International Journal of Community Medicine and Public Health
Devi BA et al. Int J Community Med Public Health. 2022 Jun;9(6):2579-2583
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20221538

Original Research Article

Knowledge, attitude, and practices of pregnant women towards antenatal care in Rural health training centre in Achrol, Jaipur, Rajasthan

Bachaspatimayum Anuradha Devi, Roopali Nath Mathur*, Gajendra Singh Sisodia, Ravindra Kumar Manohar, Amol Rajendra Gite, Manish Bhardwaj

Department of Community Medicine, National Institute of Medical Sciences and Research, Jaipur, Rajasthan, India

Received: 12 April 2022
Accepted: 05 May 2022

***Correspondence:**
Dr. Roopali Nath Mathur,
E-mail: roopalinath@yahoo.co.in

ABSTRACT

Background: Pregnancy and child birth are important stages in a woman's life. During pregnancy, both the mother and their unborn babies face health problems which can lead to complications. Prevention of these complications can be possible only when all pregnancies are monitored by skilled care providers.
Methods: In this study, it refers to a pregnant women's understanding of components of antenatal care which include registration of pregnancy, danger signs during pregnancy etc. Attitudes are emotional, motivational, perceptive and cognitive beliefs that positively or negatively influence the behaviour or practice of an individual. The study was designed as a cross sectional study. Study population were pregnant females attending antenatal clinic in a rural health training centre.
Results: A total of 150 pregnant women completed the study maximum are multigravida. The age distribution depicted in current study shows maximum participants are from the age group of 21-24,maximum participants are 10th pass and are not working staying in the joined family of own house. Knowledge of pregnant women about antenatal care are ideally ANC visit was 4-6 times as per participants and minimum was 2 visits as revealed in study results. Practice of pregnant women on ANC care shows minimum participant registered in first trimester. Attitude of pregnant women about ANC showed maximum of pregnant women exhibited positive attitude towards necessary to register ANC check-up and also Institutional delivery and danger sign.
Conclusions: The knowledge and awareness regarding importance of ANC is the need of this era it also help to reduce mortality rate. To improve community awareness on ANC community campaign and mass media should use.

Keywords: Antenatal care, Danger signs, Knowledge, Attitude, Practice

INTRODUCTION

Pregnancy and child birth are important stages in a woman's life. During pregnancy, both the mother and their unborn babies face health problems which can lead to complications. Prevention of these complications can be possible only when all pregnancies are monitored by skilled care providers.[1] Antenatal care is the care of the women during pregnancy. The primary aim of antenatal care is to achieve a healthy mother and a healthy baby at the end of pregnancy. Antenatal care helps to detect high risk cases, to foresee complications and to remove anxiety and dread associated with delivery. Knowledge is the understanding of any given topic.[2] In this study, it refers to a pregnant women's understanding of components of antenatal care which include registration of pregnancy, danger signs during pregnancy etc. Attitudes are emotional, motivational, perceptive and cognitive beliefs that positively or negatively influence the behaviour or practice of an individual.[3] Practices are defined as the

observable actions of a pregnant women that could affect her to go to the hospital for antenatal check-up, after knowing the danger signs during pregnancy. The lifestyle modification program on pregnant women had an impact of cost-effective risk reduction strategy in adverse pregnancy outcome.[4] With this background the present study was conducted among pregnant females to find out the knowledge attitude and practice (KAP) score about antenatal care in the rural health training centre in Achrol, Jaipur.

Aim and objectives

Aim and objective of current study were to find out the percentage and KAP score of antenatal care attending RHTC, Achrol and to find out the percentage and KAP score of danger signs during pregnancy attending RHTC, Achrol.

METHODS

The study was designed as a cross sectional study. Study population were pregnant females attending antenatal clinic in a rural health training centre. One hundred and fifty (150) pregnant females recruited randomly from the pregnant females visiting the RHTC centre at Achrol during the three-month time period. Antenatal check-up is scheduled every day. On an average 10 pregnant females attend outpatient department (OPD) antenatal clinic every day. So, every day 2 pregnant females were asked question about KAP for antenatal care, Women were questioned regarding registration of pregnancy, minimum 4 antenatal check-up visits, taking 180 iron and folic acid tablets. They were also asked about the danger sign during pregnancy. The danger signs were dizziness, fainting swelling of feet, severe head ache, persistent vomiting, bleeding per vagina, and blurring of vision, less movement of baby inside uterus, leaking per vagina and pain abdomen. A pre-designed, pre-tested questionnaire was used to collect the data

Data analysis

For correct answer for KAP score of 1 is given and incorrect response was given 0. Indicators used to quantify knowledge are reported in terms of percentages and score. The data was analysed in SPSS version 16.0. Percentages used as indicators of knowledge are determined from the numerical indicators. For example: percentage of respondents who know the correct answer to a question; score for a score-based indicator of knowledge, each respondent is given a score based on the number of correct responses provided. The knowledge score of the population is calculated for each question as the total number of correct response to one question divided by the total number of responses. Respondents who did not answer the question, or for whom information is incomplete were excluded from the study.

$$Score\ of\ knowledge = sum\ of\ correct\ responses\ given\ by\ all\ respondants \div total\ number\ of\ respondants$$

Measurement of attitudes: attitudes are measured by asking the respondents to judge whether they are positively or negatively inclined towards: antenatal check-up and danger signs during pregnancy.

RESULTS

A total of 150 pregnant women completed the study maximum are multigravida. The age distribution depicted in (Table 1) shows maximum participants are from the age group of 21-24,maximum participants are 10th pass and are not working staying in the joined family of own house.

Table 1: Socio-demographic distribution (n=150).

Variables		N	%
Age (years)	18-21	26	17.33
	21-24	44	29.33
	24-27	40	26.67
	27-30	27	18.00
	30-33	8	5.33
	33-36	5	3.33
Educational status	Illiterate	39	26.00
	5th pass	12	8.00
	10th pass	62	41.33
	Graduate	33	22.00
	Post graduate	4	2.67
Variables		**Yes**	**No**
Working		37 (24.67)	113 (75.33)
Staying in joint family		124 (82.67)	26 (17.33)
Primi gravid women at the time of KAP study		59 (39.33)	91 (60.67)
Living in house		**Rented**	**Own house**
		28 (18.67)	122 (81.33)

Knowledge of pregnant women about antenatal care are ideally ANC visit was 4-6 times as per participants and minimum was 2 visits as shown in (Table 2). Knowledge regarding registration was quite high, Anganwadi provide diet and Td dose, IFA and calcium was maximum and also knowledge for JSY was quite high. But knowledge regarding danger sign was very less. Practice of pregnant women on ANC care; minimum participant registered in first trimester and also IFA and calcium intake was also less as shown in (Table 3). Practice of complete 4 ANC visit; diagnostic kit, Td dose is high. Attitude of pregnant women about ANC; maximum of pregnant women showed positive attitude towards necessary to register ANC check-up and also Institutional delivery and danger sign as shown in (Table 4).

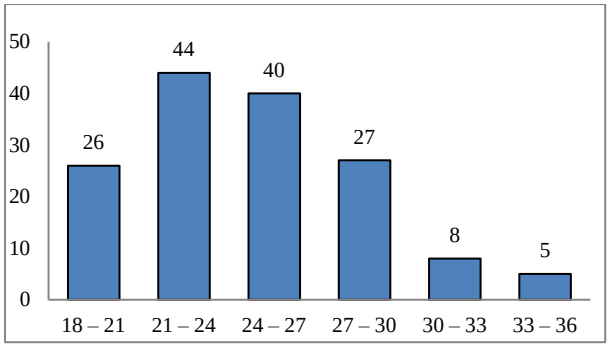

Figure 1: Age distribution.

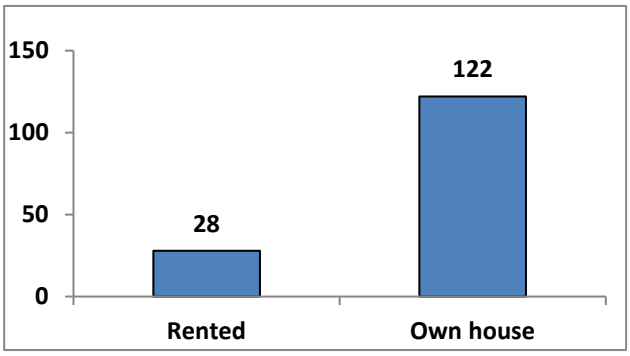

Figure 2: Distribution according to living of house.

Table 2: Knowledge among pregnant women about antenatal care (n=150).

Variables		N	%
Ideally ANC visit	0-2	27	18.00
	2-4	27	18.00
	4-6	33	22.00
	6-8	31	20.67
	8-10	25	16.67
	10-13	7	4.67
Minimum ANC visit	1	41	27.33
	2	68	45.33
	3	31	20.66
	4	10	6.68
Variables		**Yes**	**No**
Registration of pregnancy		91 (60.67)	59 (39.33)
Td dose		98 (65.33)	52 (34.67)
IFA and calcium		66 (44)	84 (56)
180 IFA		45 (30)	105 (70)
Financial assistance JSY		95 (63.33)	55 (37.67)
Anganwadi provide diet		128 (85.33	22 (14.67)
Danger sign		22 (14.67)	128 (85.33)

DISCUSSION

It was observed in this study that overall knowledge regarding antenatal care among pregnant women was adequate. Almost everyone was in favour of antenatal care but many women did not know about screening of infectious disease, injection tetanus toxoid, folic acid importance and alarming signs of pregnancy.

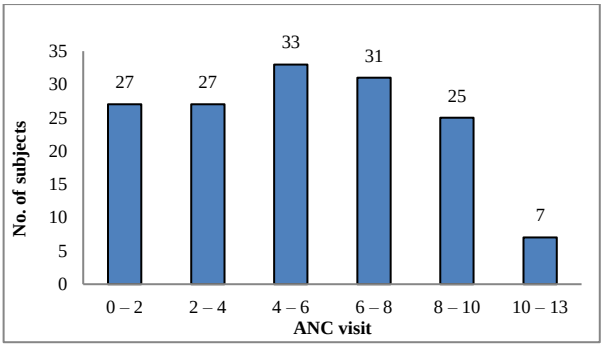

Figure 3: Distribution according to ideally ANC visit.

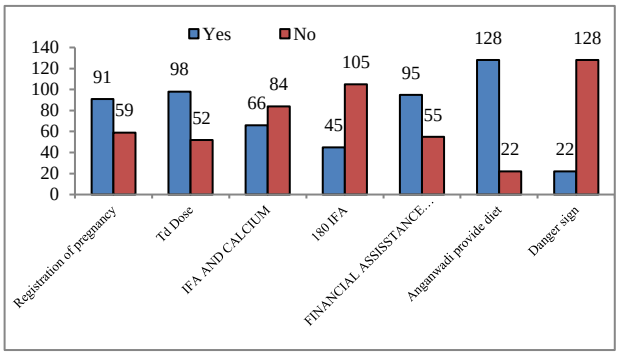

Figure 4: Responses of knowledge questions of ANC visit.

WHO recommended iron and folic acid supplementation to reduce the risk of pregnancy among pregnant women.[5] A study conducted by Laishram et al found that the mean score of the knowledge on antenatal care was 20.9±4.3 out of a total score of 36, which was 55.56%.[3,6] It is quiet lower than our study.

Table 3: Practices of pregnant women on ANC.

Variables	Yes	No
Registered during first trimester	22 (14.67)	128 (85.33)
Diagnostic kit	95 (63.33)	55 (36.67)
Completed >4 ANC visit	114 (76)	36 (24)
Td dose	91 (60.67)	59 (39.33)
IFA and calcium	59 (39.33)	91 (60.67)

In the same study 42.6% women got full antenatal care and main reason for not attending any antenatal check-up were thought of as not necessary and financial constraints. On contrast in our study the ideal ANC visit were 22.00% which is quite lower in comparison. It was found that higher level of education, Hindu religion and living in owned house were statistically associated with better knowledge. A study done by Khatib et al in which the minimum 3 antenatal visits made by pregnant female is 33.6%.[7] Iron tablets were taken by 94% of women, though only 45.3% completed the required 180 tablets. In our study 59 pregnant female (39.33%) has taken IFA tablets and 30% take complete IFA 180 days.A study by Gupta et al found that 10.9% of pregnant female knew

that >3 antenatal care visits were essential.[8] In our study, 76% of the pregnant female had done minimum four antenatal care visit. Regarding the knowledge about antenatal care services 86.2% knew about early registration (preferably before 16 weeks) to be done to have proper antenatal care. 94.3% had adequate knowledge about the importance of tetanus toxoid injection during pregnancy. Similarly in our study 60.67% pregnant female responded that 2 tetanus toxoid doses required to immunize against tetanus during pregnancy. Athanase et al reported that 74.2% of women have positive attitude that early antenatal registration is important on contrast 88.67% pregnant females have positive attitude towards registration of pregnancy.[9]

Table 4: Attitude of pregnant women about ANC.

Variables	Yes	No	Can't say
Necessary to register ANC check up	133 (88.67)	17 (11.33)	0
Necessary to know danger sign	11 (7.33)	9 (6)	130 (86.67)
Institutional delivery	103 (68.66)	47 (31.33)	0

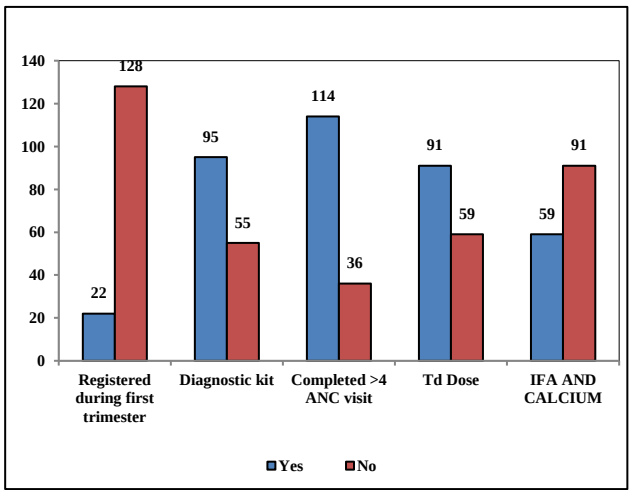

Figure 5: Responses of practice questions of ANC visit.

Shafqat et al reported that hospital as a place of delivery was favoured by 82.03% women while 17.96% women preferred to deliver at homes and private clinics.[10] Similarly in our study 68.66% pregnant females responded that they had taken decision to give birth the baby in the hospital. Education of the mother and her spouse influenced ANC utilisation which was similar to some studies conducted by Mumbare et al, Agrawal et al, Simkhada et al and Gurmera et al conducted some studies similar to our studies and said utilization of antenatal services by the educated groups could be due to their better understanding of the importance and benefits of antenatal services.[11,12,13] The socioeconomic status of mother also significantly influenced the ANC utilization. The mothers belonging to higher socioeconomic status had utilized the antenatal services fully as compared to mothers of low socioeconomic status. It is similar to some studies done by Mumbare et al and Metgud et al.[11,13] All the studies have some variation in KAP score in pregnant females. The score has not reached towards 100%. The practices and attitudes are better in percentage than knowledge component. We have studied the knowledge about danger signs during pregnancy by the females is really less.

Limitations

The limitations of the present study were that it was conducted with less number of pregnant female participants.

CONCLUSION

The knowledge and awareness regarding importance of ANC is the need of this era it also help to reduce mortality rate. To improve community awareness on ANC community campaign and mass media should use. Overall knowledge and attitude are good among pregnant women but there is lack in ANC practice. Family support and government support both should be parallel provided to pregnant female in order to improve maternal health. The grass root level workers should be encouraged to educate and make women more aware regarding antenatal care. Complete antenatal care should be utilised by each and every pregnant woman. Appropriate counselling should be done during the antenatal visits.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Maternal health. Available at: https://www.who.int/health-topics/maternal-health#tab=tab_1. Accessed on 7 January 2022.
2. Kaliyaperumal K. Guideline for conducting a knowledge, attitude and practice (KAP) study. Community Ophthalmol. 2004;4:7-9.
3. Andrien M. Social communication in nutrition: A methodology for intervention. Available at: 1994.www.fao.org/docrep/T0807e/T0807e00.htm. Accessed on 20 January 2022.
4. Shirazian T, Faris BS, Fox NS, Friedman F, Rebarber A. The lifestyle modification project: Limiting pregnancy weight gain in obese women. J Mater Fetal Neonatal Med. 2014;5:1-5.
5. Kawai K, Spiegelman D, Shankar A, Fawzi W. Maternal multiple micronutrient supplementation

and pregnancy outcomes in developing countries: meta-analysis and meta-regression: Bull World Health Org. 2011;89(6):402-11.
6. Jalina L, Thounaojam UD, Panmei J, Mukhia S, Devi HS. Knowledge and practice of antenatal care in an urban area. Indian Med Gaz. 2013;24:101-6.
7. Khatib N, Zhiruddin QS, Gaidhane AM. Predictors for antenatal services and pregnancy outcome in a rural area: A prospective study in Wardha district, India. Indian J Med Sci. 2009;63:436-44.
8. Gupta RK, Shore TN, Verma AK, Jan R. Knowledge regarding antenatal care services, its utilisation and delivery practices in mothers (aged 15 - 49 years) in a rural area of North India. Trop J Med Res. 2015;18:89-94.
9. Lilungulu AG, Matovelo D, Gesase A. Reported knowledge, attitude and practice of antenatal care services among women in Dodoma Municipal, Tanzania. J Pediatr Neonatal Care. 2016;4:00125.
10. Shafqat T, Fayaz S, Rahim R, Saima S. Knowledge and awareness regarding antenatal care and delivery among pregnant women. J Med Sci. 2015;23:88-91.
11. Mumbare SS, Rege R. Ante natal care services utilization, delivery practices and factors affecting them in tribal area of North Maharashtra. Ind J Commu Med. 2011;36(4):287.
12. Agarwal P, Singh MM, Garg S. Maternal healthcare utilization among women in an urban slum in Delhi. Ind J Commu Med. 2007;32(3):203.
13. Metgud CS, Katti SM, Mallapur MD, Wantamutte AS. Utilization patterns of antenatal services among pregnant women: a longitudinal study in rural area of north Karnataka. Al Ameen J Med Sci. 2009;2(1):58-62.

Cite this article as: Devi BA, Mathur RN, Sisodia GS, Manohar RK, Gite AR, Bhardwaj M. Knowledge, attitude, and practices of pregnant women towards antenatal care in Rural health training centre in Achrol, Jaipur, Rajasthan. Int J Community Med Public Health 2022;9:2579-83.