# Study of knowledge, attitude, and practice of contraception among antenatal women at tertiary care hospital in Western Rajasthan



Kannupriya Choudhary<sup>1</sup>, Ritu Bijarnia<sup>2</sup>, Rizwana Shaheen<sup>3</sup>, Kamal Kumar Yadav<sup>4</sup>, Vinita Jangir<sup>5</sup>, Seema Kalasua<sup>6</sup>, Sandeep Choudhary<sup>7</sup>

<sup>1,4,5,6</sup>Post Graduate Resident Doctor, <sup>2</sup>Associate Professor, <sup>3</sup>Professor and Unit Head, Department of Obstetrics and Gynaecology, <sup>7</sup>Associate Professor, Department of Pediatrics, Umaid Hospital, Dr. S. N. Medical College, Jodhpur, Rajasthan, India

Submission: 04-01-2023 Revision: 03-03-2023 Publication: 01-04-2023

# ABSTRACT

Background: The global population today stands at 7.7 billion and is expected to reach 9 billion by year 2045.1 Increasing population is a global problem today. India is the largest demographic country of the world, posses 2.4% of world land area and supports 16% of world's population. India is going to be the highest populous country in the world by the year 2050. Aims and Objectives: The aim of the study was to assess the knowledge, attitude, and practice of contraception among antenatal women attending ANC clinic at Umaid Hospital. Materials and Methods: An observational and cross-sectional study conducted in department of Obstetrics and Gynaecology at Umaid Hospital, Jodhpur. Results: Our study revealed that majority (86%) of illiterate women not using contraceptive methods while users of contraceptive increase with education, contraception usage was found more in urban area (51%). Majority (95%) of participants had some knowledge about methods of contraception, commonly heard method was tubectomy (87%) followed by IUCD (68%), condoms (64%), and pills (61%), but this knowledge is not leading to increased practice, as only 43% participants had used contraception. Family acted as major source of information (35%) followed by health care worker (27%). Most of users accessed contraception from pharmacy (43%) followed by health center (24%). Most common reason to use contraception is to give gap between kids (33%) followed by, to prevent unwanted pregnancy (25%). Near 60% of participants agreed that husband opinion is the most important factor for choice of contraception. Conclusion: The consciousness to curb the rapid growth of population is rampant all over the world. Extensive efforts are being made in the developing countries to reduce the existing crude birth rates through the developing countries to reduce the existing crude birth rates through the development and reforms of indirect measures such as social, economic, cultural, health, and educational besides the direct programs of family planning.

### Access this article online

#### Website

http://nepjol.info/index.php/AJMS **DOI:** 10.3126/ajms.v14i4.51097

**E-ISSN**: 2091-0576 **P-ISSN**: 2467-9100

Copyright (c) 2023 Asian Journal of Medical Sciences



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Key words: Contraceptive; Condoms; Sterilization and oral contraceptive pills

### INTRODUCTION

The global population today stands at 7.7 billion and is expected to reach 9 billion by year 2045. With fast growing population, India's population will be 1.53 billion by the year 2050. In the present scenario, proper implementation of family planning methods, developing favorable attitude regarding this, is very essential. Globally family planning

is promoted as a mechanism to address the reproductive health needs of men and women as well as to face the crucial challenge of rapid population increase.<sup>2</sup> Hence, it is important at global as well as national scale to ensure that all pregnancies are wanted or intended. Use of contraceptives can prevent at least 25% of all maternal death by preventing unintended pregnancies and also protect against sexual transmitted infection such as Human Immunodeficiency

# **Address for Correspondence:**

Dr. Sandeep Choudhary, Associate Professor, Department of Pediatrics, Umaid Hospital, Dr. S. N. Medical College, Jodhpur, Rajasthan, India. **Mobile:** +91-9414416405. **E-mail:** sandeepbugasara@gmail.com

virus, Chlamydia, Syphilis, etc. A lack of knowledge of contraceptive methods, source of supply, cost, or poor accessibility are barriers that exist in developing countries.<sup>3</sup>

The WHO has defined family planning as "a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitude, and responsible decisions by individuals and couples of promoting health and welfare of the family and contribute effectively to the social development of country". Family planning actually aims at limiting fertility, avoiding high risk pregnancies, and ensuring responsible parenthood. It causes reduction in maternal mortality rate and infant mortality rate. The number of children was influenced by several factors including maternal educational background, marital age, maternal age of first child, and the use of contraceptive method.

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 to spread of family planning information, correction of wrong perceptions as well as the opportunities for exchange of ideas between mothers.<sup>47</sup> Hence, we planned the present study to assess the knowledge, attitude, and practice of contraception among antenatal care patient.

# Aims and objectives

The aim of the study was to assess the knowledge, attitude, and practice of contraception among antenatal women attending ANC clinic at Umaid hospital.

- a. To determine the proportion of antenatal women who have heard about family planning methods, know about its source of information, know the place where to access family planning methods
- b. To determine proportion of women influenced with husband opinion regarding family planning.

# **MATERIALS AND METHODS**

This was a cross-sectional observational study, conducted in department of Obstetrics and Gynaecology at Umaid Hospital, Dr. Sampurnanand Medical College Jodhpur, after taking permission from the Institutional Ethical Committee, we include pregnant women attending antenatal clinic till decided sampling numbers achieved.

With the help of structured self-administered validated questionnaire, interviewing of the attendees of the antenatal clinic was done. The questionnaire was framed with aim of gather information in relation to the reproductive health of the subjects, awareness of time of commencement of contraceptive choices, knowledge of different variety of contraceptive techniques, information's source, and reasons for use and non-use of contraceptives was collected.

Sample size was calculated to be 245 antenatal women at 95% confidence interval and 5% relative allowable error, which was enhanced and round to 250 subjects. Data were analyzed with help of Chi-square test. P<0.05 was considered significant.

### **RESULTS**

Table 1 shows that most participants belong to 21–30 years of age group. Out of 250 only 41.60% are users and 58.40% had not used any contraceptives.

Among illiterate 86.36% women are non-users while number of users increase with education, P<0.05 (Table 2).

Users of contraceptive are more in urban area than rural area (P<0.05) (Table 3).

Women who is having child alive at home opted more to contraceptive methods than, women who is not having any live issue at home (P<0.05) (Table 4).

Among total participants 95.60% have heard about contraception and 4.4% have not heard about contraception. Among the patients who have heard about contraception, 43.51% are users and 56.49% are non-users (Table 5).

Most commonly heard method of contraception is Tubectomy (87%) followed by IUCD/vasectomy (68%), condoms (64%), and pills (61%) (Table 6).

Table 1: Age wise distribution of study population Total Age (years) User Not user % Ν % n n ≤20 0 0.00 100.00 15 15 6.00 21-30 94 45.41 113 54.59 207 82.80 ≥31 10 35.71 64.29 11.20 18 28 41.60 Total 104 146 58.40 100.00

Education	U	User		Not user		Total	
status	n	%	n	%	n	%	
Illiterate	6	13.64	38	86.36	44	17.60	
Primary	25	48.08	27	51.92	52	20.80	
Secondary	36	52.17	33	47.83	69	27.60	
Higher secondary	11	37.93	18	62.07	29	11.60	
Graduate	11	42.31	15	57.69	26	10.40	
Post graduate	15	50.00	15	50.00	30	12.00	
Total	104	41.60	146	58.40	250	100.00	

Table 3: Lacality wise distribution of study cases								
Locality	U	ser	Not	user	Total			
	n	%	N	%	n	%		
Rural	37	30.58	84	69.42	121	48.40		
Urban	67	51.94	62	48.06	129	51.60		
Total	104	41.60	146	58.40	250	100.00		
P<0.0E	Peo or							

Table 4: Distribution of study cas	ses based on
number of living child	

No. of	U	ser	Not	user	Т	otal
child living	n	%	N	%	n	%
0	25	28.74	62	71.26	87	34.80
1	53	44.54	66	55.46	119	47.60
2	17	65.38	9	34.62	26	10.40
≥3	9	50.00	9	50.00	18	7.20
Total	104	41.60	146	58.40	250	100.00

Table 5: Distribution of study population based on ever heard about contraception

Heard about	U	ser	No	t user	Т	Total	
contraception	n	%	n	%	n	%	
Yes	104	43.51	135	56.49	239	95.60	
No	0	0.00	11	100.00	11	4.40	
Total	104	41.60	146	58.40	250	100.00	

Table 6: Distribution of study population according to their knowledge regarding methods of contraception

Knowledge regarding methods	Number	%
LAM	58	24.26
Condoms	153	64.01
Implant	5	2.09
Calendar	40	16.73
Diaphragm	4	1.6
IUCD	164	68.61
Pills	148	61.92
Tubectomy	210	87.86
Vasectomy	164	68.61
Injection	108	45.18

Over all family contribute as a major source of information about contraception (35%) followed by health-care worker (27%) and friends (16%) (Table 7).

The study shows that 31.73% used condoms previously followed by IUCD (28%) pills (20%) and calendar method (19%) (Table 8).

We found that 60.80% of women discussed with husband regarding selection of contraception methods followed by family (20.40%) and health worker (14.80%) (Table 9).

Table 7: Distribution of study subjects according to their source of information about contraception

Source of	ι	Jser	No	Not user		Total	
information	n	%	n	%	N	%	
Family	31	29.81	55	37.6	89	35.60	
Friends	16	15.38	24	16.44	40	16.00	
Health care worker	33	31.73	36	24.66	69	27.60	
NGO	6	5.77	6	4.11	12	4.80	
TV/radio	15	14.42	9	6.16	24	9.60	
Magazine/ news paper	3	2.88	5	3.42	8	3.20	
Not knowing	0	0.00	11	7.5	5	2.00	
Total	104	100.00	146	100.00	250	100.00	

Table 8: Contraceptive methods used by study cases

Which method used (n=104)	No. of women	Percentage
Calendar method	20	19.23
Condoms	33	31.73
Implant	3	2.88
Injection	7	6.73
IUCD	30	28.84
LAM	5	4.81
Pills	21	20.19

Table 9: Distribution of study cases according to their choice to talk regarding selection of contraception methods

Talk about	ι	User		Not user		Total	
contraception for selection	N	%	n	%	n	%	
Husband	68	65.38	84	57.53	152	60.80	
Family	18	17.31	33	22.60	51	20.40	
Friends	2	1.92	6	4.11	8	3.20	
Neighbor	1	0.96	0	0.00	1	0.40	
Health worker	15	14.42	22	15.07	37	14.80	
Others	0	0.00	1	0.68	1	0.40	
Total	104	100.00	146	100.00	250	100.00	

Table 10: Reasons to use contraception

Reason to use	No. of women	Percentage
Gap between kids	35	33.65
Improve health	6	5.77
Prevent STD	19	18.27
Prevent unwanted pregnancy	27	25.96
Recommended by health worker	7	6.73
Socioeconomic reasons	10	9.62
Others	0	0.00
Total	104	100.00

In our study, main reason for use contraceptive was to maintain gap between kids (33.65%), followed by to prevent unwanted pregnancy (25.96%) (Table 10).

Table 11: Factors which influence the choice of contraception					
Factors which support the choice of contraception	No. of women	Percentage			
Advertisement on media	8	7.69			
Fewer side effects	26	25.00			
Heard from family	5	4.81			
Heard from friends	1	0.96			
Husband opinion	61	58.65			
Offers	3	2.88			
Total	104	100 00			

Table 12: Different reasons for not to use contraception							
	Reasons for not want to use	No. of women	Percentage				
	Cultural belief	2	1.37				
	Due to religious belief	3	2.05				
	Fear of side effects	23	15.75				
	Lack of knowledge	21	14.38				
	Prohibition put by husband	6	2.05				
	Prohibition put by laws	4	1.37				
	Decreased Sexual Pleasure	12	8.22				
	Using natural method	26	17.81				
	Want to have child	49	33.56				
	Total	146	100.00				

The study revealed that husband opinion (58.65%) is the most common factor which support the choice of contraception (Table 11).

Most common reason for not to use contraception was the desire to further have child (33.56%) followed using natural methods (17.81%), fear of side effects (15.75%), lack of knowledge (14.38%), and decreased sexual pleasure (8.22%) (Table 12).

# DISCUSSION

The consciousness to curb the rapid growth of population is rampant all over the world. Extensive efforts are being made in the developing countries to reduce the existing crude birth rates through the development and reforms of indirect measures such as social, economic, cultural, health, and educational besides the direct programs of family planning. However, these measures have yet to make their impact felt in the rural areas where the ideal family size figure continues to register a slow decline.

This study was undertaken by interviewing 250 antenatal women who came to antenatal clinic for check-up at Umaid hospital, Jodhpur, attached to Dr. SNMC Jodhpur. Among 250 antenatal women 104 are contraception user (41.60%) while 146 (58.40%) are not using any kind of contraceptive methods (Table 1). We found illiterate women used contraceptive in lesser number while it increases with

education status (Table 2), similar results shown by Thapa et al. Thus, literacy is an important factor influencing the attitude toward family planning practices. Hence, through improving educational status, knowledge, and practice of contraception can be improved. We observed women belonging to rural area, around 30% are users and 69.42% are non-users while women residing in urban area, around 51.94 are users and 48.06% are non-users. This difference may be due to people residing in urban area have better access to contraceptive facilities. We saw as the number of pregnancy increases, usage of contraception also increases and similar findings were obtained by Thapa et al. 8

Majority of participants around 95.60% have heard about contraception in our study and results were similar to studies done by others. 9,10

In this study, family acts as a major source to spread knowledge of contraception followed by health workers and media, which similar to study done in nigeria<sup>11</sup> but contrary Thapa et al., found that mass media was the major source of information.<sup>8</sup> This signifies that family plays a important role in making people aware regarding contraception. Our family planning program should be family oriented. So that benefits of contraception can be propagated by family members and people get easily convinced by family members.

Most of users access contraception from pharmacy (43.27%), followed by health center (24%), hospital (15%), and NGO (2%). Kara et al., also reported pharmacies were the most common source of contraception (53%), In contrary to this Lincoln et al., found that 57% participants accessed contraception from health center. Seventy-two females (69.23%) consider that contraception is not difficult to access and similar results were obtained by Sangavi and Hatnoor her study. Free availability of contraception at health center needs to be improved so that people may get more benefited.

Most preferred contraceptive method was condoms (31%) followed by IUCD (21%) and pills (20%), and similar findings were obtained by in a study done by Kara et al., on contrary Thapa et al., found most common used method was inj. Depo–provera in their study.

Around 60% want to talk with husband for selection of contraception followed by family (20%) and health worker (14.80%), in similar studies, majority of the participants agreed that a male's attitude about contraception play a big role into women's decision to use family planning methods. 8.10,13

### Limitations of the study

Single centre and ANC clinic based study, needs larger sample size community based study to further consolidate this study's findings.

# CONCLUSION

In our study, only 42% of women attending ANC clinic had ever use contraceptives and it further decreases in women of rural back ground. Female education status had direct effect on contraceptive practices. Family is a common source to spread awareness regarding contraceptive in female.

#### Recommendations

To increase contraception awareness and practice, following things should addressed

- 1. Increase knowledge in family
- Overcome husband's opposition: Address men directly with information regarding benefits of family planning
- 3. Strengthen family planning schemes especially in rural area to improve access of contraception.

# **ACKNOWLEDGMENT**

The authors are acknowledged the cooperation of all ANC women who participate in this study.

# **REFERENCES**

- Van Bavel J. The world population explosion: Causes, backgrounds and-projections for the future. Facts Views Vis Obgyn. 2013;5(4):281-291.
- Pandey S, Karki S and Pradhan A. Practice of contraceptives. J Inst Med Nepal. 2010;31(3):3-9.
  - https://doi.org/10.3126/jiom.v31i3.2972
- Jahan U, Verma K, Gupta S, Gupta R, Mahour S and Kirti N. Awareness, attitude and practice of family planning methods in a tertiary care hospital, Uttar Pradesh, India. Int J Reprod Contracept Obstet Gynecol. 2017;6(2):500-506.
  - https://doi.org/10.18203/2320-1770.ijrcog20170370

- Olugbengao-Bello AI, Abodunrin OI and Adeomi AA.
   Contraceptive practices among women in rural communities in South-Western Nigeria. Glob J Med Res. 2011;11(2):1-8.
- Khan T and Khan RE. Fertility behavior of women and their house hold characteristics-A case study of Punjab Pakistan. J Hum Ecol. 2010;30:11-17.
  - https://doi.org/10.1080/09709274.2010.11906267
- Jabeen M, Gul F, Wazir F and Javed N. Knowledge, attitude and practices of contraception in women of reproductive age. Gomal J Med Sci. 2011;9(2):223-229.
- Ankomah A, Anyanti J, Adebayo S and Giwa A. Barriers to contraceptive use among married young adults in Nigeria: A qualitative study. Int J Trop Dis Health. 2013;3(3):267-282. https://doi.org/10.9734/ijtdh/2013/4573
- Thapa P, Pokharal N and 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 Reprod Health Contracept. 2018;36:44-52. https://doi.org/10.21767/2471-9749.100051
- Kara WK, Bendicto M and Mao J. Knowledge, attitude and practice of contraceptive methods among female undergraduates in Dodoma, Tanzania. Cureus. 2019;11(4):e4362. https://doi.org/10.7759/cureus.4362
- Lincoln J, Mohammadnezhad M and Khan S. Knowledge, attitudes and practices of family planning among women of reproductive age in Suva, Fiji in 2017. J Womens Health Care. 2017;7(3):431. https://doi.org/10.4172/2167-0420.1000431
- Oyedakun AO. Determinants of contraceptive usage: Lesson from women in Osun State, Nigeria. Int J Humanit Soc Sci. 2007;1:1-14.
- Sangavi R and Hatnoor S. Knowledge attitude and practice of contraception among antenatal care patients. Int J Reprod Contracept Obstet Gynecol. 2018;7(8):3065-3068. https://doi.org/10.18203/2320-1770.ijrcog20182987
- Wani RT, Rashid I, Nabi SS and Dar H. Knowledge, attitude and practice of family planning services among health care worker in Kashmir-A cross-sectional study. J Family Med Prim Care. 2019;8(4):1319-1325.

https://doi.org/10.4103/jfmpc.jfmpc\_96\_19

# Authors' Contributions:

KC- Literature survey, implementation of study protocol, data collection, data analysis; RB- Manuscript preparation, editing, and manuscript revision;

RS- Concept and design of the study; KKY- Review of literature and manuscript preparation; VJ- Data collection; SK- Coordination and Manuscript revision;

SC- Statistically analysed and interpreted, preparation of manuscript and revision of the manuscript.

#### Work attributed to:

Department of Obstetrics and Gynae, Dr S N Medical College, Jodhpur, Rajasthan, India.

#### ORCID ID:

Ritu Bijarnia - 10 https://orcid.org/0000-0003-1839-0986
Rizwana Shaheen - 10 https://orcid.org/0000-0003-1245-7799
Kamal Kumar Yadav - 10 https://orcid.org/0000-0001-8108-3925
Vinita Jangir - 10 https://orcid.org/0000-0002-3443-4283
Seema Kalasua - 10 https://orcid.org/0000-0002-4134-5297
Sandeep Choudhary - 10 https://orcid.org/0000-0002-6172-6097

Source of Funding: Nil, Conflicts of Interest: None declared.