ISSN:0975 -3583.0976-2833 VOL 15, ISSUE 07, 2024

# Unmet Need for Contraceptive use among Married Women of Reproductive Age Group Attending a Tertiary Care Centre of Western Odisha: A Cross Sectional Study

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Received: 06-05-2024 / Revised: 16-05-2024 / Accepted: 22-06-2024

#### **ABSTRACT**

#### INTRODUCTION

In India, despite significant progress in reproductive health services, there remain substantial unmet needs for family planning among married women. This situation not only affects maternal health but also impacts economic stability and overall well-being of families.

#### **OBJECTIVE**

To assess the unmet contraceptive needs among married women of reproductive age attending a tertiary care center in Western Odisha.

#### MATERIALS AND METHODS

A cross sectional study was conducted among 154 married women of reproductive age group attending the Outpatient department of the Obstetrics and Gynaecology (OBG) OPD of a tertiary care centre of Western Odisha between Jan- Feb 2021. They were all interviewed by using a predesigned and pretested semi-structured questionnaire.

#### **RESULTS**

51.94% of the women belonged to the age of more than 25 years followed by 46.1% in the 18-25 years category. 8.44% were completely illiterate. 82.4% were home-makers. 41.55% women had one child,29.2% had two children,12.98% had more than 2 children and 16.23% women haven't had a child yet. 44.80% couples had a baby girl as their last child. 79.22% of the women were of age 18-25years when they got married whereas 18.83% got married even before they crossed 18. Inter-spouse communication about contraception was present in 80.51% of couples. Implants and vasectomy were the least preferred ones followed by injectable contraceptives. The most common reasons for not using contraceptives were, lack of information (40.74%),fear of side effects (27.16%) and need for more children (13.58%). The least common reason was lactational amenorrhea (1.23%).

# **CONCLUSION**

It was seen that 27.9% of the married had unmet need for contraception.

#### **KEYWORDS**

Unmet Needs, Contraception, Family Planning

# **INTRODUCTION**

Unmet need for family planning signifies the disparity between women's reproductive intentions to avoid pregnancy and their actual use of contraception. According to the World Health Organization, an estimated 210 million women become pregnant annually, with only two-thirds carrying pregnancies to term and delivering live infants; the remainder end in stillbirths, miscarriages, or abortions. The factors contributing to unintended pregnancies are diverse and encompass various fields including healthcare (coverage and effectiveness of family planning programs), health literacy, and behavior (knowledge and proper utilization of modern contraceptive methods), sociocultural aspects (attitudes towards fertility and contraception), gender rights (sexual coercion), and autonomy in sexual and reproductive decisions (women's empowerment in contraceptive use, pregnancy timing, and spacing). [3-6]

In India, many couples avoid long-term contraceptive methods due to concerns about side effects or they have preferences against coitus-linked methods. Consequently, numerous women who wish to control birth spacing or limit births currently do not use contraceptives. [7] Globally, unintended pregnancies stemming from unmet need represent a significant issue impacting women, their families, and societies at large. Several international initiatives have aimed to address this issue, leading to substantial progress over the past two decades. From 2000 to 2020, the number of women using contraceptives increased by 188 million worldwide, and the percentage of demand for contraceptives satisfied rose from 73.6% to 76.8%. [8,9] Effective prevention of unintended pregnancies is crucial for improving pregnancy outcomes and reducing complications associated with childbirth. [10]

Nevertheless, the persistent unmet need for contraceptives continues to undermine the potential benefits of contraceptive use. Hence, this study was conducted to assess the unmet contraceptive needs among married women of reproductive age attending the Obstetrics and Gynecology Outpatient Department at a tertiary care center in Western Odisha.

#### MATERIALS AND METHODS

The present study is a cross sectional study conducted among married women of reproductive age group attending the Outpatient department of the Obstetrics and Gynaecology (OBG) OPD of a tertiary care centre of Western Odisha between Jan- Feb 2021. Unmarried women and those who did not give consent for the study were excluded.

The sample size has been estimated using the following formula,  $n=Z^2_{(1-\alpha/2)}pq/d^2$ , Where in,  $Z^2_{(1-\alpha/2)}$  value for 95% level of significance = 1.96, p = Prevalence of unmet need for contraception in urban Karnataka (18.6%), q=100-p which is 81.4, d=precision of 7%. Substituting the above formula minimum sample size is 124. Considering a non-response rate of 20%, the final sample size is 154.

The married women of reproductive age group were interviewed by using a predesigned and pretested semi-structured questionnaire between 10:00AM – 12:00PM on each working day excluding Sunday and official holidays at OBG department of tertiary care centre. Study

ISSN:0975 -3583.0976-2833 VOL 15, ISSUE 07, 2024

participants were interviewed individually by taking informed consent (verbal) before initiation of interview. Questionnaire topics included sociodemographic parameters, knowledge of contraceptive methods and its uses. Questions about awareness of contraception, contraceptives methods source of information and its uses were asked.

The study was approved by the institutional ethics committee of the Institute. The data was entered in MS-Excel sheet. Descriptive analysis and frequency distribution was done using statistical method.

#### **RESULTS**

Out of 154 study subjects, maximum 80 (51.94%) belonged to the age of more than 25 years, followed by 71(46.1%) in the age group of 18-25 years and 3 (1.94%) in the age group of less than 18 years. Maximum number of women 40(25.97%) were educated till secondary school whereas 35(22.73%) studied till primary school or lesser than that 13(8.44%) were completely illiterate and only 2(1.30%) were graduates. With regards to occupation, 127 (82.4%) were home-makers and others are 27 (17.6%) included farmers, maids, teachers, daily wage labourers and businesswomen (Table 1).

Out of 154 study subjects, 64 (41.55%) women had one child, 45(29.2%) had two children,20 (12.98%) had more than 2 children and25 (16.23%) women haven't had a child yet. Out of those who had children, 69(44.80%) couples had a baby girl as their last child and rest 60(38.96%) had a boy as their last child. Out of 154 subjects, more than half 109 (70.77%) desired to have two children followed by 24 (15.58%) who wanted to have one child only. 21 (13.63%) couples wished to have more than two children (Table 1).

Most (79.22%) of the women were of age 18-25years when they got married, followed by 18.83% who got married even before they crossed 18. Maximum (78.58%) had no abortion history and the rest (21.42%) had an abortion before, cause of which was spontaneous (47.5%), accidental (37.4%), infection (9.1%), congenital abnormality (6%). Only one (3%) of them had contraceptive failure. Inter-spouse communication about contraception was present in maximum (80.51%) of couples and the rest (19.49%) of the couples didn't talk about contraception (Table 1). 124(80.51%) were aware about the existence of contraceptives ( Table 2), source of which were ASHA (36.7%), Doctors (23%), media (15.3%) and others (25%). Maximum subjects knew about condoms (74.02%) and oral contraceptives (70.77%) and minimum knowledge was of implants and injectables. Rest (19.49%) didn't have knowledge about contraception at all. Futhermore it was also found that implants and vasectomy were the least preferred ones followed by injectable contraceptives. (Table 3).

81(52.6%) were contraceptive non-user and 73(47.4%) were using some kind of contraceptive. The reason for using contraceptives among those who used them were, for spacing birth (58.90%); wanting no more (34.24%) and some other reason (6.84%) (Table 2).

The most common reasons for not using contraceptives were, lack of information (40.74%), fear of side effects (27.16%) and need for more children (13.58%). The least common reason walactational amenorrhea (1.23%) (Table 2).

132 (85.71%) women had no knowledge about Antara and Chhaya(Chhaya is centchroman while Antara is injectable DMPA) and rest 22(14.28%) had knowledge about either of them.(Table 2).

Out of 154 study subjects, it was observed that most (72.1%) reported no unmet need for contraception, while the remaining (27.9%) indicated they did have such a need.

ISSN:0975 -3583,0976-2833 VOL 15, ISSUE 07, 2024

S. No.	Variables		Frequency (Percentage)		
1		< 18 Years	3 (1.94%)		
	Age	18 – 25 Years	71 (46.10%)		
		> 25 Years	80 (51.94%)		
		Illiterate	13 (8.44%)		
2		Primary School	35 (22.73%)		
	Educational Status	Middle School	32 (20.78%)		
	Educational Status	Secondary School	40 (25.97%)		
		Higher Secondary	32 (20.78%)		
		Graduate	2 (1.30%)		
		Daily wage Labourer	4 (2.59%)		
		Farmer	6 (3.89%)		
3	Occupational Status	Home Maker	127 (82.4%)		
		Maid	3 (1.94%)		
		Teacher	14 (9.09%)		
		> 2 children	20 (12.98%)		
4	N f Children	1 child	64 (41.55%)		
4	No. of Children	2 children	45 (29.22%)		
		0 children	25 (16.23%)		
		Male	60 (38.96%)		
5	Gender of last child	Female	69 (44.80%)		
		Nil	25 (16.23%)		
	Desired number of children	>2 children	21 (13.63%)		
6		1child	24 (15.58%)		
		2children	109 (70.77%)		
	Duration of Marriage	< 1 Year	19 (12.33%)		
7		1-5 years	53 (34.41%)		
/		6 – 10 Years	51 (33.11%)		
		> 10 years	31 (20.12%)		
	Age at the time of Marriage	< 18 Years	29 (18.83%)		
8		18 – 25 Years	122 (79.22%)		
		> 25 Years	3 (1.94%)		
9	History of Abortions	Yes	33 (21.42%)		
10	Interspouse communication	Yes			
	regarding contraception		124 (80.51%)		
Table 1: Baseline characteristics of the study population(n=154)					

S. No.	Variables		Frequency (Percentage)
1	Knowledge about contraception	Yes	124 (80.51%)
2	Using Contraceptives	Yes	73 (47.40%)
3	Reason for using contraceptive ( N=73)	Birth Spacing	43 (58.90%)
		Want no more children	25 (34.24%)
		Any Other	5 (6.84%)
4	Reasons for not using contraceptives ( Multiple Options*) (N=81)	Lack of Information	33 (40.74%)
		Fear of side effects	22 (27.16%)

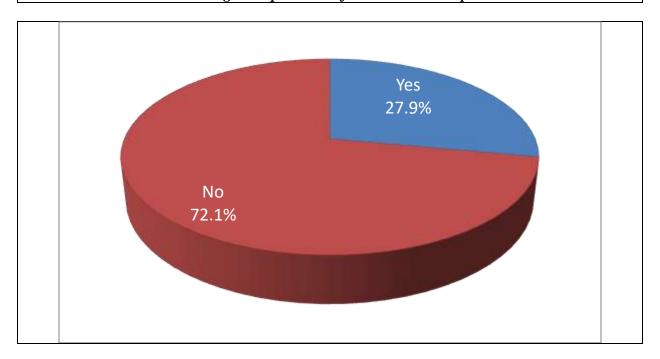
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		Need more children	11 (13.58%)
		Inconvenience	4 (4.93%)
		Husband Opposition	3 (3.70%)
		Need male child	2 (2.46%)
		Religious Belief	2 (2.46%)
		Lactational Amenorrhea	1 (1.23%)
		Planning to use it in the future	4 (4.93%)
5	Knowledge about Newer contraceptives (Antara and Chhaya)	Yes	22 (14.28%)

Table 2: Contraceptive awareness, its usage and reasons for usage and non usage among the study population

Type of Contraceptive	Knowledge about the contraceptive (N=154)	Used in the past ( Multiple Options*) (N=73)	Intended to use in the future (N=154)
Oral	109 (70.77%)	31 (42.46%)	11 (7.14%)
ECP	90 (58.44%)	11 (15.06%)	9 (5.84%)
IUD	98 (63.63%)	13 (17.80%)	10 (6.49%)
Condom	114 (74.02%)	40 (54.79%)	15 (9.74%)
Vasectomy	93 (60.38%)	0 (0%)	1 (0.64%)
Tubectomy	97 (62.98%)	6 (8.21%)	20 (12.98%)
Implants	31 (20.12%)	0 (0%)	0 (0%)
Injectable contraceptives	34 (22.07%)	4 (5.47%)	4 (2.59%)

Table 3: Knowledge and practices of various contraceptive methods



ISSN:0975 -3583.0976-2833 VOL 15, ISSUE 07, 2024

Figure 1: Unmet need for contraception in the study population

#### **DISCUSSION**

In the present study, 27.9% of women had an unmet need for family planning: 16.34% desired spacing and 11.56% desired limiting. The results obtained in the present study are lower than that observed by Bhattathiry MM et al<sup>[3]</sup> where 39% had an unmet need for FP: 12% for spacing and 27% for limiting. The estimated prevalence of unmet need for family planning for the state of Odissa was found to be 7.2 for the year 2021 as per a study conducted by Kirtana Devaraj et al.<sup>[11]</sup>The considerable difference could be because of changes in demographic and socioeconomic characteristics. It was seen that younger women and those in the lowest quintiles of wealth had relatively higher prevalence of total unmet needs.<sup>[3]</sup>

Most unmet need of younger women is for spacing births, whereas for older women it is for limiting births. Unmet need typically peaks for many women in their thirties and then declines in the forties. [3] In case of women having one child, the unmet need for spacing was seen to be highest (26.5%) and gradually decreased with each additional child. On the other hand unmet need for limiting births was low (18.30%) in women having one child and was gradually increased with each additional child. 44% of the women of unmet needs group had one child so it indicates even after first child the women are interested in controlling fertility. This is in contrast to a study done by But in Ram et al, study showed that 92% of the mothers with unmet need had 2 or more children. [12]

The study showed that 79.22% of women arein the age group of 25-29 years,where unmet need is at its highest at 16.34%. This is comparable to the results obtained by Bhattathiry MM where unmet need of family planning was at its highest at 29%, in women between 25-29 years. [3]

Most of the married coupleused condom followed by oral contraceptives. Very few (5.47%) used injectable contraceptives. This is comparable to the results obtained by Bhattathiry MM et al<sup>[3]</sup>where 48% of the couple were contraceptive users and most of themused condom (28%). Oral contraceptives, particularly those combining estrogen and progestin, offer up to 99% effectiveness in addition to providing non-contraceptive advantages. These include protection against certain cancers, prevention of iron deficiency anemia, regulation of menstrual cycles, improvement of acne and hirsutism, management of endometriosis, and prevention of osteoporosis. It would be beneficial to highlight these positive effects in educational programs to alleviate concerns regarding potential adverse effects.

For 64% of the women, the source of informed choice is the health care worker. This is comparable to the results obtained by Bhattathiry MM et al<sup>[3]</sup> where 69% of the women reported that the source of informed choice was the health care worker. However, MaoJ<sup>[13]</sup> in a study showed friends (44%) as the most common source, followed by media (22%). BajracharyaA<sup>[14]</sup> concluded that the most common source of information was media(60.5%). Television and radio were the most common source of knowledge in 70% of cases as shown by Ghike et al.<sup>[15]</sup>

In the present study, 81(52.6%) women were non users, mainly because of lack of information followed by fear of side effects. Similar reasons were quoted by the study population in a study conducted by Bhattathiry MM et al<sup>[3]</sup>where the main reason for not using any family planning method was low perceived risk of pregnancy (18%), fear of side effects (9%) and lack of information (5%) Bajracharya A<sup>[14]</sup> found no specific cause in most of the nonusers. Study done by Kaushal et al<sup>[16]</sup> showed that unavailability was the main cause accounting for 30.8%.

Unmet need for FP was higher among rural women compared with urban residents(18.6% vs 9.3%). The probable reasons could be ignorance, lack of awareness, limited access to health care facilities, socioeconomic factors, cultural and social norms. This is in contrast to the findings obtained by Sudarshan Dash et al<sup>[4]</sup> wherethere was no significant difference between the urban and rural residential areas regarding their status of contraceptive use.

# **LIMITATION**

This was a hospital-based study and hence the results may not be generalized for the whole country.

# **CONCLUSION**

In the present study, 27.9% of women had an unmet need for family planning: 16.34% desired spacing and 11.56% desired limiting. 81(52.6%) were contraceptive non-user. The most common reasons for not using contraceptives were, lack of information (40.74%), fear of side effects (27.16%) and need for more children (13.58%).

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