

Original Research Article

Perceptions and practices of various maternal and child health services: a study among women of reproductive age group in a costal block of Ganjam District, Odisha

Prafulla Chandra Pal, Manasee Panda, Nivedita Karmee, Sanjaya Kumar Sahoo*

Department of Community Medicine, MKCG Medical College, Berhampur, Odisha, India

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***Correspondence:**

Dr. Sanjaya Kumar Sahoo,

E-mail: sanju_dr97@yahoo.co.in

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ABSTRACT

Background: “Healthy mothers - Healthy children” and “children’s health - tomorrows health”. Any intervention which should be planned towards the upliftment of health status of this group must start with gathering information about their present status especially in the underprivileged section. This study was conducted with an objective to assess perceptions and practices of various Maternal and Health services in the study group.

Methods: An observational, cross-sectional study was conducted among women in reproductive age group residing in villages of a coastal block with a predesigned and pretested questionnaire.

Results: Among the study population 54.7% women were in the 25-34 years age group, majority (46.7%) were illiterate and one-fourth of the study population age at marriage was below 18 years. Though 90.7% of study population were aware of the ongoing contraceptive practises only 37.4% of the respondents accepted some or other contraceptive methods. Fear of side effects (35.4%) found to be the chief reasons for unwillingness for adopting contraception. Majority (90.2%) responded that pregnant women need to go for ANC but only 51.9% knew correctly about minimum number of ANC. Women having adequate knowledge on ANC was found to be significantly associated with their educational status and age at marriage. Among PNC mothers 57.6% had completed the requisite no. of ANC and only 30% of respondents had completed the course of iron and folic acid tablet during their last pregnancy.

Conclusions: The literacy status of the study population has to be improved which will lead to demand generation and utilization of the health and other services provided by the Government.

Keywords: Child health, Maternal, Perception, Practices, Reproductive age group

INTRODUCTION

“Healthy mothers - Healthy children” and “children’s health - tomorrow’s health”. It is the duty of everyone to ensure them a better, longer lasting quality of life providing better health, nutrition, education and social service. Any intervention which should be planned towards the upliftment of health status of this group must start with gathering information about their present status especially in the underprivileged section. The health

status of women in reproductive age group is assessed through measurements of mortality, morbidity, and growth and development. Though the mortality indicators are reliable, they are relatively insensitive because of changing criteria for health and other indicators of health are required to demonstrate the real health picture. Morbidity data are often scarce, poorly standardized and cannot be quantified. In recent years much attention has been given to systematic collection, interpretation and dissemination of data on health of the mother and child,

but much remains to be explored. India has 17.5% of the world's population (UN World Population Prospects, 2008) but only 2.4% of its landmass, resulting in great pressures for resources.¹ As per 2011 census, the total population of India is 1.2 billion out of which 655.8 million are males and 614.4 million are females.² The typical female advantage in life expectancy is not seen in India and this suggests there are systematic problems in women's health care. Indian women have high mortality rates, particularly during childhood and in their reproductive years. India's maternal mortality rates in rural areas are among the world's highest. From a global perspective, India accounts for 19% of all live births and 27% of all maternal deaths (NFHS-3).³ The health situation of women and children in India is very poor. Due to increasing socio-economic inequalities, rapid urbanization and shifting economic activity from Agriculture to industry there is rise in diseases like HIV/AIDS and the re-emergence of diarrheal diseases, malaria, TB etc. has been noticed. The contraceptive prevalence among reproductive women is very low and there is underutilization of maternal and child health care service attributable to low female literacy. The situation in Odisha is mainly due to malnutrition, infection and unregulated fertility together with poor socioeconomic conditions including scarcity of health and other social service. The people residing in coastal villages form a group of vulnerable not only against the fury of nature but also due to poor standards of living. The social patterns prevalent among them include illiteracy, poverty, large family, insanitary living conditions etc, apart from doing strenuous physical labour so as to make their daily lively hood. This has profound effect on the health status of aforementioned group of population.

Although there are numerous studies regarding maternal and child health among women of reproductive age group, not many researches were done in recent times in this part of the country especially among women living in coastal areas. Also determining the perceptions and practices of various Maternal and Health services in the study group will help the health administrators and policy makers to work on all the modifiable factors for effective implementation of different MCH programmers and proper utilization of services by the beneficiaries. With this background, the study was undertaken to assess perceptions and practices of various Maternal and Health services in the study group. The objectives of this work to study demographic and socio-economic profile of women in reproductive age group residing in villages of a coastal block of Ganjam district and also to assess perceptions and practices of various Maternal and Adolescent Health programmes in the study group.

METHODS

Study settings

The study was conducted in villages of a coastal block of Ganjam district, Odisha.

Study design

An observational cross-sectional study.

Study population

Women of reproductive age group (15-49 years).

Sampling method and sample size

The study was carried out in one randomly selected block (i.e. Rangeilunda block) out of 23 blocks of Ganjam district. Out of 82 villages of the block 10% of the total villages (i.e. 8 villages) were selected by simple random sampling method. From each village 30% of the women in reproductive age group (15-49 years) were taken for the study purpose.

Table 1: List of selected villages with population and required sample size from each village.

Name of the village	Total female population within 15-49 yrs.	Desired no of women within 15-49 yrs. (30% of total)
Manikapur	220	66
Totadapalli	179	53
Mandarajpur	88	26
Garampeta	235	70
Indrakhi	258	77
Betanapada	125	37
Nakaram	57	17
Panapalli	138	41
Total	1300	387

The total sample size= 387

The total female population of reproductive age group of the selected villages was collected from the AWW. Sampling interval in each selected village was calculated by dividing the number of females in reproductive age group of 15-49 years in that village by required number of respondents (30% of total females in each village).

First female respondent to be interviewed was randomly selected from the census list and then applying sampling interval by systematic random sampling method next respondent to be interviewed was chosen till the desired no of respondents were interviewed after subjecting them to the following exclusion and inclusion criteria.

Inclusion criteria

Women in reproductive age group (15-49 years).

Exclusion criteria

- Those not willing to participate,
- Those who were very sick at the time of interview.

Study period

January 2014 to September 2015.

Study tool

The Pre-designed pre-tested schedule consisted of relevant socio-demographic information, perception and utilisation of ANC, PNC services, contraceptive practices. The data were collected from the study population after taking informed consent. All due care was taken not to hurt the emotion of the study subjects.

Method of data collection

Prior to data collection, in each of the selected villages AWW/AW helper/ASHAs were contacted and sensitized about the study instrument as they had to accompany the investigator during the data collection to elicit confidential information. Data was collected by interview method twice a week i.e. on Tuesdays and Fridays with prior information to the ASHA/AWW/AW helper. Each day, data was collected from 3-4 women and all were contacted in the morning hours. Study subjects were explained about the purpose of study. After taking informed consent from each study subject, interview was conducted for data collection using the pre-designed, pre-tested schedule.

The data so collected were compiled and analyzed in the Department of Community Medicine, MKCG Medical College, Berhampur, Odisha using appropriate statistical methods.

RESULTS

Majority of the women (54.7%) were in the 25-34 years age group which is the most crucial period in the reproductive span, followed by 24.1% in the age group 15-24 years and 21.1% were in the age group 35-49 years. Most of the women were Hindus (96.3%). More than half (52.2%) of women were from nuclear families. Majority of the women (75.2%) were homemakers. Among the study population majority (46.7%) were illiterate thus revealing lower literacy status among females. Most (90.4%) of the study population were married. Among them 71.4% got married within 18-29 years of age. Almost one-fourth of the study population age at marriage was below 18 years (Table 2).

Most (90.7%) of study population were aware of the ongoing contraceptive practices. Regarding awareness about types of contraceptive methods, 59.7% of population were aware about tubectomy as a permanent method of contraception. Among temporary methods 79.5% were aware of barrier methods i.e. condoms followed by oral contraceptives (75.2%). Only 4% had knowledge on other methods like diaphragm, jellies and traditional methods including rhythm methods, withdrawal technique etc (Table 3).

Table 2: Background information of the study population (n=387).

Variables	Frequency(n)%	
Age (years)	15-24	93(24.03)
	25-34	212(54.78)
	35-49	82(21.19)
Religion	Hindu	373(96.38)
	Muslim	6(1.55)
	Christian	8(2.07)
Type of Family	Nuclear	202(52.19)
	Joint	97(25.08)
	Three generation	88(22.73)
Education	Illiterate	181(46.71)
	Primary	66(17.05)
	Secondary	83(21.44)
	Higher secondary and above	57(14.80)
Occupation	Home maker	291(75.19)
	Service-govt./private	28(7.23)
	Self-business	23(5.94)
	Unskilled worker	45(11.64)
Marital status	Married	350(90.43)
	Unmarried	30(7.75)
	Divorcee/separated/Widow	7(1.82)
Age at marriage (in years)	<18	85(23.8)
	18-29	255(71.42)
	>29	17(4.76)

Table 3: Awareness about contraception among study population

Awareness on contraception practices (n=387)	No. (%)
Yes	351(90.7)
No	36(9.3)
Awareness on type of contraceptive methods (n=351)	
Condoms	279(79.5)
OCP	264(75.2)
IUCD	178(50.8)
Tubectomy	231(59.7)
Vasectomy	49(13.9)
Other methods (natural methods, ayurvedic medications)	15(4.3)

Only 37.4% of the respondents accepted some or other contraceptive methods, giving the prevalence of contraceptive use as 37.4%. Although 90.7% had knowledge about contraceptives only 37.4% had adopted some form of contraceptive methods. Vasectomy was not accepted by any of subject's partner. Majority (37.41%) among users preferred tubectomy. Temporary methods were adopted by 62.6% of contraceptive users, out of which 28.2% women took oral contraceptive pills, IUCD was being used by 15.2% women and condoms were being used by the partners of 19.1% women as a means

of contraception. Present study showed poor male participation in contraceptive use (Figure 1).

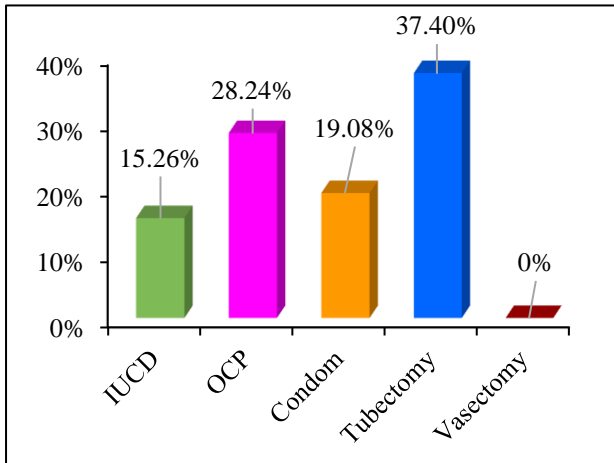


Figure 1: Distribution of study population as per acceptance of different contraceptive.

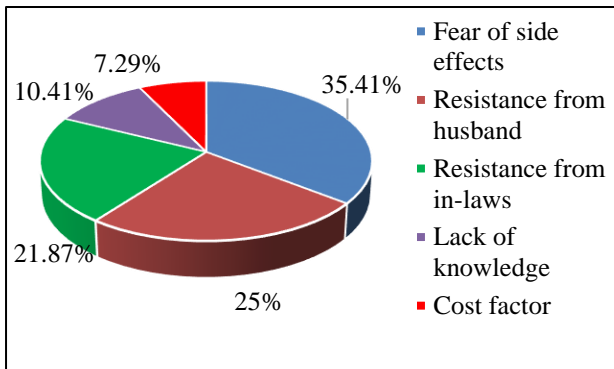


Figure 2: Reasons for non-adoption of contraceptive services (n=96).

Among the chief reasons for unwillingness for adopting contraception 35.4% were due to fear of side effects, 25% faced resistance from husbands, followed by in-law factor (21.8%). This could be attributed to social backwardness, lack of effective education, reluctance in acceptance of modern methods (Figure 2).

Majority (90.2%) of them responded that pregnant women need to go for ANC. However only 51.9% knew correctly about minimum number of antenatal checkups. 59.7% knew about correct doses of inj. TT and iron and folic acid tablets, 40.6% of respondents were aware of complications of pregnancy during antenatal period and only 29% of women knew about the harmful effects of addiction on pregnancy outcome. That 72% of women were aware that they should go for post-natal check-up after delivery.

Among the women who were aware of PNC, around 80% were of the opinion that child’s vaccination was the main cause for receiving PNC. Majority (75.62%) of women had the knowledge of spacing of at least two to three

years between successive pregnancies. Only 53.4% were aware of exclusive breast feeding. (Table 4)

Table 4: Knowledge about antenatal care and Postnatal care among study group (n=387).

Presence of knowledge about antenatal care	Frequency	(%)	
Minimum number of 4 visits	201	51.93	
Complications during antenatal period	157	40.57	
Tests during antenatal period	193	49.87	
Medications (inj. Tt and iron folic acid tab.)	231	59.69	
Diet	189	48.83	
Rest	182	47.02	
Harmful effects of addiction	113	29.19	
Knowledge about Post-natal care	279	72.09	
Minimum number of visits (4 visits)	135	48.38	
Type of care	Only for mother	73	26.16
	Only for child	223	79.92
	Both	20	7.16
Post-partum complications	147	52.68	
Spacing during birth	211	75.62	
Exclusive breast feeding	149	53.40	

Table 5: Knowledge of ANC according to literacy status and age at marriage.

Variables	Knowledge		P-value
	Inadequate No. (%)	Adequate No. (%)	
Literacy status			
Illiterate	103(56.90)	78(43.09)	Chi square = 68.446 P- value = 0.00001
Primary	19(28.78)	47(71.21)	
Secondary	12(14.45)	71(85.54)	
Higher secondary and above	6(10.52)	51(89.47)	
Age at marriage (in years)			
< 18	39(45.88)	46(54.11)	Chi square= 19.784 DF = 2 P - value=0.00005
18-29	54(17.25)	201(82.7)	
≥ 30	4(23.52)	13(76.47)	

Significantly more number of women with higher educational status had adequate knowledge on antenatal

care and those who were married at later age significantly had more knowledge on ANC (Table 5).

Table 6: Acceptance of ANC, IFA prophylaxis and TT immunisation among lactating women (n=33).

Type of service	Received	
	Complete No. (%)	Incomplete No. (%)
Minimum number of visits (at least 4)	19(57.57)	14(42.42)
Injection TT (2 doses)	26(78.78)	7(21.21)
IFA prophylaxis (≥ 90 tab.)	10(30.30)	23(69.69)

Those mothers who had delivered within last six months (n=33) were asked about acceptance of ANC practices and the study revealed that, around 79% of women had completed the course of inj. TT, 57.6% had completed the requisite no of antenatal visits and only 30% of respondents had completed the course of iron and folic acid tablet during their last pregnancy (Table 6).

DISCUSSION

In our study almost one-fourth (23.8%) of the study population age at marriage was below 18 years. Yadav K et al in a study in Dayalpur village of Haryana observed that 42.5% females were married before the age of 18 years.⁴ Masood A et al reported 63.4% got married before the age of 18 years in rural area while it was 41.6% in urban area.⁵ Similarly in a study by Gaur DR et al conducted in a rural Muslim area, 82.7% women got married before the legal age for marriage.⁶

In the current study more than half (52.2%) of women were from nuclear families. Similar findings were observed in the study by Singh A et al where majority of the respondents (65.1%) were from nuclear families.⁷ This could be due to emerging trend of nuclear families in the society. However, in a study on contraceptive methods in a rural area of West Bengal by Manna N and Basu G majority of the respondents (75.5%) were from joint families.⁸ In current study majority (46.7%) were illiterate whereas 17% had education up to primary level and only 14.7% had education up to higher secondary and above. Similar findings were found in the study by Manna N and Basu G, where 38.2% of the study population were illiterate and less than 3% had studied up to higher secondary and above.⁸

Similarly, in another study by Pandey S in rural area of Hisar, Haryana in 2011 revealed 43.2% of women were illiterate and 16.3% had education up to higher secondary and above.⁹ This might be due to several factors such as importance to male child in the family and familial objections to educate the girl child. However, a study by Walvekar PR in rural areas of Belgaum observed only

20% of women were illiterate. More than 40% of study subjects had secondary education.¹⁰

Current study revealed that 90.7% of study population were aware of the ongoing contraceptive practices. This emphasizes that the mass is well versed with methods of contraception. Similar findings were observed in the studies conducted at by Singh A et al and by Ghike S. et al where most of the women have knowledge about contraceptive methods as 78.18% and 100% respondents were familiar with at least one method.^{9,11} Regarding awareness about types of contraceptive methods, 59.7% of population were aware about tubectomy as a permanent method of contraception. Among temporary methods 79.5% were aware of barrier methods i.e. condoms followed by oral contraceptives (75.2%) which is less than that observed in the study by Makada K et al where majority (87.71%) women were aware about Oral Contraceptive Pills (OCP) and Cu-T, followed by female sterilization and condoms which was known to 80.4% and 77.5% women respectively.¹¹

It is revealed from the study that although 90.7% had knowledge about contraceptives only 37.4% of the respondents accepted some or other contraceptive methods, giving the prevalence of contraceptive use as 37.4%.¹² In a study conducted by Mohanan P et al reported couple protection rate of 28.1% which is comparable to this study.¹³ But according to the studies conducted by Walvekar PR in Belgaum, Divya and Kushwah in Rewa and Bisoi S. et al in Howrah, contraceptive prevalence was 59.92%, 60.6% and 62.3% respectively which is very high as compared to the present study.^{10,14,15}

In our study vasectomy was not accepted by any of subject's partner. Majority (37.41%) among users preferred tubectomy. Similar findings were observed in the study done by Singh N et al where tubectomy accounted for 43.27% among the current contraceptive users and vasectomy was not accepted by any of the couple.¹⁶ However, Maurya N et al in their study reported better acceptance of permanent contraceptives where tubectomy acceptors were 98.55% while only 1.45% used pills and condoms.¹⁷

Among the chief reasons for unwillingness for adopting contraception, 35.4% were due to fear of side effects, 25% faced resistance from husbands, followed by in-law factor (21.8%). Contrasting findings were observed in the study by Singh A et al where unawareness (53.45%) was the main reason for not adopting family planning methods and 35.63% due to fear from husbands and other family members.⁷ Also in another study by Ghike S et al found main reasons for non-use of contraceptive methods were family pressure (59%) i.e. from husband and in-laws and 2.1% women never wanted to use contraception due to fear and myths about it.¹¹ Majority (90.2%) of them responded that pregnant women need to go for ANC However, only 51.9% knew correctly about

minimum number of antenatal checkups. The knowledge and practice among women in our study was on lower side than findings in the study done by Jalina L et al where responses were 97.9% and 55.2% respectively.¹¹ Only 59.7% knew about correct doses of inj. TT similar to the findings of the study done by Jalina L et al.¹⁸

The study revealed that, around 79% of women had completed the course of inj. TT, 57.6% had completed the requisite no of antenatal visits and only 30% of respondents had completed the course of iron and folic acid tablet during their last pregnancy. Findings of the present study was similar to findings of NFHS-33 and DLHS-3 data (Odisha) which revealed 58% of women had at least 3 or more no. of antenatal visits and only 31.4% completed the course of IFA tablets and 52% of rural women had at least 3 or more no. of visits and only 47.7% completed the course of IFA tablets respectively.¹⁹

Also, DLHS-319 data showed majority (81.5%) of women had taken at least one TT injection. Women having adequate knowledge on ANC was found to be significantly associated with their educational status and age at marriage but in study done by Jalina L et al educational status, age at marriage, religion, and ownership of the house found to be associated significantly with knowledge on ANC.¹⁸

CONCLUSION

This study shows that though majority had knowledge on contraceptive practices very few were practicing contraception. Fear of side effects and resistance from husband were the leading causes of non-acceptance. Adequate knowledge on ANC was significantly associated with literacy status and age at marriage. Utilization of ANC services was not up to the mark. Majority of the women were not concerned about their own health during post-natal period.

Recommendations

The literacy status of the study population has to be improved. An improvement in the literacy status will lead to demand generation and utilization of the health and other services provided by the Government. To improve community awareness on ANC and PNC, IEC/BCC activities should be strengthened through community campaign and mass media like local television channel, radio and local newspapers. There is a need to motivate women to utilize maternal care services which are freely available in all the government health setup. Special emphasis should be given for exclusive breast feeding. Steps should be taken to improve male participation in reproductive health issues. Most importantly women empowerment will help in improving the status of women in the society and increasing their role in decision making about family planning issues will help India to achieve its long-term family planning goals.

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