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Original Research Article

Knowledge, attitude and practice of antenatal care among pregnant women attending antenatal clinic in a tertiary care hospital of Mathura, Uttar Pradesh, India

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ABSTRACT

Background: The objective of this study was to assess the knowledge, attitude and practice of antenatal care among pregnant women attending antenatal clinic in a tertiary care hospital and also to identify factors that are associated with non-usage of antenatal care.

Methods: The study was conducted on 150 pregnant women attending antenatal clinic in department of obstetrics and gynecology of K. D. Medical College and associated hospital of Mathura from September 2019 to December 2019. After obtaining consent, randomly selected pregnant women were given a pre-designed, structured questionnaire on socio-demographic variables, knowledge, attitude and practice towards antenatal care.

Results: In the present 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.

Conclusions: To improve effective utilization of ANC services, we need to bring behaviour changes, improve communication and quality of service delivery, along with effective monitoring and evaluation. Awareness should be developed in the community about the importance of registration for ANC, educating women about the detection of complications during pregnancy, importance of TT injection, IFA tablets and extra nutrition.

Keywords: Antenatal care, Attitude, Knowledge, Practice, Pregnant women

INTRODUCTION

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. The health of the mother affects the overall growth and development of the child. The safe motherhood

initiatives, a world wide effort was launched by the World Health Organization in 1987 which aimed to reduce the number of deaths associated with pregnancy and childbirth. 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. Pregnant mothers contribute to a major vulnerable and priority group in any community, no less in India. According to the census 2011, maternal mortality rate in India accounts to an enormous figure of 212.¹ Major causes include haemorrhage, obstructed

labor, hypertension and other conditions.² The reason being lack of proper antenatal care coverage and lack of awareness among mothers particularly from rural parts of India, contributing the major population, about the need of early registration and compliance with proper and regular antenatal check-ups.

To improve maternal health, barriers that limit access to quality maternal health services must be identified and addressed at all levels of the health system. Health knowledge is an important element to enable women to be aware of their health status and the importance of appropriate ANC. This study was conducted to determine the level of knowledge, attitude and practice related to antenatal care among pregnant women attending antenatal clinics in hospital set-up and to assess the awareness about their own health during pregnancy.

METHODS

This was a cross sectional study conducted by the department of obstetrics and gynecology at K. D. Medical College and Associated Hospital, Mathura from 1st September 2019 to 31st December 2019, to assess the knowledge, attitude and practice of antenatal care among 150 pregnant women attending antenatal clinic of department of obstetrics and gynecology.

Inclusion criteria

- All pregnant women attending antenatal clinic were interviewed.

Exclusion criteria

- Pregnant women who refused to take part in the study.

After obtaining the ethical committee approval, randomly selected pregnant women attending out-patient antenatal clinic who gave consent were included to participate in the study. The women were informed and explained about the study and in case of illiterate subjects, the nursing staff gave the guidance to obtain answers to questionnaire. A written pre-designed, structured questionnaire was given to the respondents which included socio-demographic details like age, religion, area of residence, type of family, education and occupation of subjects, parity and booking status of pregnant women.

The participants were also asked all types of questions which could help us to assess their knowledge, attitude and practice regarding antenatal care. The questionnaire enquired to assess awareness of ANC service and its importance among pregnant women. The questionnaire also addressed the reason of not using antenatal care among non-users of ANC service. Confidentiality of information provided was assured and maintained.

Statistical analysis

The responses were entered in excel spreadsheet and later analysed using SPSS software version 25.

RESULTS

Socio demographic characteristics

A total of 150 antenatal women were successfully interviewed. The majority of the respondents were in the age group of 26-30 years, followed by 20-25 years. Regarding educational background 61 (40.7%) attended primary education and 6.0% were illiterate. Quite a low proportion of the women received education above intermediate level. Regarding occupation most were housewives 87 (58%) followed by unskilled workers 45 (30%). Majority of mothers 67 (44.7%) had numbers of children 1-2 (Table 1).

Table 1: Socio-demographic characteristics of subjects (n=150).

Characteristics	Category	Number	%
Age in years	<20	18	12.0%
	20-25	42	28.0%
	26-30	56	37.3%
	>30	34	22.7%
Religion	Hindu	118	78.7%
	Muslim	32	21.3%
Residential area	Rural	134	89.3%
	Urban	16	10.7%
Type of family	Nuclear	43	28.7%
	Joint	107	71.3%
Education of subject	Illiterate	9	6.0%
	Primary	61	40.7%
	High School	37	24.7%
	Intermediate	28	18.7%
	Graduate	13	8.6%
	Post graduate	2	1.3%
Occupation of subject	Housewife	87	58.0%
	Skilled worker	18	12.0%
	Unskilled worker	45	30.0%
Booking status	Booked	47	31.3%
	Unbooked	103	68.7%
Parity	Nulliparous	48	32.0%
	<3	67	44.7%
	≥3	35	23.3%

Knowledge towards antenatal care service

Table 2 shows the interviewed women's responses to the questions on knowledge regarding antenatal care. Majority of women 94 (62.7%) ever heard about ANC service. Majority of antenatal women 52 (34.7%) in the study considered single time ANC check-up sufficient throughout the course of pregnancy. From the respondents who knew about ANC, majority 73 (48.7%)

said ANC service was being given at health institution. Majority, 124 (82.7%) antenatal women agreed to the fact that check-up during pregnancy reduces risk of complications during and after pregnancy. Among the woman who did not hear about ANC service, they did not hear about ANC service because of unavailability of

media 23 (41.1%), lack of information from health worker 18 (32.1%) and lack of time 15 (26.8%). Majority of antenatal women 111 (74.0%) knew that ANC examination should be done within first 3 months. On interviewing for the place of delivery, 89 (59.3%) were in favour of hospital delivery (Table 2).

Table 2: Knowledge about antenatal care among subjects.

Variables	Category	Number	Percent (%)
Do you know about ANC service?	Yes	94	62.7%
	No	56	37.3%
Where is the service given?	Health institution	73	48.7%
	Private clinic	38	25.3%
	Traditional attendant	39	26.0%
How many times mothers should get ANC service in pregnancy?	Once	52	34.7%
	Twice	49	32.7%
	Three times	28	18.6%
	Four and above	21	14.0%
Should first ANC examination be done within first 3 months?	Yes	111	74.0%
	No	39	26.0%
Does check-up during pregnancy reduces risk of complications?	Yes	124	82.7%
	No	26	17.3%
Why did not know about ANC service?	Unavailability of media	23	41.1%
	Lack of information from health worker	18	32.1%
	Lack of time to get information	15	26.8%
Should delivery happen at hospital/home?	Hospital	89	59.3%
	Home	61	40.7%
Is it necessary to give Inj. Tetnus during pregnancy?	Yes	107	71.3%
	No	43	28.7%
Does pregnant women need iron folic acid supplements during pregnancy?	Yes	94	62.7%
	No	56	37.3%
Should pregnant women often get weight and BP checked?	Yes	88	58.7%
	No	62	41.3%

Table 3: Practice regarding antenatal care among subjects.

Variables	Category	Number	Percent (%)
Have you followed ANC service?	Yes	81	54.0%
	No	69	46.0%
Where did get ANC service? (n=81)	Health institution	30	37.0%
	Private clinic	14	17.3%
	Traditional attendant	37	45.7%
How many times did you get the service?	One time	31	38.3%
	Two times	29	35.8%
	Three times	16	19.7%
	Four and above	5	6.2%
Where will delivery likely to happen?	Hospital	91	60.7%
	Home	59	39.3%

Practice of ANC service

Regarding practice, 81 (54%) of antenatal women were following ANC service. Out of 81 respondents, 31 (38.3%) had taken ANC service once, 29 (36.8%) twice

and only 5 (6.2%) women had taken ANC service four and above times. Among the respondents, 91 (60.7%) were likely to deliver at hospital and 59 (39.3%) at home (Table 3).

Table 4 shows the various reasons of not using ANC service among 69 non-users of ANC service. Majority 56 (81.1%) were unaware of antenatal care service. Another common reason was that ANC service was available far away from home 42 (60.9%) and 37 (53.6%) had poor transportation facility. Out of 69, 39 (56.5%) of antenatal women thought that they were quite healthy and do not require ANC service (Table 4).

Table 4: Attitude among non-users of ANC service (n=69).

Reason*	Number	Percent (%)
Unaware	56	81.2%
Thought I was healthy	39	56.5%
Check-up unaffordable	22	31.9%
ANC service far away from home	42	60.9%
Family members unco-operative	25	36.2%
Poor transportation facility	37	53.6%
Felt scared	9	13.0%
Booking system user unfriendly	13	18.8%
Stigma due to cultural beliefs	28	40.6%
*Multiple responses		

DISCUSSION

Antenatal care allows for the management of pregnancy, detection and treatment of complications, and promotion of good health. In the present study, 65.3% of respondents belonged to age group 20-30 years. In study conducted by Rozliza et al, majority of the respondents (46.2%) were from age group 20-29 years.³ Study conducted by Shirin S et al, mean age of women was 33.5±10.4 years.⁴ In a study conducted by Alam AY et al, the mean age of women was 29.57±7.1 years.⁵ Similar study conducted by Manas P et al, most of the respondents were more than 25 years.⁶ In present study, 89.3% were residents of rural areas and 10.7% from urban areas. Similarly, study conducted by Singh P et al, 63.7% respondent belongs to rural areas while 36.3% belongs to urban areas.⁷ In the present study, 40.7% of subjects were educated up to primary and 24.7% subjects were educated till high school. On the contrary, study conducted by Rozliza et al, 42.3% didn't received any primary or secondary education. In study conducted by Alam AY et al, 69.5% subjects were illiterate. In present study, maximum respondents 58% were housewives. This is in line with the study conducted by Alam AY et al, 81.5% of respondents were housewives. Similar result was found in study conducted by Sonia Shirin et al, i.e. 96% were housewives.

In the present study about 60% of respondents had knowledge about ANC service, IFA tablet supplementation, TT injection and importance of weight and BP checked during pregnancy. In another study also,

pregnant mothers were aware of injection TT and IFA supplementation.⁸ It is encouraging to note that pregnant women are aware of Inj. TT and IFA supplementation mainly because government health functionaries provide these. The knowledge regarding number of ANC visits was not adequate. The reason for the respondent's fair knowledge about ANC service was that illiterate women were very less. According to Becker et al. mother's education was the most consistent and important determinant of the use of child and maternal health service.⁹

A matter of concern was that nearly 40% of women with no antenatal care expressed total lack of knowledge about ANC service. Lack of concern about safe delivery was seen in 40.7% of antenatal women who did not feel to deliver in an institution and preferred to deliver at home. Low level of knowledge of antenatal well-being and less desire for hospital or assisted delivery was also observed in other studies.¹⁰ The reason regarding inadequate utilization of ANC services in this study like financial constraints, non-awareness, and non-availability of transport facilities are in agreement with the results of a similar study by Mumbare.¹¹

It has been suggested that one of the best things that antenatal care could accomplish is to influence women to have an institutional delivery. An association between the use of antenatal care services and health facility delivery was observed in India and in other developing countries. An analysis based on data from India's first and second National Family Health Survey conducted was that mothers who received antenatal check-ups are two to five times more likely to give birth in medical institution than mothers who did not receive any antenatal check-up. In general, women prefer to deliver at home for reasons such as support, familiarity, tradition, belief that birth is considered a natural phenomenon for which an institutional delivery is not required. In this study, a majority of women with antenatal care planned an institutional delivery. It may, therefore, be possible to promote institutional delivery by promoting antenatal checkups and associated counselling.

CONCLUSION

To improve effective utilization of ANC services, authors need to bring behaviour changes, improve communication and quality of service delivery, along with effective monitoring and evaluation. Awareness should be developed in the community about the importance of registration for ANC, educating women about the detection of complications during pregnancy, importance of TT injection, IFA tablets and extra nutrition.

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