54.84%) of males

had undergone investigations and 42 (67.74%) of females had undergone investigations. Among couples with secondary infertility 25 (51.02%) males had undergone investigations and among females 29 (59.18%) had undergone investigations (Table 2).

Table 3: Distribution of couples with infertility based on reasons for not availing health care facility.

Reasons for not availing	Primary infertility		Secondary infertility	
health care facility	Males	Females	Males	Females
	n=19	n=12	n=24	n=18
Economic Hardship	9 (47.37)	6 (50.00)	07 (29.17)	06 (33.33)
Wait for spontaneous conception	3 (15.79)	1 (08.33)	10 (41.67)	08 (44.44)
Distance to health care facility	2 (10.53)	2 (16.67)	-	01 (05.56)
Not willing to take treatment	3 (15.79)	-	02 (08.33)	-
Ignorance	2 (10.53)	2 (16.67)	01 (04.17)	01 (05.56)
One kid is already present	-	-	04 (16.67)	02 (11.11)

Note: Figures in parenthesis indicates percentages

47.37% of males among couples with primary infertility had not approached health care facility due to economic reasons. 15.79% wanted to wait for spontaneous conception without taking treatment and 15.79% were not willing to take treatment at all.

Among females with primary infertility by 50.0% had not approached health care facility because of economic hardship and 16.67% because of distance to be travelled to health care facility. 41.67% of males among couples

with secondary infertility had not availed health care facility because they wanted to wait for spontaneous conception, 29.17% because of economic hardship and 16.67% said that they already have one child.

44.44% of females among couples with secondary infertility had not availed health care facility because they wanted to wait for spontaneous conception, 33.33% because of economic hardship and 11.11% said that they already have one child (Table 3).

Table 4: Distribution of couples with primary infertility based on treatment seeking pattern.

	Primary Infertility		Secondary Infertility	
Health care facility availed*	Males (n=43)	Females (n=50)	Males (n=25)	Females (n=31)
Allopathy	42 (97.67)	47 (94.00)	21 (84.00)	24 (96.00)
Homeopathy	02 (04.65)	02 (04.00)	1 (04.00)	3 (12.00)
Ayurveda	02 (04.65)	04 (08.00)	2 (08.00)	4 (16.00)
Traditional healers	04 (09.30)	06 (12.00)	6 (24.00)	6 (24.00)
Switch over in system of medicine	04 (09.30)	07 (14.00)	5 (20.00)	9 (36.00)

Note: * Multiple responses.

97.67% of males among couples with primary infertility who approached had taken allopathic treatment followed by 9.30% had approached traditional healers.94% of females among couples with primary infertility who approached health care facility had taken allopathic treatment and 12% approached traditional healers (Table 4).

84% of males among couples with secondary infertility who approached health care facility had taken allopathic treatment and 24% had approached traditional

healers.96% of females among couples with secondary infertility who approached health care facility had taken allopathic treatment and 24% approached traditional healers (Table 4).

DISCUSSION

The estimate of infertility in the present study area is higher than NFHS 3 survey which reported the prevalence of infertility in Indian women to be 4%.6 In the present study couples educated till high school had

highest prevalence of infertility which is similar to study conducted by Nicole JW et al on consequences of infertility in developing countries where 39% had education till high school.¹¹

With increase in level of education among women, total fertility rate decreases, however, infertility rate increases. In the present study it was found that infertility was highest among housewives. This contradicts the fact that working women are 20 percent more likely to be infertile compared to non-working women stated in NFHS data. In the present study it was observed that allopathy was most common treatment sought by infertile couples which are in consistent with other studies done recently. Couples also follow religious practices with such treatment, either simultaneously or subsequently.

It was observed from the present study that percentage of females who sought treatment for infertility and also percentage of females who underwent investigations for infertility was higher than the males. Irrespective of who the infertile person is, it is the woman who usually initiates the first contact with a physician. It was observed from the present study that treatment seeking was higher among couples with primary infertility than secondary infertility. Couples with primary infertility are usually more interested in treatment than those with secondary infertility. ¹³

The study showed that the minority of the infertile group depends purely on medical approach as a fertility seeking behavior and most of them sought the spiritualists and traditional medicine beside medical option. It means that medical treatments alone are less often used by the respondents may be because of perceptions of the causes of infertility or the lack of confidentiality at the treatment centers. ¹⁴

Most of the help-seeking is undertaken by women, both traditional and modern biomedical health services, as was revealed in present study also.

The provision of health education as an integral part of infertility management into reproductive health care programmes is needed. At the same time the importance of traditional health services in infertility management should be recognized as an important factor. ¹⁵ About 15% of couples had more than one cause for their infertility. It is therefore, important to make complete investigations from the outset rather than focusing treatment on the first cause identified. ¹⁶

Although most studies reveal that male participation in infertility diagnosis and treatment tends to be limited as infertility is perceived to be a woman's problem, in some contexts, husbands also participate and accept treatment if required. Stigmatizing beliefs, limited male participation, cost, indifferent quality of care and lack of services in the public sector are major barriers to prompt

and appropriate treatment seeking. Patterns of treatment seeking depend on the couple's socio-economic status, decision-making within the family, the level of information and accessibility of treatment.¹⁷ More recent studies have identified allopathy as the first treatment sought. Couples also follow religious practices with such treatment, either simultaneously or subsequently.⁸

Among infertile couples seeking treatment, 85 to 90 percent are treated with conventional medical and surgical therapy. Medical treatment ranges from instructing the couple in the relatively simple methods of pinpointing ovulation to more complex treatments involving ovulation induction with powerful fertility drugs and artificial insemination.

Surgical treatments also span a wide spectrum of complexity, ranging from ligation of testicular veins for eliminating varicocele to delicate microsurgical repair of reproductive tract structures in both men and women. Beyond being physically invasive, treatment is often emotionally taxing.¹⁸

Two non coital reproductive technologies- IVF and Gamete Intra Fallopian Transfer (GIFT)-offer hope to as many as 10 to 15 percent of the infertile couples who could not be successfully treated otherwise. ¹⁷

A study conducted, particularly for women, among a predominantly Muslim population in urban slums of Dhaka in Bangladesh explores the perceived causes of infertility, treatment-seeking for infertility and the consequences of childlessness. The leading causes of infertility were perceived to be evil spirits and physiological defects in women and psychosexual problems and physiological defects in men.

Herbalists and traditional healers were considered the leading treatment option for women, while for men it was remarriage, followed by herbalists and traditional healers. Childlessness was found to result in perceived role failure, with social and emotional consequences for both men and women, and often resulted in social stigmatisation of the couple, particularly of the woman. Infertility places women at risk of social and familial displacement, and women clearly bear the greatest burden of infertility. ¹⁹

The rate of childlessness was five percent among the currently married women aged 20 years or more who had been married for at least three years, according to a study conducted in Ranga Reddy district in Andhra Pradesh in 1998.

A large majority sought allopathic treatment first, and tried other sorts of treatment, prayer, rituals and traditional treatments when allopathic treatment did not work or cost too much. There is a clear need for infertility investigation and treatment to be included in the reproductive health programme in India, and for health

workers to be trained to provide information, care and referrals. 20

About 80% of infertile women sought treatment but a substantial proportion (33%) received non-allopathic and traditional treatment due to expensive modern treatment and lack of awareness.²¹

The infertile women need to be motivated to seek treatment at the early age, as the fertility potential declines with advancement of age. The women living in nuclear families can be explained the need to have supportive people at home in helping them to avoid strenuous domestic work during the luteal phase of implantation of the conceptus.

The infertile women should be explained about the phases of menstrual cycle, signs of ovulation and how to plan their sexual intercourse during the period of ovulation. The awareness also need to be created regarding importance of maintaining body mass index within normal limits and the association between thin or obese body mass index and anovulation should be explained to them. As most of the women undergo various investigations and treatment procedures, proper explanations, pre requisites, preparations required, cost involved and the outcomes has to be adequately informed to infertile women by the nurses and chances must be given to clarify their doubts.

Infertility is a medical as well social problem, the couple and the families suffer at the same time-silently. The matter is not discussed openly also there is no proper knowledge and awareness about it. Some people think it is due to result of some past vices and some of them practice various unscientific methods and rituals to overcome the problem.

Knowledge about infertility is flimsy across communities as well as among health service provider. Only a few couple reached up-to tertiary level of health care. Evaluation procedures and treatment for infertility should be needed. There is need of awareness generation among couples through grass root level health worker who themselves need training and sensitization.

CONCLUSION

Most common treatment seeking pattern was allopathy followed by traditional healers. Most common reason for not taking treatment was economic hardship among those with primary infertility and in those with secondary infertility was that they wanted to wait for spontaneous conception.

ACKNOWLEDGEMENTS

Authors would like to thank Dr. Gangaboraiah, Professor of Bio-Statistics, Department of Community Medicine, KIMS, Bangalore, Dr B G Parasuramalu, Professor,

Department of Community Medicine, Rajarajeshwari Medical college and Hospital, Bangalore, Dr. N. R. Ramesh Masthi, Associate Professor, In charge MO RHTC, Department of Community Medicine, KIMS, Bangalore, Dr. Ashwath Narayana, Professor and Head, Department of Community Medicine, KIMS, Bangalore, Postgraduates and interns, Dept. of community Medicine, KIMS, Bangalore and at the end authors would like to thank Medico-social workers, ASHA's, Anganwadi workers, study subjects.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- Boivin J, Bunting L, Collins JA, Nygren KG. International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. Hum Reprod. 2007;22(6):1506-12.
- Kumar D. Prevalence of female infertility and its socio economic factors in tribal communities of central India. Rural and remote health. 2007;7(456).
- 3. Shireen J. Jejeebhoy. Infertility in India-levels, patterns and consequences: Priorities for social science research. Journal of family welfare. 1998;44(2):15-24.
- 4. Niharika T. Infertility among Indian Women: Emerging Evidence and Need for Policy Measures. Research Scholar, International Institute for Population Sciences (I.I.P.S.), Mumbai, INDIA.
- 5. Goverde AJ. Intrauterine insemination of in-vitro fertilization in idiopathic sub fertility and male sub fertility. Lancet. 2000;355(1):13-8.
- 6. Unisa S. Infertility and treatment seeking in India: findings from district level household survey. FV&V in ObGyn. 2010; Monograph:59-65.
- 7. Chhabra S, Srujana D, Annapurna MA. Health Seeking Practices of Infertile Women. Open Repro Scie J. 2012, 4:10-3.
- 8. Mulgaonkar Y. A cost effective approach in evaluation of female infertility. J Obs & Gyn. 2002;52(2):76-80.
- 9. Uday LM, Sane PV, Nath P, Sane AP. Infertility: an approach to management in a district hospitals. J Ind Med Ass. 1980;74(9):165-8.
- Mallika A, Dare FO, Agarwal HS. Sociodemographic factors associated with infertility. Journal of psychosomatic research. 1999;46(2):117-23
- 11. World Health Organization. Prevention of Infertility at the Primary Health Care level. Geneva. 1983.
- 12. Ganguly S, Unisa S. Trends of Infertility and Childlessness in India Findings from NFHS Data. F, V & V In Obgyn. 2010;2(2):131-8.
- 13. Sciarra JE. An International Health Problem. Inter J Obstet & Gynaecol. 1999(12);206-69.

- 14. Maha A. Social Consequences of Infertility upon Women in Mosul City. Iraqi J. Comm. Med Oct. 2008;21(4):291-8.
- 15. Chhabra S, Srujana D, Annapurna MA. Health Seeking Practices of Infertile Women. Open Rep Sci J. 2012;4:10-3.
- 16. Malpani A. Day care for infertility clinics. Bomb Hospl J. 2003;45(2):232-3.
- 17. Iyengar A. Impact of childlessness. Ind J Obstet & Gynaecol. 2003;14(3):19-28.
- 18. Goverde AJ. Intrauterine insemination of in-vitro fertilization in idiopathic sub fertility and male sub fertility. Lancet. 2000;355(1):13-8.
- 19. Papreen N, Sharma A, Sabin K, Begum L, Ahsan KS, Baqui HA. "Living with Infertility: Experiences

- among Urban Slum Populations in Bangladesh," Reproductive Health Matters. 2000;8(15):33-44.
- Unisa S. "Childlessness in Andhra Pradesh, India: Treatment- Seeking and Consequences," Reproductive Health Matters. 1999;7(13):54-64.
- 21. Sanjit S, Pallavi G. Socio-Demographic Correlates of Women's Infertility and Treatment Seeking Behavior in India. J Reprod Infertil. 2016;(17)2:123-32.

Cite this article as: Chethana R, Shilpa. Treatment seeking pattern among infertile couples in a rural area. Int J Community Med Public Health 2016;3:2884-90.