

A Study of Knowledge, Attitude, and Practice of Contraception among Antenatal Mothers Attending Antenatal Clinic of a Tertiary Institute in India

Dipak Mandi¹, Avik Ghosh², Subhajit Howlader²

¹Associate Professor, ²Resident, Department of Obstetrics and Gynaecology, Burdwan Medical College, Bardhaman, West Bengal, India

Abstract

Objective: The objective of the study was to assess the knowledge, attitude regarding family planning, and the practice of contraceptives among antenatal women.

Materials and Methods: It was a cross-sectional study done over a period of 18 months in the Dept. of Obstetrics and Gynaecology of a hospital in India, involving 1000 women attending the antenatal clinic of this hospital. Their knowledge, attitude, and practice of contraception were studied.

Results: Out of 1000 women studied, 659 (65.9%) were primi and 351 (35.1%) were multigravida; most women (75.3%) belonged to 20–29 years of age group, had secondary education (38.1%), and were house-wives (69.3%). Eight hundred seventy-nine women (87.9%) had knowledge about contraception. Among those 879 women, 340 women had a positive attitude toward birth spacing, 98 had negative attitudes, 70 were undecided, and 365 women had no idea about the necessity of birth spacing. Most of the primigravida (212, 36.3%) prefer contraceptive pills, whereas most of the multigravida (102, 34.58%) prefer tubectomy. Most of the women (474), both users and non-users, depend upon the health workers regarding the choice of contraceptives.

Conclusion: Most of the women studied had some knowledge about contraception. Majority of them have a positive attitude toward contraception and birth spacing, but it is also noteworthy that a large number had no idea about the utility of birth spacing. Most of the primigravida prefer contraceptive pills, whereas most of the multigravida prefer tubectomy. They mainly depend upon the health workers for the selection of contraception.

Keywords: Attitude, Contraception, Knowledge, Practice

INTRODUCTION

It is rightly said that “The greatest shortcoming of the human race is our inability to understand the exponential function.” For countries such as Spain, Canada, and Italy, where the population is decreasing, population explosion might be considered as a boon. However, for a developing country like India, population explosion is nothing but a curse which is damaging the development of the country. With 17.74% of world’s population, India is the second most populated country in the world. Even though

2001–2011 decadal growth rate has reduced to 17.6 %, compared to 21.5% recorded during 1991–2001, suggesting slowing down of growth, there is an urgent need for the XII Five Year Plan to further accelerate the stabilization of India’s population by repositioning family planning within the broader framework of reproductive health and primary health care.^[1] The antenatal clinic was selected as the present study area as it suggests the best environment within the hospital for meeting females in the reproductive age group along with providing a forum for the dissemination of family planning information, correction of wrong perceptions as well as the opportunities for exchange of ideas between mothers.

MATERIALS AND METHODS

It was a cross-sectional observational study done in the Department of Obstetrics and Gynaecology of a tertiary

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Corresponding Author: Dr. Avik Ghosh, 2 No. Sankaripukur, Diptibag South, P.O. Sripally, Purba Bardhaman, West Bengal, India.

hospital in India, from January 2018 to June 2019 involving 1000 pregnant women, both primigravida and multigravida, attending antenatal clinic, after getting approval from Clinical Research Ethics Committee. Analysis was done regarding their knowledge, attitude, and practice of contraception. Informed consent was obtained from those women included in the study.

Objective

The objective of the study was to assess the knowledge, attitude toward family planning and the practice of contraceptives among antenatal women.

RESULTS AND ANALYSIS

Statistical analysis was done using percentage, Chi-square test. $P < 0.05$ was considered statistically significant.

Sociodemographic features of the study population are depicted in Table 1. Of 1000 women, 649 (64.9%) were primigravida and 351 (35.1%) were multigravida. Most of the women belonged to the age group of 20–29 years (75.3%), had secondary education (38.1%), and were housewives (69.3%).

Of 1000 women, 879 (87.9%) women had some knowledge about contraception. This is elaborated in Table 2.

Among those 879 women, 340 women had positive attitudes toward contraception, 98 women had a negative attitude, 70 women undecided, 365 women had no idea regarding the necessity of birth spacing. This is elaborated in Table 3. $P = 0.021$ is statistically significant.

Most of the primigravida (212, 36.3%) prefer contraceptive pills, whereas the majority of multigravida (102, 34.58%) prefer tubectomy as a mode of contraception. This is illustrated in Table 4. $P < 0.001$ is statistically significant.

Most of the women (474), both users and non-users, depend upon health workers for the selection of contraceptive methods. This is illustrated in Table 5. $P < 0.001$ is statistically significant.

DISCUSSION

The global population today stands at 7.7 billion and is expected to reach 9 billion by the year 2045.^[2] Increasing population is a global problem today and India having one-fifth of the world population and a growth rate of 16 million each year is the second most populated country in the world.^[3] Uncontrolled population growth has been recognized as the most important impediment to our

Table 1: Distribution of cases according to sociodemographic features

Gravidity	Frequency	Percentage
Primigravida	649	64.9
Multigravida	351	35.1
Total	1000	100
Age (Years)		
15-19	83	8.3
20-24	398	39.8
25-29	355	35.5
>=30	164	16.4
Total	1000	100
Educational status		
Illiterate	244	24.4
Primary education	273	27.3
Secondary education	381	38.1
Graduate	102	10.2
Total	1000	100
Occupation		
Govt/Pvt employee	86	8.6
Farmers	174	17.4
House wife	693	69.3
Others	47	4.7
Total	1000	100

Table 2: Distribution of cases according to knowledge about contraception

Knowledge about contraception	Frequency	Percent
No	121	12.1
Yes	879	87.9
Total	1000	100

national development, despite the fact that India was the first country in the world to adopt a national population control program in 1952.^[4,5] Hence, it is important at a global as well as national scale to ensure that all pregnancies are wanted or intended.

Family planning is defined by WHO as “a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes, and responsible decisions by individuals and couples, to promote the health and welfare of family groups and thus contribute effectively to the social development of a country.”^[6]

It is quite evident from our study that the majority of antenatal women (879 of 1000 women studied) had at least some knowledge regarding contraception. This corresponds to the findings of the studies of Mustafa *et al.*^[6], Kara *et al.*^[7], Sherpa *et al.*^[8], Renjhen *et al.*,^[9] Lavanya *et al.*^[10] who also found that most women of the reproductive age group had some degree of knowledge about contraception.

It was noted that among 879 women, both users and non-users of contraception, who had some knowledge about

Table 3: Distribution of cases according to attitude toward birth spacing method

		Attitude toward birth spacing				Total (%)	P value	Significance
		No idea (%)	Negative (%)	Undecided (%)	Positive (%)			
Used contraceptive before this pregnancy	No	251 (68.77)	55 (56.12)	41 (53.95)	213 (62.65)	560 (63.71)	0.021	Significant
	Yes	114 (31.23)	43 (43.88)	35 (46.05)	127 (37.35)			
Total		365(100)	98(100)	76 (100)	340 (100)	879 (100)		

Table 4: Distribution of cases according to the method of contraception used before this pregnancy between Primi and Multi gravida

		Gravidity		Total (%)	P value	Significance
		Multi (%)	Primi (%)			
Type of contraception	Condom	28 (9.49)	155 (26.54)	183 (20.82)	<0.001	Significant
	Pill	40 (13.56)	212 (36.3)	252 (28.67)		
	IUCD	48 (16.27)	126 (21.58)	174 (19.8)		
	Tubectomy	102 (34.58)	0 (0)	102 (11.6)		
	Injectables	77 (26.1)	91 (15.58)	168 (19.11)		
Total		295 (100)	584 (100)	879 (100)		

Table 5: Distribution of cases according to dependency on person for selection of method of contraception

		Dependency on person for choice of contraception			Total	P value	Significance
		Family (%)	Husband (%)	Health personnel (%)			
Used contraceptive before this pregnancy	No	65 (60.19)	218 (73.4)	277 (58.44)	560 (63.71)	<0.001	Significant
	Yes	43 (39.81)	79 (26.6)	197 (41.56)			
Total		108 (100)	297 (100)	474 (100)	879 (100)		

contraception, 340 women had positive attitudes toward birth-spacing, 98 had negative attitudes, and 70 women were undecided. A large number of women (365) had no idea about the necessity of birth-spacing. $P = 0.021$ which is statistically significant. This finding corresponds to the findings of Mustafa *et al.*,^[6] Kara *et al.*,^[7] Sherpa *et al.*,^[8] Renjhen *et al.*,^[9] Thapa *et al.*,^[11] Pegu *et al.*,^[12] These studies also show that majority of women had a positive attitude toward contraception as well as birth spacing, but also a large number of women had no idea about the utility of birth spacing.

From our study, we also found that while most of the primigravida prefer hormonal pills, most of the multigravida prefer tubectomy as a method of contraception. $P < 0.001$ is statistically significant. This corroborates with studies by Kara *et al.*,^[7] and Sherpa *et al.*,^[8] which found that most women prefer hormonal pills followed by condoms. Renjhen *et al.*,^[9] also found that most women prefer hormonal pills followed by condoms followed by tubectomy. Thapa *et al.*,^[11] found that most women prefer Inj. medroxyprogesterone followed by tubectomy followed by hormonal pills and condoms with equal frequency.

We found that most of the women depend upon health workers for the choice of contraception rather than their

husbands or other family members. $P < 0.001$ is statistically significant. This finding matches with the studies by Sherpa *et al.*,^[8] and Pegu *et al.*,^[12] However, Renjhen *et al.*,^[9] Lavanya *et al.*,^[10] Idonije *et al.*,^[13] and Tajure *et al.*,^[14] found that the source of information on contraception was social circle followed by media rather than health personnel. Thapa *et al.*,^[11] found that the source of information was mass media in most of the cases followed by health workers.

Mustafa *et al.*,^[6] conducted a cross-sectional study on 100 non-pregnant rural women of 15–45 years age group in the gynecological outpatient clinic of a hospital in Karachi, Pakistan, from July to December 2005. Of 100 interviewed women with a mean age of 29.7 years, 81 (81%) had some knowledge about family planning methods. The media provided information of contraceptives in 52 out of 81 (64%) women. Regarding the usage of contraceptive methods, only 53 (53%) of the respondents were using some sort of contraception. Barrier method (condoms) was in practice by 18 (33.9%) and 12 (22.6%) of women had already undergone tubal ligation. The women using injectables and intrauterine contraceptive devices were 10 (18.8%) and 7 (13.2%), respectively. Six were using oral contraceptive pills (11.3%). Positive attitude toward contraception was shown by 76 (76%) of them, while

41 (41%) stated their husbands' positive attitude toward contraception.

Sherpa *et al.*^[8] conducted that a descriptive survey of 136 females between 18 and 45 years of age was done using a structured knowledge questionnaire, structured attitude scale, and opinionnaire on practice and preference during the month of January 2012 to February 2012 at Moodu Alevoor village, Udupi district, Karnataka. It was shown that 98.5% got information through health personnel. The majority (67.60%) had moderate knowledge on contraceptive methods and 17.60% had high knowledge. The majority (87.50%) had a favourable attitude and 12.50% had an unfavorable attitude toward contraceptive methods. From the group of studied women, 38.23% did not use any contraceptive methods, 19.85% used OCPs, and minimum 1.47% used injection as a contraceptive method. In this study, 37.5% preferred OCPs as Rank 1, male condom (22.1%) as Rank 2, and injection (16.3%) as Rank 3. There was no association between attitude and the studied variables.

Renjhen *et al.*^[9] conducted a cross-sectional descriptive study in the Obstetrics and Gynaecology Department of a Hospital in Sikkim, India. The study group included 443 women of reproductive age group (15–44 years) attending the two hospitals during the month of January 2004 to March 2005. Their knowledge, attitude, and practice on contraceptives were evaluated with the help of a pre-designed questionnaire. It was found that 98% of the women had knowledge about family planning and 94.2% of them had knowledge about contraceptives. Over 50% had gained information from media. The majority (98%) thought that contraceptive use was beneficial, but only 55.2% had used contraceptives and 84% of them were satisfied. Sixty-two percent were currently using contraceptives, 37.9% of them were using oral contraceptives, 37.9% of them were using oral contraceptive pills, and 31% were using condoms.

A cross-sectional descriptive study was conducted by Thapa *et al.*^[11] among 209 married women of reproductive age in selected wards of Dharan Sub-Metropolitan City, Nepal. Most (53.1%) of the respondents were of the age group 20–34 years. The majority (92.3%) of the respondents had ever heard of contraception. Popular known method was Inj. Depo-Provera (92.7%). Mass media (85.8%) was the major source of information. Mean percentage score of knowledge was 45.23%. The majority (90.4%) of the respondents had a positive attitude and only (64.6%) were using contraceptives currently.

Bhabani Pegu *et al.*^[12] conducted a cross-sectional study in a hospital in Shillong, Meghalaya, a state in the North-

Eastern part of India. Two hundred married women aged between 15 and 45 years were included in this study. Along with the sociodemographic characteristics of the women, their knowledge, attitude, and practices on contraception were evaluated with the help of a pre-designed questionnaire. It was observed that of 200 women, 174 (87%) had knowledge about contraceptive methods and it was mainly obtained from health workers (58.6%) followed by media (24.1%) and social circle (15.5%). Seventy-six (38%) women were practicing contraceptive methods, of which most of them were using a condom (38.2%) followed by oral contraceptive pills (OCPs) (27.6%), intrauterine contraceptive device (15.8%), etc. Although most of the women had knowledge about contraceptive methods, the majority of male 55.5% and female 51.5% were showing a negative attitude toward family planning.

Hence, it is evident that the findings of our study are similar to the findings of the aforementioned studies.

CONCLUSION

From our study, we can conclude that most of the women among the study group had some degree of knowledge about contraception and also had a positive attitude about family planning. The majority of primigravida prefer hormonal pills, whereas multigravida prefers tubectomy. They mostly depend upon health personnel for the selection of contraceptives. It is noteworthy that a large number of women had no idea about the necessity of birth-spacing. Hence, we must take proper initiative to increase awareness on the utility of birth-spacing.

REFERENCES

1. Muttreja P. Family Planning: The Need to Reposition in context of Maternal and Child Health. New Delhi: Yojana; 2011. p. 11-4.
2. Van Bavel J. The world population explosion: Causes, backgrounds and projections for the future. *Facts Views Vis Obgyn* 2013;5:28191.
3. Park K. Park's Textbook of Preventive and Social Medicine. 17th ed. Jabalpur: Banarasidas Bhanot; 2002. p. 32558.
4. Renjhen P, Kumar A, Pattanshetty S, Sagir A, Samarasinghe CM. A study on knowledge, attitude and practice of contraception among college students in Sikkim, India. *J Turk Ger Gynecol Assoc* 2010;11:78-81.
5. Wani RT, Rashid I, Nabi SS, Dar H. Knowledge, attitude, and practice of family planning services among healthcare workers in Kashmir-a cross-sectional study. *J Fam Med Prim Care* 2019;8:1319-25.
6. Mustafa R, Afreen U, Hashmi HA. Contraceptive knowledge, attitude and practice among rural women. *J Coll Physicians Surg Pak* 2008;18:542-5.
7. Kara WS, Benedicto M, Mao J. Knowledge, attitude, and practice of contraception methods among female undergraduates in Dodoma, Tanzania. *Cureus* 2019;11:e4362.
8. Sherpa SZ, Sheilini M, Nayak A. Knowledge, attitude, practice and preferences of contraceptive methods in Udupi District, Karnataka. *J Fam Reprod Health* 2013;7:115-20.
9. Renjhen P, Gupta SD, Barua A, Jaju S, Khati B. A study of knowledge, attitude and practice of family planning among the women of reproductive

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- age group in Sikkim. *J Obstet Gynecol India* 2008;58:63-7.
10. Lavanya KS, Prasanna NS. A study on contraceptive knowledge, attitude and practice among reproductive age group women in a tertiary institute. *Int J Res Health Sci* 2014;2:577-80.
 11. Thapa P, Pokharel N, Shrestha M. Knowledge, attitude and practices of contraception among the married women of reproductive age group in selected wards of Dharan Sub-Metropolitan City. *J Contracept Stud* 2018;3:18.
 12. Pegu B, Gaur BP, Sharma N, Singh AS. Knowledge, attitude and practices of contraception among married women. *Int J Reprod Contracept Obstet Gynecol* 2014;3:385-8.
 13. Idonije BO, Oluba OM, Otamere HO. A study on knowledge, attitude and practice of contraception among secondary school students in Ekpoma, Nigeria. *JPCS* 2011;2:22-7.
 14. Tajure N. Knowledge, attitude and practice of emergency contraception among graduating female students of Jimma University, Southwest Ethiopia. *Ethiop J Health Sci* 2010;20:91-7.

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