RESEARCH ARTICLE DOI: 10.53555/cqawxr82

A STUDY ON KNOWLEDGE AND PRACTICES OF ANTENATAL CARE AMONG PREGNANT WOMEN IN RURAL AREAS OF BARABANKI DISTRICT

Shwetambari Srivastava^{1*}, Raj Shekhar Tiwari², Dr. Zainab Khan³

^{1*}Department of Community Medicine, Hind Institute of Medical Sciences
²Department of Pediatrics, TS Mishra Medical College, Lucknow
³Department of Community Medicine, Hind Institute of Medical Sciences and Research

*Corresponding Author: Dr. Shwetambari Srivastava Assistant professor, Department of Community Medicine, Hind Institute of Medical Sciences and Hospital, Barabanki

ABSTRACT

Background

Appropriate antenatal care (ANC) is one of the pillars of this initiative. Antenatal care is considered as a backbone of obstetrical services of any health of pregnant women and is the way in which maternal and fetal complications are detected and managed. It highlights the care of antenatal mothers as an important element in maternal healthcare as appropriate care will lead to successful pregnancy outcome and healthy babies. Safe motherhood by providing good antenatal care (ANC) is very important to reduce maternal mortality ratio and infant mortality rate and to achieve millennium development goals.

Objective

The objective of the present study is awareness about the ANC among pregnant women, knowledgeand practices regarding elements of ANC care and to give suggestions to improve the maternal health practices.

Study Area

Barabank district catchment area of RHTC

Study population

All pregnant women registered at RHTC HIMS Barabanki.

Results

The study shows that ANC women, 32.5 % are illiterate so they are not aware about their health during their pregnancy and health workers don't provide them adequate information about the Government schemes. Maximum number of pregnant women are aware of their health and fetus, visit health centers regularly for their ANC checkups. They agreed that smoking and alcohol consumption is bad for fetus as it causes growth retardation. Some of thepregnant women agreed for the IFA tablet supplementation during pregnancy instead of that they are not taking IFA tablets during their pregnancy. Some of the respondents delivered their baby at home because of their fear of miscarriage or risk at hospital. Pregnant women having knowledge about ANC was found to be statistically significant who are literate. Practices were found to be statistically significant in pregnant women attending regular ANC visits.

Key words-ANC, WHO, MMR, Health BSTRACT

INTRODUCTION

The pregnancy period is one of the happiest events in every woman's life. Every mother wants her pregnancy period to be healthy and smooth, but the experiences of pregnancy is not the same for all mothers. Pregnancy is a physiological condition that involves the life of both the mother and the growing fetus, so great care needs to be taken during this period. Getting early and regular antenatal care (ANC) improves the chances of a healthy pregnancy. ANC is an essential process to protect the health of mother and their upcoming child ¹.

Antenatal care is defined as a comprehensive antepartum care programme that involves co-ordinated approach to medical care and psychosocial support that optimally begins before conception and extends throughout antepartum period. Antenatal care (ANC) is a key strategy to decreasing maternal mortality in low resource setting. ANC clinics provide resources to improve nutrition and health knowledge and promote preventive health practices. A healthy mother brings forth a healthy baby. Every year about 6 million women become pregnant; 5 million of these pregnancies lead to the birth of the child. An adequate use of antenatal health services is associated with improved maternal and neonatal health status. Pregnancy care expected to affect the development of the fetus and the baby as well as the mother ².

Approximately 810 women die every day from preventable causes related to pregnancy and childbirth around the world. Global maternal deaths estimated about 295,000 women died during and following pregnancy and childbirth. The vast majority of these deaths (94%) occurred in low-resource settings, and most could have been prevented.

Knowledge is the understanding of any given topic ³. It refers to a pregnant women's understanding of components of antenatal care which include registration of pregnancy, danger signs during pregnancy, intake of prophylactic Iron and Folic Acid (IFA) tablets during pregnancy and adapting family planning methods.

Attitudes are emotional, motivational, perceptive and cognitive beliefs that positively or negatively influence the behaviour or practice of an individual ⁴. A pregnant female's antenatal check-up, adapting family planning behaviour is influenced by her emotions, motivations, perceptions and thoughts. Attitudes influence future behaviour no matter the individual's knowledge and help to explain why an individual adopts one practice and no other alternatives. The terms attitude, beliefs and perceptions are interchangeable.

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, how she is making the arrangement to attend hospital and how she had adapting the family planning methods after marriage, in the previous and present pregnancy.

With this background the present study was conducted among pregnant females to find out the knowledge, and practice about antenatal care.

METHODOLOGY

A community based cross sectional study was conducted among all registered pregnant women in any of the trimester ,at Rural health training Centre of Hind Institute of Medical Sciences Barabanki ,willing to participate in study, and her family is residing in study area at-least from last six month excluding migratory population.

This study aimed to determine the knowledge, and practices of antenatal care among pregnant women in rural areas of Barabanki district. This study was conducted with specific objectives, to estimate the knowledge and practices related to antenatal care, awareness about their own health during pregnancy and to give suggestions to improve the maternal health practices.

The study received approval from the Institutional Ethics Committee-Human Research (IEC- HR) HIMS, Barabanki.

After seeking permission from required authorities, list of pregnant women registered at RHTC HIMS Barabanki was obtained.

Multistage Sampling was done.

Stage I- Convenient sample: was used for selecting the Block in district Barabanki.

Out of total 15 Blocks of district Barabanki, 2 Blocks Harakh and Banki were chosen depending upon their proximity to the Rural Health and Training Centre.

Stage II- Simple random sampling was done for selecting villages.

Out of 16 villages, 6 villages was selected by simple random sampling (lottery method).

Stage III- Simple random sampling 80 pregnant women registered at RHTC HIMS Barabanki were selected by simple random sampling using random number table.

Door to door survey was done. Pregnant women were interviewed with help of pre designed & pre tested questionnaire.

Data was collected by interviewing all eligible subjects willing to participate in the study. A predesigned and pretested semi-structured questionnaire which include the characteristics of respondents such as age of the respondent, type of family, literacy status, occupation of head of family, socio-economic status, religion, caste, health status of respondent, preference of the health care facility, reason for availing that particular health care facility was collected.

STATISTICAL ANALYSIS

For descriptive statistics detailed tables, pie charts, bar charts and column charts were prepared. Statistical tests of significance i.e. Chi Square were used to predict the association between the independent and dependent variables. Binary Logistic Regression was used find degree of association. The data was analyzed using statistical software SPSS trial version 26.0. Value of p<0.05 was considered as statistically significant.

STUDY INSTRUMENTS

The study instrument used in this research are as follows:

A pre designed and pre tested interview schedule was used to collect data.

Socioeconomic status was assessed by Modified BG Prasad Classification.

Knowledge was assessed about ANC visits, tetanus immunization, investigations, and nutritional factors, danger signs of pregnancy, contraception, and personal habits. Each parameter was awarded 1 mark for the correct answer and 0 mark if the answer was wrong. Thus total marks for questions related to knowledge were 17. Those who scored 70% and above were considered as having adequate knowledge, and those who scored below 70% were considered inadequate knowledge.

Questions were asked to assess the practices with regards to ANC visit, dietary changes made during pregnancy, IFA tablets taken. Questions related to smoking, alcohol, self-medication were noted. Tetanus immunization during pregnancy and practice with regard to use of contraception was also noted. Each parameter was awarded 1 mark for good practice and 0 marks if the practice was not found appropriate. Thus, total marks for questions related to practices were 21. Practice on attending number of visits carried 2 marks (<3 visits = 0, 3-5 visits = 1 and >5 visits = 2). Practice of IFA tablet consumption carried 5 marks (0-49 = 1, 51-99 = 2,100-149 = 3, 150-200 = 4, >200 = 5). Those who scored 70% and above were considered as practicing good and those who scored below 70% were considered poor practices with regard to ANC.

Similar to the methodology used by Patel et.al; 2021¹⁶ in their respective studies.

Demographic characteristics namely age, parity, type of family, education and occupation, and socioeconomic status (SES) were selected for studying association with knowledge and practices regarding ANC. For the ease of study, age is categorized into two categories namely age <25 years and ≥25 years. Family was divided into two categories namely joint family and nuclear family.

Education was categorized divided into those illiterate, primary, middle, high school and above, occupation of respondent is divided in two categories housewife and working women.

RESULTS

This study is conducted to determine the knowledge, and practices of antenatal care among pregnant women residing in rural area of Barabanki District. The base line characteristics of target population were used to determine age of respondents, age at marriage, age of respondent at first birth, education of respondent, education of husband, occupation of husband, type of family, income of family, Antenatal Care knowledge, Antenatal Care practices, Antenatal visits, Antenatal Check up, Iron and Folic acid intake and their association with socio demographic profile.

Descriptive results were presented by means of;

- Frequency
- Percentage

Association between socio demographic independent variables and dependent variables (i.e, knowledge, practices) were assessed using Chi Square test and significant variables are assessed using Binary Logistic Regression Analysis for calculation of Unadjusted Odd's Ratio.

Frequency distribution of study population according to understanding of Antenatal Care (ANC). (N = 80)

Understanding of ANC	No.	Percentage
Recommended by medical and nursing care	49	61.1
Prevent health problems	14	17.5
Benefit both mother and child	17	21.3

Table 2: Shows the understanding of antenatal care. About 61.3% study population understands that, antenatal care is recommended by medical and nursing care. 21.3% understands that it is beneficial for both mother and child. 17.5% understands that antenatal care prevent health problems.

Table 3: Association of overall knowledge regarding ANC with socio demographic factors.

Socia demographia variables	Knowledge	n value of w?	
Socio-demographic variables	Adequate	Inadequate	p value of χ2
Respondent Age	%	%	
<25	45.0	55.0	
25-29	40.0	60.0	0.093
>=30	40.0	60.0	
Age at Marriage			
18-20	50.0	50.0	
21-24	36.7	63.3	0.600
>=25	41.7	58.3	
Age of respondent at first birth			
<25 Year	55.80	44.20	0.067
>=25 Year	60.70	39.30	0.007
Education of the respondents			
Illiterate	39.3	60.7	
Primary	50.0	50.0	0.826
Middle	36.8	63.2	0.020
High School and higher education	46.2	53.8	

Education of Husband			
Illiterate	45.2	54.8	
Primary	34.6	65.4	0.053
Middle and above	55.0	45.0	
Family Income			
Upper class	96.5	3.75	
Upper middle class	92.5	7.5	0.040*
Middle class	87.5	12.5	0.048*
Lower middle class	78.75	21.25	
Lower	44.4	55.6	
Occupation of Respondents			
Housewife	42.9	57.1	0.742
Working women	33.3	66.7	0.743
Husband's Occupation			
Farmer	38.9	61.1	
Labour	64.3	35.7	0.220
Pvt. Job	35.3	64.7	0.339
Govt. Job	38.5	61.5	
Parity			
0	48.7	51.3	
1	40.0	60.0	0.006
2	33.3	66.7	0.086
3	20.0	80.0	
Total	42.5	57.5	

Respondents who belong to upper class have 96.5% of knowledge on antenatal care, upper middle class respondent have 92.5% of knowledge, one who belong to middle class have 87.5% of knowledge, while respondents who belong to lower middle class and lower class have 78.5%, 44.4% knowledge on antenatal care respectively. This group of above table shows statistically significant value (p<0.05).

Table4: Association between selected demographic factors with overall ANC practices.

Casia dama awan kia wawia klas	Practi	ce	
Socio-demographic variables	Good	Poor	p value of χ2
Respondent Age	%	%	
<25	37.5	62.5	
25-29	60.0	40.0	0.089
>=30	40.0	60.0	
Age at Marriage			
18-20	57.7	42.3	
21-24	33.3	66.7	0.081
>=25	45.8	54.2	
Age of respondent at first birth			
>=25 Year	46.4	53.6	0.036*
<25 Year	44.2	55.8	0.030
Education of the respondents			
Illiterate	50.0	50.0	
Primary	15.0	85.0	0.016*
Middle	57.9	42.1	

High School and higher education	61.5	38.5	
Education of Husband		ı	
Illiterate	41.9	58.1	
Primary	46.2	53.8	0.610
Middle and above	54.5	45.5	
Family Income			
Upper class	96.25	3.75	
Upper middle class	92.5	7.5	0.048*
Middle class	87.5	12.5	0.040"
Lower middle class	78.75	21.25	
Lower	44.4	55.6	
Occupation of Respondents			
Housewife	45.5	54.5	0.067
Working women	33.3	66.7	0.007
Husband's Occupation			
Former	47.2	52.8	
Labour	35.7	64.3	
Pvt. Job	52.9	47.1	0.798
	38.5	61.5	
Govt. Job			
Parity			
0	43.6	56.4	
1	53.3	46.7	0.070
2-3	27.2	72.7	
Total	45.0	55.0	

44.2% of respondents who gave birth to their first baby under 25 years of age had good practice of antenatal care while 46.4% of respondent who gave birth after 25 years of age had good practice of antenatal care. This group of above table shows statistically significant value (p<0.05).

Respondents who were illiterate have 50% good practice of antenatal care, while respondents who passed from primary school have 15% good practice of antenatal care, respondents who passed from middle school have 57.9% good practice of antenatal care and who have attended education up to high school and above have 61.5% good practice of antenatal care. This group of above table shows statistically significant value (p<0.05).

Respondents who belong to upper class have 96.25% good practice of antenatal care, upper middle class respondent have 92.5% good practice of antenatal care, one who belong to middle class have 87.5% good practice of antenatal care, while respondents who belong to lower middle class and lower class have 78.5%, 44.4% good practice of antenatal care respectively. This group of above table shows statistically significant value (p<0.05).

Table 5

Sasia damaguanhia yaniahlas	Knowledge	n value of?	
Socio-demographic variables	Adequate	Inadequate	p value of χ2
ANC Visit	%	%	
Yes	53.6	46.4	0.071
No	18.2	81.8	0.071
Religion			
Hindu	56.1	43.9	0.051
Muslim	44.0	56.0	0.851

Others	35.7	57.5	
Taken IFA			
No	58.3	42.5	0.014*
Yes	57.3	42.6	0.014"
Parity			
0	48.7	51.3	
1	40.0	60.0	0.086
2	33.3	66.7	0.000
3	20.0	80.0	

Table 5 Shows the association between intake of iron folic acid and adequate knowledge on antenatal care, respondents who were taking iron folic acid tablets have 57.4% adequate knowledge on antenatal care, while on other hand who were not taking IFA tablets have 58.3% adequate knowledge on antenatal care. This group of above table shows statistically significant value (p<0.05).

Table 6:

C · l · · · · · · · · · · · · · · · · ·	Practio	ee		
Socio-demographic variables	Good	Poor	p value of χ2	
Education of the respondents	%	%		
Illiterate	50.0	50.0		
Primary	15.0	85.0	0.016*	
Middle	57.9	42.1	0.010	
High School and higher education	61.5	38.5		
ANC Visit				
Yes	60.9	39.1	0.000*	
No	18.2	81.8	0.008*	
Religion				
Hindu	68.3	31.7		
Muslim	36.0	64.0	0.035*	
Others	50.0	50.0		
Taken IFA				
Yes	60.3	39.7	0.023*	
No	25	75	0.023	
Parity				
0	43.6	56.4		
1	53.3	46.7	0.086	
2-3	27.2	72.7		

Table 6.Shows 60.9% of study population who were going on regular antenatal visits had good practice of antenatal care, while 18.2% of respondents who were not regular in theirs antenatal visits have good practice of antenatal care. This group of above table shows statistically significant value (p<0.05).

Hindu respondents have 68.3% good practice of antenatal care, Muslims have 36% good practice of antenatal care, where as other religions have 50% have good practice of antenatal care. This group of above table shows statistically significant value (p<0.05).

Respondents who were taking IFA tablets have 60.3% good practice of antenatal care, while who were not taking have 25% good practice of antenatal care. This group of above table shows statistically significant value (p<0.05).

Socio-demographic variables	Knowledge	p value of χ2
Socio delliographie (dilabies	11110 Wiedse	b tarac or X=

	Adequate	Inadequate	
Taken IFA	%	%	
Yes	57.4	42.6	0.014*
No	58.3	42.5	0.014

Table 7:Shows Respondents who were taking IFA tablets have 57.4% of adequate knowledge on antenatal care, while who were not taking have 58.3% knowledge on antenatal care. This group of above table shows statistically significant value (p<0.05).

Table 7: Association between overall ANC knowledge and intake of IFA.

	Knowledge		OR
Socio-demographic variables	Adequate	Inadequate	(95% CI) P value
Taken IFA	110000	2220000	1 / 10200
Yes	20(57.4%)	20(42.6%)	1.429
No	14(58.3%)	16(42.5%)	0.443-2.940
			0.783

Table number 7 shows association of selected demographic factors with overall ANC knowledge. The risk of having poor knowledge was 1.5 times higher in pregnant women not taking IFA tablets as compared to pregnant women taking IFA tablets.

Table 8: Association between selected demographic factors with overall ANC practices.

2 3.71330clation between selected	Practice	OR	
Socio-demographic variables			(95% CI)
	Good	Poor	P value
Education of the respondents			
Illiterate	14(50.0%)	14(50.0%)	1.364
Literate	22(42.3%)	30(57.7%)	(0.542 - 3.431)
			0.510
ANC Visit			
Yes	22(56.4%)	17(43.6%)	2.496
No	14(34.1%)	27(65.9%)	(1.011-6.165)
	, ,	, ,	0.0474
Religion			
Hindu	24(68.3%)	14(31.7%)	4.464
Non Hindu	12(32.82%)	30(68.18%)	1.751-11.383
			0.002
Taken IFA			
Yes	27(60.3%)	11(39.7%)	9.000
No	09(50%)	33(75%)	3.254-24.88
			<0.0001
Age of respondent at first birth			
>=25 Year	19(46.4%)	21(53.6%)	1.106
<25 Year	18(44.2%)	22(55.8%)	(0.459 - 2.664)
	, ,	, ,	0.823

In table number 8 Binary Logistic Regression Analysis was carried out to identify possible associated factors for practice of antenatal care.

Following are the results of analysis:-

The risk of poor practice is significantly higher in illiterate group (OR= 1.36).

There is higher risk of poor practice in pregnant women who are not regular in their ANC visits (**OR=2.496**).

The risk of poor practice of ANC is higher in other religion as compared to Hindu religion (OR= 4.464).

The risk of poor practice of ANC is significantly higher in pregnant women not taking IFA tablet (OR= 9.00).

Similarly, the odds of having poor practice was found to be higher (OR 1.106) in pregnant women of age 25 & above when compared to pregnant women of age less than 25 years.

Table 9:Frequency table of knowledge and practice of antenatal care.

Background Characteristics	No.	Percentage
Knowledge		
Adequate	34	42.5
Inadequate	46	57.5
Practice		
Good	36	45.0
Poor	44	55.0

Association of knowledge and practice of ANC.

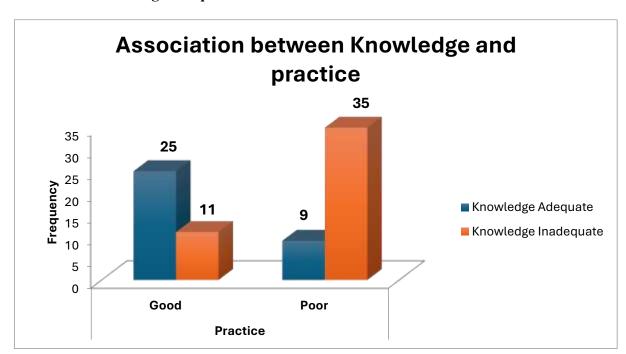


Table 10: Association between knowledge and practice about ANC.

	Practice			OR
Variables	Good	Poor	p value of χ2	(95% CI) P value
Knowledge				
Adequate	25(69.4%)	9(20.5%)		8.838
Inadequate	11(30.6%)	35(79.5%)	0.000*	(3.189 - 24.499)
				<0.0001

Table 10 shows association between level of knowledge and practice of antenatal care. There was significant association between knowledge of ANC and practice. Those who had adequate knowledge about antenatal care they had adopted good practice (Chi-square value 19.466; OR 8.838)

Discussion

Demographic Profile of Study

1-AGE OF RESPONDENT

In the present study out of total 80 respondents involved in the study, 40(50%) were less than 25 years of age, 25(31.3%) were between 25-29 years of age, 15(18.8%) were 30 or above.

Respondents who gave birth to their first baby under 25 years of age have 44.2% good practice of antenatal care, while who gave birth after 25 years of age have 46.4% good practice of antenatal care which when compared was statistically significant (p<0.05).

However in studies conducted by Lilungulu et al (2016) described knowledge, attitudes and practices towards women seeking antenatal care from their previous pregnancy in Dodoma Municipal Tanzania. Among the 500 women included, 299(59.8%) was from the age group of 19 to 252-Education of Respondent

In the present study it was observed that 28(35%) were literate, 20(25%) were educated up to primary class, 12(15%) were educated up to middle class, 16(20%) were educated up to high school and above.

Respondents who were illiterate have 50% good practice of antenatal care, while on the other hand respondents who passed from primary school have 15% good practice of antenatal care, respondents who passed from middle school have 57.9% good practice of antenatal care and who have attended education up to high school and above have 61.5% good practice of antenatal care which when compared was statistically significant (p<0.05).

However studies conducted by **Jaiswal et al (2022)** explored the ANC awareness of pregnant women and its association with socio-demographic factors. Out of total subjects **10.74%** of study participants were illiterate while only **21.65%** were graduated.

While **Agarwal** *et al.* in their study in 2007 found that ANC received was significantly lower among illiterate women which was similar to our study.

Study done by **Jesuyajolu et al (2022)** assessed the extent of knowledge of antenatal-care services among women of reproductive age in Ido Ekiti, a rural town in South West Nigeria. Most respondents **(96%)** were educated.

3-Socioeconomic class of Respondent

In the present study respondents 03(3.75%) belonged to upper class, 06(7.5%) belonged to upper middle class, 10(12.5%) belonged to middle class, 17(21.25%) belongs to lower middle class and, majority 44(55.6%) belonged to lower class.

Knowledge is found to be significantly associated (p value 0.048) with family income, as in our study 55.6% of respondent who belongs to lower class was having inadequate knowledge about antenatal care.

However in studies conducted by Patel et al (2016) in Maharashtra regarding on "A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra". It was found that almost all the variables such as age, education, occupation, parity, type of family, and socioeconomic status (SES) had a significant association with awareness about ANC.

On other hand study done by (Lincetto et al, 2006) on "Utilization of maternal services in rural areas are mainly driven by socio economic factors like education, income, family status which was similar to our study.

Knowledge about ANC by Socio-demographic variables

In the present study 42.5% of total respondent had adequate knowledge about antenatal care, rest 57.5% do not have adequate knowledge in association to various socio demographic factors, which when compared was found to be statistically significant.

However in studies conducted by. **Bej** (2018) regarding knowledge, attitude and practice (KAP) score about antenatal care. Among 54 pregnant females were studied about KAP during antenatal care check-up in a tertiary care hospital. The study concluded that the study detected knowledge score of 17%, practice score of 62% and attitude score of 93% in pregnant female attending antenatal check-up clinic insignificant association in qualification and practices. In study conducted by **Garg and Divya** (2020) in their study assessed the knowledge, attitude and practice of antenatal care among pregnant women attending antenatal clinic in a tertiary care hospital. In the study, out of 150 respondents, 62.7% had knowledge and awareness regarding antenatal care. There was inadequate knowledge about frequency of antenatal visits with 59.3% subjects wanting to deliver in the hospital.

Practices during ANC by Socio-demographic variables

In the present study 45% of total respondent have good practice of antenatal care, rest 55% do not have good practice of antenatal care in association to various socio demographic factors, which when compared was found to be statistically significant.

However in studies conducted by **Patel et al (2016)** did a study on "A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra". It was found that around 70%, women were practicing adequately, and variables such as education and SES had a significant association with practices about ANC , which was more as compared to our study, may be because it was Hospital based study and we have conducted in rural population.

On the hand study done by **Akhtar et al (2018)** on Knowledge Attitude and Practice Regarding Antenatal Care among Pregnant Women in Rural Area of Lahore. In the age group of 20 to 45 years of age. The study concluded that 64.7% pregnant women responded in yes regarding knowledge about antenatal care therefore **61% participants had positive practices** towards antenatal care.

In present study there was significant association between knowledge of ANC and practice. Those who had adequate knowledge about ANC they had adopted good practice (Chi-square value 19.466; OR 8.838).

When it is compared to study done by **Patel et.al;2021** on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at Tertiary Care Hospital Pune, Maharashtra there was significant association between knowledge of ANC and practice, those who had adequate knowledge about ANC they had adopted good practice(**Chi square 56.48; OR 5.72**) similar to our study.

CONCLUSION

On the basis of observation made the following conclusions have been obtained.

• There is still higher proportion of (57.5%) of pregnant women who have inadequate knowledge, and about one-third of study participant have poorly practice ANC care.

In our study about (61.3%) respondents understands that antenatal care is recommended by medical and nursing staff and (21.3%) understands that antenatal care is for benefit of both mother and child, (17.5%) understands that it prevents health problems. Their knowledge on certain aspects of ANC were still poor especially regarding the importance of early antenatal check-up, health screening and complications related to diabetes and hypertension in pregnancy. Respondents who were illiterate have 39.3% knowledge on antenatal care, while respondents who passed from primary school have 50% knowledge on antenatal care, respondents who passed from middle school have 36.8% knowledge on antenatal care and who have attended education up to high school and above

have 46.2% knowledge on antenatal care. There is higher risk of poor practice in illiterate (35%) women.

- There is higher risk of poor knowledge in pregnant women who belong to lower socioeconomic status. Respondents who belong to upper class have 96.5% of knowledge on antenatal care, upper middle class respondent have 92.5% of knowledge, one who belong to middle class have 87.5% of knowledge, while respondents who belong to lower middle class and lower class have 78.5%, 44.4% knowledge on antenatal care respectively.
- Hindu respondents have 68.3% good practice of antenatal care, Muslims have 36% good practice of antenatal care, where as other religions have 50% have good practice of antenatal care.
- Respondents who were taking IFA tablets have 60.3% good practice of antenatal care, while who were not taking have 25% good practice of antenatal care.
- The risk of having poor knowledge was higher in pregnant women not taking IFA tablets as compared to pregnant women taking IFA tablets (OR-1.429).
- The risk of poor practice is significantly higher in illiterate group (OR= 1.36).
- There is higher risk of poor practice in pregnant women who are not regular in their ANC visits (OR= 2.496).
- The risk of poor practice of ANC is higher in other religion as compared to Hindu religion (**OR**= **4.464**).

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

- 1.Pallikadavth S, Foss M, Stones RW. ANC: Provision and inequality in rural North India. SocSci Med 2004;59:1147-58.
- 2.WHO. UNFPA Advocacy Brief: In Family Planning/Child Birth Spacing for Health and National Development Action Points for Policymaker. Produced by the Federal Ministry of Health with Support from ENHANCE Project/USAID. 2007; 1309-1315.
- 3. Andrien M. Social communication in nutrition: A methodology for intervention. FAO; 1994
- 4.Patel BB, Gurmeet P, Sinalkar DR, Pandya KH, Mahen A, Singh N. A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra. Medical Journal of Dr. DY Patil University 2016;9(3):354.