

Knowledge Regarding Infertility amongst the People of Reproductive Age Group.

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ABSTRACT

Introduction: Fertility or the ability to produce children has a positive social value whereas; infertility has a negative social value in which it means inability couple to have children even though after living a normal sexual life and does not use any contraceptive devices for one year. Infertility can be primary or secondary and primary infertility means when a couple has never been able to conceive; secondary infertility means a couple who has previously conceived a pregnancy, but is unable to conceive again after a full year. The aim of the study was to assess the knowledge regarding infertility among the people of reproductive age group.

Methods: Cross sectional was done to "Assess the knowledge regarding infertility among the people of reproductive age group" at Gynae OPD of Shree Birendra Hospital. The Non-probability purposive sampling technique was used. The study population was 110 and study period was 2071/3/15-2071/4/25. Semi-structured questionnaire was used. The data were analyzed by using SPSS 20.

Results: No significant relationship was established ($p=0.5$) between the knowledge about infertility and age. There was approximately equal number of respondents who had knowledge of infertility in the variation of age group. The proportion of knowledge in male respondents (93.8%) is comparatively more than the female (84.6%). The proportion of knowledge of infertility according to the variation of ethnicity was similar to each other. Likewise the proportion of knowledge of infertility by occupation ($p=0.216$) and marital status ($p=0.122$) were also not significantly different.

Conclusions: The knowledge of infertility was not associated to the age, occupation and marital status.

Keywords: knowledge; infertility; reproductive age group.

INTRODUCTION

Infertility is a global phenomenon that affects between 60 million and 168 million people worldwide. In recent world, about 10-15% married couples are childless. In Nepal, infertility rate is about 13-15%. It is experienced that about 40% of these couples have male factor infertility, 40% female factor and in remaining 10% are those in whom no diagnosis can be made even after complete investigation¹. Absence of clinical effects on mental health measures, psychological interventions

were found to improve some patients' chances of becoming pregnant. Psychological interventions represent an attractive treatment option, in particular, for infertile patients are very much important².

Due to illiteracy, patriarchy, traditional social norms and backwardness among the females has led them to suffer³. Most cases of female infertility are caused by problems with ovulation^{4,5}. Poor fertility-awareness may be a contributing cause of infertility among women seeking fertility assistance at assisted reproductive

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technology clinics⁶. Among the couples, knowledge of infertility was found more in infertile females when compared to infertile males⁷. The patients with infertility had more favorable attitudes toward fertility drugs and having a test tube baby Child adoption was accepted as an option for treatment by the majority of IVF patients and fertile outpatients⁸. Improving young people's knowledge about these issues would give them more opportunity to take responsibility for their sexual health and to take an active role in shaping political change to improve conditions for earlier parenthood.¹⁰ Prevalence of depression in infertile couples was high but also had increasing growth in recent years.¹³

METHODS

This is a cross sectional study. Non-probability purposive sampling technique was used to assess the knowledge regarding infertility among the people of reproductive age group at Gynaecology OPD of Shree Birendra Hospital . The study was conducted for over a one month and 110 subjects were included with consent. Semi-structured questionnaire was used in the interview schedule. The data were analyzed by using SPSS 20. For ethical consideration formal permission was taken from the concerned authority of study area by submitting an official letter institutional review committee. The objective and purpose of the study was clearly explained and informed consent was taken before the data collection. Privacy, confidentiality and anonymity of the respondent were maintained.

RESULTS

Out of 110 respondents, maximum 42.7 percentages were belonged to the age group of 31 to 35 years. More than two third of the respondents (70.9%) were females, more than half (60.9%) were upper caste and 100 %percent were Hindus. Regarding education

status, 9.1 percent were illiterate and remaining was literate. More than one quarter were agriculture dependent respondents and about half of them were belonged to services. Regarding marital status most of them were married (91.8%) and more than half of them were nuclear lived in.

Regarding the knowledge about infertility, most of them had the knowledge (96, 87.3%) about it, among them, most of them got the information about infertility by television (37.3%) and followed by newspaper (25.5%) and least by books (3.6%). About 3 out of 4 were not counseled in infertility and only about 20% were counseled by the health worker. Majority of the of them (80.9%) didn't have the family history of infertility.

Regarding the knowledge on causes of infertility among men and women, most of them answered by them are smoking for both male (67.7%) and female (26.4%) and contraceptive pills (49.1%) for females. About 50% of the respondents were answered that genetic factor in men is also the reason of infertility. About more than one third of the respondents had the knowledge of infertility on defective ovulation (37.3%) and congenital anomalies (26.4%).

Regarding the knowledge on prevention of infertility, about two third (63.6%) had the knowledge of prevention of infertility. Among them, 31.4% were answered on maintain healthy practice and followed on avoid using unnecessary drugs (30%) and avoid from chemicals (28.57%). Eighty percent had the knowledge of treatment. Among them 61.26% had the knowledge about test tube and 42.05 % on hormonal therapy . There were 86.4% who had the knowledge that both male and female are equally responsible for infertility and about the social impact of infertility.

Table 1. Association of infertility and Demographic information (n=100)

Characteristics		Knowledge on infertility		P value
		Yes	No	
Age of the respondents	25-30	17(89.5%)	2(10.5%)	P= 0.5
	31-35	39(83.0%)	8(17.0%)	
	36-40	40(90.9%)	4(9.1%)	
Sex	Male	30(93.8%)	2(6.2%)	p =0.192
	Female	66(84.6%)	12(15.5%)	
Ethnicity	Janajati -advantage	24(92.3%)	2(7.7%)	p =0.196
	Upper Cast	55(82.1%)	12(17.9%)	
	Janajati-disadvantages	13(100%)	0(0%)	
	Dalit	4(100%)	0(0%)	
Literacy status	Illiterate	4(40%)	6(60%)	p =0.000
	Literate	92(92%)	8(8%)	
Occupation	Homemaker	4(66.7%)	2(33.3%)	p = 0.216
	Business	14(87.5%)	2(12.5%)	
	Service	48(92.3%)	4(7.7%)	
	Agriculture	24(80%)	6(20%)	
	Labor	6(100%)	0(0%)	

Regarding the association between the knowledge about infertility and age of the respondent, an insignificant relationship was established ($p=0.5$). There was approximately equal number of respondents who had the knowledge of infertility in the variation of age group. The proportion of knowledge in male respondents (93.8%) is comparatively more than the female (84.6%) but it is also insignificant ($p=0.192$). Similarly the proportion of knowledge of infertility according to the variation of ethnicity is similar to each other. So proportion of knowledge is also insignificant to the ethnicity ($p=0.196$). Likewise the proportion of knowledge of infertility by occupation ($p=0.216$) was also insignificant. So the knowledge of infertility is not associated to the occupation. The proportion of knowledge on infertility by literacy status was strongly significant ($p=0.000$). Among the illiterate group, only 40% had the knowledge whereas among literate group there were 92% respondents who had the knowledge about the infertility. So literacy status is only one variable which is highly associated with the knowledge on infertility.

DISCUSSION

Fertility or the ability to produce children has a positive social value whereas; infertility has a negative

social value in Nepali culture. Family and society look down couple who is not able to bear children within a reasonable period of time following marriage. Another reason for so much importance being attached to the social aspect of fertility behavior is that family name will not be carried forward without a child. Today fertility and infertility have both emerged equally problematic in the world population context,

Regarding the knowledge about the causes of infertility, most of the answer given by them is smoking for both male (67.7%) and female (26.4%) respectively and contraceptive pills (49.1%) for females. About 50% of the respondents answered that genetic factor in men is also the reason of infertility. About more than one third of the respondents had the knowledge of infertility on defective ovulation (37.3%) and congenital anomalies (26.4%).

Similar type of study done by Padma and Annie is consistent with this study. In which it was found a man is born with the problems that affect his sperm. Other times problems start later in life due to illness or injury. Movement of sperm and also some time shape of the sperm causes infertility in Health problems that cause hormonal changes, such as polycystic ovarian syndrome and primary ovarian insufficient.

Health problems that cause hormonal changes, such as polycystic ovarian syndrome and primary ovarian insufficiency^{4,7,9}.

In this present study 88% has said they have knowledge about infertility and among them majority of the respondent (61.36) has the knowledge that infertility is treated by therapy In-vitro fertilization/Test tube baby and (42.05) said infertility can be treated by the hormonal therapy and only (2.273) said that there are other ways of treatment. Similar type done in 2013 by Tabong&Adongo the respondent believes that Most childless couples can be treated by spiritualist, traditional healers and hospital So the finding is not accordance with the present study.¹¹

In this study among the total participants 61% have knowledge on prevention of infertility, 31.4% were answered on maintain healthy practice and followed on avoid using unnecessary drugs (30%) and avoid from chemicals (28.57%). Similar type of study done by Macalus, et al. and found that effective prevention is reducing weight, early detection of STI and treatment and early detection of hormonal condition are the main preventive measure noted finding does not consistent with the present study¹².

CONCLUSIONS

The knowledge of infertility was not associated to the age, occupation and marital status.

REFERENCES

1. Annual Report of Department of Health Services 2066/2067
2. Znoj H, Hämmerli K, Barth J. The efficacy of psychological interventions for infertile patients: a meta-analysis examining mental health and pregnancy rate. Institute of Psychology, Department of Clinical Psychology and Psychotherapy, University of Bern, Switzerland, 2002.
3. Infertility Nepal. Family planning and Health survey.

- Planning research and evaluation sectioni KTM, Nepal, 2012.
4. Annie A. Healthy Women, Healthy Mother, 2012, 503. <http://www.who.int/reproductivehealth/topics/infertility/definitions/en/index.html>
5. Basanvanthappa B. Text book of midwifery and reproductive health nursing. New Delhi: Jaypee publication, 2006.
6. Hampton KD, Mazza D, Newton JM. Fertility-awareness knowledge, attitudes, and practices of women seeking fertility assistance, J Adv Nurs. 2013;69(5):1076-84. <http://dx.doi.org/10.1111/j.1365-2648.2012.06095.x>
7. Padma B. Knowledge of Infertile Couples Regarding Infertility in Selected Areas. Department of Obstetrics and Gynaecology Navodaya College of Nursing Raichur. Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore, 2005.
8. Abolfotouh MA, Alabdrabalnabi AA, Albacker RB, Al-Jughaiman UA, Hassan SN. Knowledge, attitude, and practices of infertility among Saudi couples. Int J Gen Med. 2012;76(11):1674-7.
9. Sumera, et al. Knowledge, perceptions and myths regarding infertility among selected adult population in Pakistan, 2008. Retrieved on September 7, 2013,
10. Ekelin M, Åkesson C, Ångerud M, Kvist LJ. Swedish high school students' knowledge and attitudes regarding fertility and family building. Department of Health Sciences, Division of Nursing, 256-162
11. Tabong PTN, Adongo PB. Understanding the Social Meaning of Infertility and Childbearing: A Qualitative Study of the Perception of Childbearing and Childlessness in Northern Ghana, African, 2013, January 16.
12. Macaluso M, Wright-Schnapp TJ, Chandra A, Johnson R, Satterwhite CL. A public health focus on infertility prevention detection management. Fertil and infertility. 2008, 1-10.
13. Masoumi SZ, Poorolajal J, Keramat A, Moosavi SA. Prevalence of Depression among Infertile Couples in Iran: A Meta-Analysis Study. Dept. of Reproductive Health, School of Nursing & Midwifery, Shahroud University of Medical Sciences, Semnan, Iran, 2011.