Section: OBG

Original Research Article

TO ASSESS KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS ANTENATAL CARE AMONG PREGNANT WOMEN ADMITTED IN OBSTETRICS ICU OF NSCB MEDICAL COLLEGE JABALPUR

Raksha Singh[1], Priyadarshini Tiwari[2], Dolly Marawi[3], Bhoomija Rajpoot[1], Khyati Gupta[1]

[1]PG Resident, Department of OBGY NSCB Medical College, Jabalpur, Madhya Pradesh, India
Professor, Department of OBGY NSCB Medical College, Jabalpur, Madhya Pradesh, India
Assistant Professor, Department of OBGY NSCB Medical College, Jabalpur, Madhya Pradesh, India

Received : 09/07/2023
Received in revised form : 17/08/2023
Accepted : 28/08/2023

Keywords:
Antenatal care, knowledge, Attitude, practices.

Corresponding Author:
Dr. Priyadarshini Tiwari,
Email: rakshasinghgmc@gmail.com

DOI: 10.47009/jamp.2023.5.5.25

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2023; 5 (5); 121-126

Abstract

Background: An extensive program of prenatal care known as antenatal care includes a coordinated approach to medical treatment and psychosocial support that ideally starts before conception and lasts the entire prenatal period. One of the eight millennium development goals is to improve maternal health . Regular antenatal visits lead to their early detection and management with reduction in maternal mortality. Safe motherhood by providing good antenatal care is very important. The aim and objective is to assess the knowledge, attitude and practice of the antenatal patients admitted in obstetrics ICU of NSCB medical college. **Materials and Methods:** This hospital-based cross-sectional study was conducted on 400 pregnant women referred to the department of obstetrics and gynaecology of our institution in a period of 18 months from march 2021 to august 2022. A predesigned questionnaire was used after taking informed consent to assess the knowledge, attitude and practices of the pregnant women and their family members. **Result:** 90 % of antenatal women had knowledge about importance of antenatal care.78% had positive attitude for antenatal check-ups but only 10% were of the opinion that one visit monthly is necessary. Only 29% of women had four or more antenatal visits. There was a delay in seeking antenatal care in 44.7% patients due to lack of awareness regarding antenatal care. **Conclusion:** The level of antenatal care in the referrals was generally very poor leading to high morbidity and mortality. This can help us to plan an effective health program aiming to improve antenatal care.

INTRODUCTION

Antenatal care is the systematic supervision given to the pregnant women in order to achieve a healthy mother and baby. It includes the pregnant woman's visit to antenatal clinic, examination, investigations, immunization, supplements (iron, folic acid, calcium) and the required interventions. This is a comprehensive approach to medical care and psychological support to the family that ideally begins at conception and ends with onset of labour. It envisages ongoing assessment of risk, identifying and managing problems through education, counselling and medical interventions. The goal of antenatal care is to have a healthy mother and healthy baby at the end of pregnancy.[1]

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. The Sub-Saharan Africa alone accounted for roughly two-thirds (196,000) of maternal deaths 2,5 Improving maternal health is one of the eight-millennium development goals (MDGs).

Under MDG5, countries committed to reducing maternal mortality by three-quarters between 1990 and 2015. Since 1990, maternal Deaths worldwide have dropped by 47%.[2,3]

The main contributor of India's population are mothers, especially those from rural areas, who are less aware of the importance of early registration and compliance with appropriate and regular antenatal check-ups.[4] At all levels of the healthcare system, there are obstacles that prevent women from receiving high-quality maternal healthcare. These

ISSN (O): 2687-5365; ISSN (P): 2753-6556

obstacles must be found and removed in order to promote maternal health. The ability to understand one's health status and the significance of proper antenatal care is a key component. The purpose of this study was to ascertain the level of knowledge, attitude, and practice among pregnant women referred to our institution.

MATERIALS AND METHODS

This hospital-based cross-sectional study was conducted on 400 pregnant women referred to the department of obstetrics and gynaecology of our institution in a period of 18 months from march 2021 to august 2022.

After obtaining ethical committee approval, randomly selected pregnant women who were referred to our institution were included to participate in the study. The women were informed and explained about the study. The patients who were very sick their interview was taken from their husbands.

A pre designed questionnaire was used after taking informed consent to assess knowledge, attitude and practices of the pregnant women and their family members. The participants and their family members were asked all types of questions which help us to assess their knowledge, Attitude and practices among antenatal care.

Inclusion Criteria

- All antenatal referred patient admitted in obstetrics ICU

Exclusion Criteria

- Pregnant women not willing to participate
- All postnatal and post-caesarean cases

Sample size and sample technique

Sample size: This study was carried out on 400 patients in 18 months.

Sampling technique: Simple Random Sampling

Justification of sample size – n = z2pq / d2 where z = 1.96 at 95% d = 5% Absolute p = 52%

Precision d = 0.05 p = 0.52 q = 1 - 0.52 q = 0.41 n = 384 sample size

Data collection technique and tools

Data collection technique

- Primary data- History was taken by patients and their attendees Tools
- Personal interviews taken from patients and attendants based on pre tested questionnaire

All the data was selected randomly and was entered into Microsoft excel and tabulated, then the data were analysed with appropriate statistical tools ―SPSS version 24‖

RESULTS

Table 1: Sociodemographic Characteristics

S no.	Characteristics	Category	Numbers	Percentage
1	Age in years	<20	80	20%
		21-23	160	40%
		24-26	94	23.50%
		27-29	37	9.25%
		>-30	29	7.25%
2	Education	Illiterate	29	7.25%
		Primary	28	7%
		Middle	150	37.5%
		High School	132	33%
		Higher Secondary	40	10%
		Graduate	21	5.25%
3	Religion	Hindu	396	99%
		Muslim	4	1%
4	Locality	Urban	30	7.50%
		Rural	370	92.50%
5	Occupation	Housewife	393	98.25%
		Working Lady	7	1.75%
6	Family income	Low	300	75%
		Middle	93	23.25%
		High	7	1.75%

Table 2:

S no.	Questions	Category	Numbers	Percentage
1	Should the first antenatal checkups be done during the first 3 months?	Yes	116	29%
		No	284	71%
2	Does a pregnant women need to come to come for at least 5 antenatal check-up	Yes	180	45%
		No	220	55%
3	Can high blood pressure affect the fetal growth?	Yes	172	43%
		No	228	57%
4	Why are iron and folic acid tablets given to pregnant women?	To Increase Blood Of Mother	56	14%
		To Allay Weakness	122	30.5%

ISSN (O): 2687-5365; ISSN (P): 2753-6556

		Both	193	48.25%
		Don't Know	29	7.25%
5	What was the knowledge of the patient about ANC care	No Visits Needed	42	10.5%
		2 Visits For Tetanus Toxoid	238	59.5%
		More Then 2 Visits	80	20%
s		One Visit Every Month	40	10%
6	What was the knowledge of the Patient about primary caregiver.	Asha	96	24%
		Anm	69	17.25%
		Nurse	146	36.5%
		Doctor	89	22.25%

Table 3: Attitude

SNO.	Questions	Category	Number	Percentage
1	Antenatal check up is necessary after becoming pregnant	Agree	315	78.75%
		Disagree	8	2%
		Neutral	77	19.25%
2	Antenatal check-up is necessary before 3rd month	Agree	158	39.50%
		Disagree	18	4.50%
		Neutral	224	56%
3	Screening for blood tests should be carried out during antenatal check ups	Agree	280	70%
		Disagree	08	2%
		Neutral	112	28%
4	If you get any problem during your pregnancy what would you do	Report to health centre	173	43.25%
		Go to local dispensary	164	41%
		Home remedy	30	7.50%
		Self medications	12	3%
		Ignore it	21	5.25%
5	What is the Attitude of husband	No visits needed	22	5.50%
		2 visits needed	267	66.75%
		More then 2 visits	108	27%
		1 visit every month	03	0.75%

Table 4: Practices

S NO	Questions	Category	Number	Percentage
1	Where did you get ANC services	Anganwadi	240	60%
		PHC	79	19.75%
		CHC	34	8.5%
		DH	38	9.5%
		MEDICAL COLLEGE	09	2.25%
2	Number of ANC visits	0	40	10%
		1	57	14.25%
		2	106	26.50%
		3	80	20%
		4 and more visits	117	29.25%
3	Type of care provider	Nurses	59	14.75%
		ANM	84	30.75%
		ASHA	50	9.25%
		Medical officer	129	28.50%
		Cannot specify	78	16.75%
4	Number of iron folic acids consumed	<50	175	43.25%
		50-99	133	33.75%
		100-149	70	17.50%
		150-200	12	3%
		>200	10	2.5%

ISSN (O): 2687-5365; ISSN (P): 2753-6556

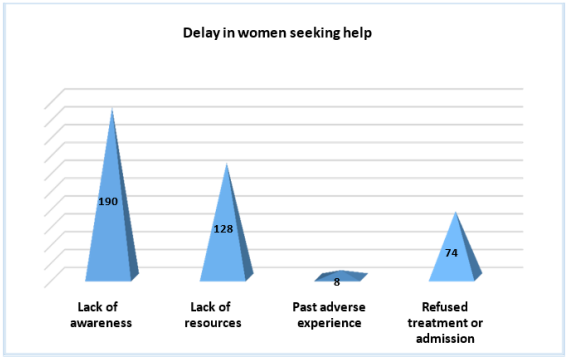

Figure 1: reasons for delay in women seeking help

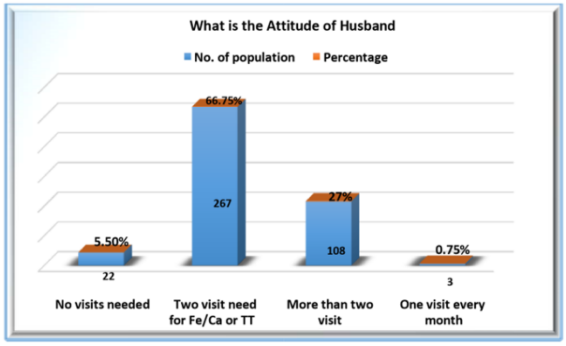

Figure 2: attitude of husband towards antenatal checkup

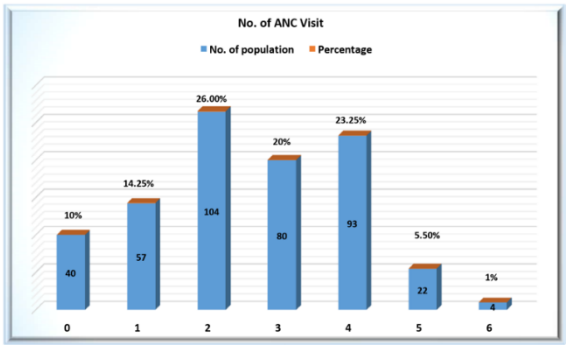

Figure 3: showing numbers of antenatal visits

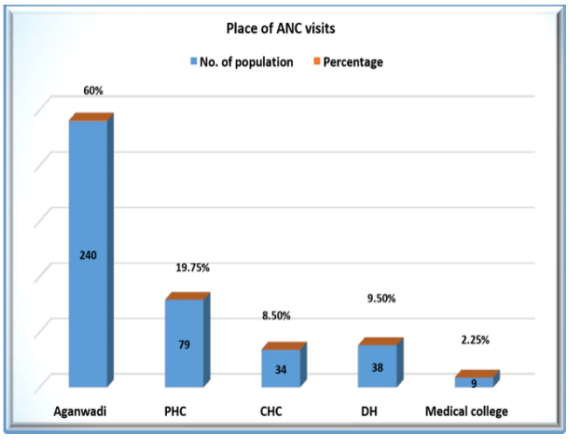

Figure 4: Showing Places of Antenatal Visits

Sociodemographic characteristics

In our study out of 400 pregnant women, mean age groups was 20-26 years with a p value (p=<0.05).Majority 158 (39.5%) of the patients were educated up to middle school ,10% were educated up to higher secondary ,5.25% were graduates and 6% were illiterate .

The majority of women were housewives 393 (98.25%) whereas only 7 (1.75%) were working women.

Out of the 400 total patients, 300 (75%) belonged to lower-income group. 92.50% of the patients belonged to rural areas. Most of the referrals were from rural areas. [Table 1]

knowledge of pregnant women towards antenatal care In regard to the frequency of antenatal visits,10% of the patients said that there was no need of antenatal care whereas 59.5% patients were of the opinion that only two visits for receiving tetanus toxoid are sufficient for antenatal care. 20% of the patients thought that more than two antenatal visits are needed. Only 10% of the patients felt that one visits every month was needed.

On questioning about who should be the caregiver for their antenatal care 36.5% preferred staff nurse as the care giver, 24% preferred Accredited social health activist as the caregiver, 17.25% opted for Auxiliary nurse midwife for antenatal care and only 22.25% of the patients wanted a doctor to be the caregiver. [Table 2]

Attitude of the pregnant women and partners towards antenatal care 78.75% participants agreed that antenatal check-ups were necessary for women after becoming pregnant. Only 43.25% women preferred government health care centres. 41 % consulted local private practitioners. 5% of the patients were totally ignorant their health issues.

As per our study 267(66.75%) husbands of antenatal women had attitude that only 2 antenatal visits was sufficient whereas 108(27%) said that more than 2 visits was needed. 22 (5.50%) had very poor attitude, saying that no antenatal care was needed. Only 3 husbands (0.75%) opined that monthly antenatal visits were needed. [Table 3]

Antenatal care practices

Out of the studied participants ,240 (60%) received their antenatal care in Aganwadi ,79 (19.75%) attended primary health centre, 34 (8.5%) received their antenatal services in community health centre, whereas 2.25% (9) received antenatal services in medical college. 40 patients (10%) had no antenatal visits, (26.50%) 106 had only 2 antenatal visits (mainly for tetanus toxoid) and only 29.75% had more than 4 antenatal visits.

Majority of the participants 129(28.50%) had taken antenatal services from medical officers, followed by 84(30.75%) by auxiliary nurse midwife whereas 59(14.75%) opted for staff nurses as their primary care provider.

There was delay in seeking health care services due to varied reasons, majority 44.75% said that there was lack of awareness for antenatal checkups,41.50% had lack of accessibility whereas 40% said it was due to lack of funds. [Table 4]

ISSN (O): 2687-5365; ISSN (P): 2753-6556

DISCUSSION

The maternal mortality of our state is (173 per 100,000 live births) as per SRS 2016-18 which is high as compared to many of the states in India. The most important factor leading to high mortality in our state is poor antenatal care.

Poor level of antenatal care depends on many factors, but one of the most important factors is awareness of the patients in this matter. This awareness depends on many factors which we have tried to study here.

Our study shows that most of our referred patients were of rural background, and most of them were housewives. The level of education in most of them was not more than middle level and most of them belonged to low socio-economic status.

It is apparent from these findings that women who have a low level of literacy and are not financially independent would not be aware of their own needs as far as antenatal care is needed. In such situations they can hardly have access to social media or internet or be watching health awareness related matters on television, even if given the access.

Most of our patients were from younger age group between 21 to 26 years (63.5%). This is similar to the finding by Garg p et el6 who found a mean age of 20 to 30 years in 65.3 % patients.

The level of education in our study group was low, with maximum patients educated up to middle school (39%), whereas 6.25 % of the patients were totally illiterate. In the study by Garg P et al6, 40.7% had received primary education and 6% were illiterate. According to a study by Abera A et al,[7] out of the 312 women, half (57.6%) had no formal education, 173 (32%) had primary education, 45 (8.3%) had studied till secondary school, and 10 (1.9%) had a diploma. As per research done by Abdullahi muse Mohamoud et al8 majority were 22 (37%) were illiterate, followed by 17 (28%) were primary education level, 14 (23%) were secondary level While only 7 (12%) were university level.

In our study 393 (98.25%) were housewives, whereas 7 (1.75%) were working which was similar to findings by Abera A et al,[7] who also found 94.8% housewives in their study with 5.2% working women. According to a related study by Garg P et al6, the majority 87 (58%) were housewives, and 45 (30%) were unskilled employees.

Out of a total of 400 pregnant women, 300 (75%) of the patients were from the low-income group. Only 7 people (1.75%) belonged to the high-income group, while 93 (2.25%) belonged to the moderate-income group. In study by Abera A et al.7, 2.2% of respondents had high incomes, 5% had intermediate incomes, and 92.8% had low incomes

Out of the total 400 patients, 370 (92.50%) females were from rural areas and 30 (7.50%) were from urban areas. According to research by Garg P et el 6, 10.7% of the population were from urban and 89.3% were from rural.

As per our study only 29% had knowledge regarding antenatal check-ups in 1st trimester whereas 71 % did not have knowledge about the same and 45% pregnant women knew about atleast 5 antenatal check-ups . According to Nimmy N. John et al9 among 150 pregnant women, maximum number of respondents 125(83%) knew about registration of pregnancy and almost half of the 49% respondents said that pregnant women need to go for at least 5 antenatal check-ups.

Our study concluded regarding consumption of iron folic acids, out of 400 pregnant women majority of population 43.25% consumed less than 50 iron folic acids whereas only 17 % women consumed more than 100 iron folic acid which shows significant association of anaemia being Prevalent in India. In the study by Garg P et al,[3] about 60% of respondents had knowledge about iron folic acid tablet supplementation. The fact that pregnant women are aware of injectable tetanus toxoid and injectable Iron supplementation is encouraging, mainly because government health functionaries offer these on routine basis.

Regarding practices of antenatal care majority of pregnant women had only 2 antenatal visits 106 (26%), 57(14.25%) had 1 antenatal visits,8whereas there were 40 (10%) women who did not had any antenatal visits .Garg P et al 6concluded 81 (54%) of antenatal women were following antenatal care service. 31 (38.3%) had taken antenatal service once, 29 (36.8%) twice and only 5 (6.2%) women had taken antenatal service four and above time. As per research done by Abdullahi muse Mohamoud et al8 concluded regarding number of antenatal visits that 21 (35%) had antenatal visit once followed by 10 (16%) had antenatal visits twice, 3 (5%) had antenatal visits three times ,whereas only 1 (2%) had four and more times.

As per our study maximum 240(60%) had antenatal visits in anganwadi,79(19.75%) visited primary health centre ,34(8.5%) visited community health centre, 38(9.5%) had antenatal visits in district hospital whereas only 9 (2.2%) had antenatal visit in medical college. As per research done by Abdullahi muse Mohamoud et al8 showed that the majority of respondents 22 (36%) said mother and child health center (MCH), followed by 10 (16%) said public hospitals. while only 2 (5%) said private hospital.

As per our study 283(70.75%) survived whereas 117(29.25%) died which showed the poor outcome of poor antenatal care. This study was done on critical patients admitted in obstetrics ICU hence the maternal mortality is high in study population.

CONCLUSION

Education and economic independence of women leading to women empowerment is necessary to improve the level of our antenatal care. A woman who is educated and financially independent will be able to take her decisions regarding her own health

ISSN (O): 2687-5365; ISSN (P): 2753-6556

and antenatal care. There is a direct correlation between the level of education and better healthcare practices. Whether or not the woman is formally educated, if she is financially independent she will definitely be able to assert her opinions in the decisions regarding her own health which includes her antenatal care.

Regular training regarding antenatal care should be given to auxiliary nurse midwife (ANM) and accredited social health activist (ASHA) working at grassroot level. Training in understanding warning signs in high-risk pregnancies and how to recognise these need to be given to ANM so that referral can be timely and effective. The importance of the attitude of the husband and family members and the need of their active support cannot be under estimated.

The need of our times is to have some mass education programmes for the general population which will include women and their families. It would be beneficial to organise repeated trainings for health workers to enable them to identify high risk pregnancy and be able to refer them to appropriate facility in case such a need arises.

REFERENCES

1. Bhalwar R, Dudeja P, Jindal AK. Health care of the mothers. Textbook of Community Medicine. 2nd edition. 2018: 327
2. Special bulletin on Maternal mortality in india 2014-16. Sample registration system . Office of registrargeneral, India . (availableonlineon http://www.censusindia.gov.in/vital statistics/SRS_Bulletins/MMR%20Bulletin2014-16.pdf, accessed on 18 Oct 2019)
3. United Nations. The Millennium Development Goals Report 2011. New York: United Nations; 2011
4. Nair M, Yoshida S, Lambrechts T, Boschi-Pinto C, Bose K, Mason EM, Mathai M. Facilitators and barriers to quality of care in maternal, newborn and child health: a global situational analysis through metareview. BMJ open. 2014 May 1;4(5):e004749.
5. (2019) Trends in Maternal Mortality: 2000 to 2017: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. World Health Organization, Geneva.
6. Garg P. Knowledge, attitude and practice of antenatal care among pregnant women attending antenatal clinic in a tertiary care hospital of Mathura, Uttar Pradesh, India. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2020 Jun 1;9(6):226974.
7. Abera A, Asseffa NA, Obssa MS, Balla ET, Koyira MM. Utilization of focused antenatal care service and associated factors among women in Southern Ethiopia. International Journal of Advanced Medical and Health Research. 2019 Jul 1;6(2):56.
8. Mohamoud, A. , Mohamed, S. , Hussein, A. , Omar, M. , Ismail, B. , Mohamed, R. , Ahmed, M. and Ibrahim, S. (2022) Knowledge Attitude and Practice towards Antenatal Care among Pregnant Women Attending for Antenatal Care in SOS Hospital at Hiliwa District, Benadir Region, Somalia. Health, 14, 377-391. doi: 10.4236/health.2022.144030
9. John, N. N., & George, A. (2020). Knowledge, attitude and practices for antenatal care, danger signs of pregnancy and family planning among pregnant women in a rural area of Kerala, India. International Journal Of Community Medicine And Public Health, 8(1), 201–206.

ISSN (O): 2687-5365; ISSN (P): 2753-6556