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Original Research

A Demographic Study on Knowledge and Practices of Antenatal Care among Pregnant Women Attending a Tertiary Care Hospital, Bihar, India

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ABSTRACT

Background: Antenatal care is the care of the woman during pregnancy. The primary aim of antenatal care is to achieve, at the end of a pregnancy, a healthy mother and a healthy baby. Mother and child health is the promotion, prevention, curative and rehabilitative health care of mothers and children.
Materials and Methods: A longitudinal study was carried out among 240 pregnant women attending antenatal checkups at the Department of Obstetrics and Gynaecology at Sri Krishna Medical College, Muzaffarpur, Bihar, from October 2018 to March 2019. A pretested questionnaire was used for collecting data by interview after obtaining informed consent. A statistical analysis was performed.
Results: In our study, the total subjects studied were 240. Among them, total cases booked were 154 (64.16%). The maximum number of study subjects (43.75%) belonged to the age groups of 21–25 years. 83.75% of subjects had correct knowledge regarding reasons for adequate diet in pregnancy, followed by knowledge regarding actions to be taken in case of vaginal bleeding (71.66%).
Conclusion: A still higher proportion of pregnant women have inadequate knowledge, and most of them have poorly practiced ANC care. There is a need for comprehensive mother-and-child health care and family services as a compact family welfare service. Specific intervention programmes need to be planned and conducted to improve their maternal health practices and, eventually, their health status.
Keywords: antenatal care, knowledge, mother and child health

Introduction

Antenatal care is the care of the woman during pregnancy. The primary aim of antenatal care is to achieve, at the end of a pregnancy, a healthy mother and a healthy baby.[1] A healthy mother brings forth a healthy baby; there is less chance for a premature birth, stillbirth, or abortion. In India, women of

childbearing age (15–44) constitute 22.2%, and children under 15 years of age make up about 35.3% of the total population.[2] In this regard, the concept of mother-child health plays a vital role. Mother and child health is the promotion, prevention, curative and rehabilitative health care of mothers and children. It includes the sub-areas of maternal health, child health, family planning, school health, handicapped children, adolescence, and health aspects of the care of children in special settings such as daycare.[3] Early pregnancy detection is important in many contexts, like proper planning and adequate care to be provided during pregnancy for both the mother and foetus, timely detection of complications at an early stage, etc.[4] The very purpose of antenatal care is to identify high-risk cases among a large group of antenatal mothers and arrange for their skilled care while continuing to provide appropriate care for all mothers.[5] The need for family planning and knowledge about various modes of contraception can be better addressed during antenatal visits, as mothers are psychologically more responsive to such advice during this time. There is a need for comprehensive mother-and-child health care and family services as a compact family welfare service. 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 education is an important element to enable women to be aware of their health status and the importance of appropriate ANC.

Aims and Objectives

This study was conducted to study the demographic factors and the level of knowledge and practice related to ANC among these pregnant women and to assess their awareness about their own health during pregnancy.

Material and Methods

A longitudinal study was undertaken to study the demographic factors regarding ANC and the factors relating to knowledge and practices of antenatal care. The place of study was the Department of Obstetrics and Gynaecology at Sri Krishna Medical College, Muzaffarpur, Bihar. The study period was from October 2018 to March 2019. 240 pregnant women attending antenatal check-ups during their third trimester were the study population. The present study included all pregnant women attending antenatal check-ups during their third trimester and who gave consent for participation in the study.

Those subjects who delivered at our hospital were termed booked cases in our study. Those not willing to participate in the study were excluded. Written, informed consent was obtained from each subject. The data were collected by interviewing all the eligible subjects willing to participate in the study. A predesigned, pretested questionnaire was used. Study subjects were selected by randomization. Data regarding demographic characteristics like age, residence, religion, education, occupation, and husband's education were collected. Questions regarding various components of antenatal care, like registration of pregnancy, frequency of antenatal visits, warning signs during pregnancy, and others, were also asked to assess the knowledge and practice of antenatal care.

Statistical Analysis

The data was inputted into a Microsoft Excel spreadsheet and analysed. Categorical data were shown using frequencies and proportions. The data's significance was assessed by the chi-square test. A p-value less than 0.05 were deemed significant.

Results

Table-1: Socio-demographic distribution of patients

Demographic profile	No of subjects (n=240)	Booked	Unbooked	P value
Age in years				< 0.05
<20 years	21 (8.75%)	12(57.14%)	9(42.85%)	
21-25	105 (43.75%)	80(76.19%)	25(23.81%)	
26-30	77 (32.1%)	55(71.42%)	22(28.57%)	
>30	37 (15.4%)	25(67.56%)	12(32.43%)	
Residence				> 0.05
Rural	163 (67.9%)	99(60.73%)	64(39.26%)	
Urban	77 (32.1%)	55(71.42%)	22(28.57%)	
Religion				>0.05
Hindu	173 (72.1%)	115(66.47%)	58(33.52%)	
Mushlim	64 (26.66%)	37(57.81%)	27(42.18%)	
Others	3 (1.25%)	2(66.66%)	1(33.33%)	
Education				<0.05
Illiterate	130(54.16%)	87(66.92%)	43(33.07%)	
Primary	56(25%)	36(64.28%)	20(35.71%)	
Middle school	42(17.5%)	23(54.76%)	19(45.23%)	
High school	6(2.5%)	3(50%)	3(50%)	
Graduate	4(1.66%)	3(75%)	1(25%)	
Postgraduate	2(0.83%)	2(100%)	0(0%)	
Occupation				>0.05
Housewife	173 (72.1%)	106(61.27%)	67(38.72%)	
Skilled worker	10 (4.16%)	6(60%)	4(40 %)	
Unskilled worker	57 (23.75%)	42(73.68%)	15(26.31%)	
Husbands education				<0.05
Illiterate	24 (12%)	14(58.33%)	10(41.66%)	
Primary	63 (26.25%)	42(66.66%)	21(33.33%)	
Middle school	65 (27.08%)	40(61.53%)	25(38.46%)	
High school	43 (17.91%)	34(79.06%)	9(20.93%)	
Graduate	26 (10.83%)	16(61.53%)	10(38.46%)	
Postgraduate	19 (7.91%)	8(42.1%)	11(57.89%)	

In our study, the total subjects studied were 240. Among them, total cases booked were 154 (64.16%). The maximum number of study subjects (43.75%) belonged to the age groups of 21–25 years. Among them, the subjects booked were 80 (76.19%). Most of the subjects, 163 (67.9%) were from rural areas, and 99 (60.73%) of them were booked. 173 (72.1%) subjects were Hindu by religion, and 115 (66.47%) of them were booked cases. 130 (54.86%) were illiterate by education. The highest booking percentage of

87 (66.92%) was observed among the illiterate. 173 (72.1%) subjects were housewives by occupation, but the booking percentage was highest (73.68%) among unskilled workers. Among the subjects, most were educated up to primary (26.25%) and secondary (27.08%) school. A maximum booking percentage (79.06 %.) was observed among them who were educated up to high school. [Table1, figure 1].

Figure 1: Age wise distribution of participents of study

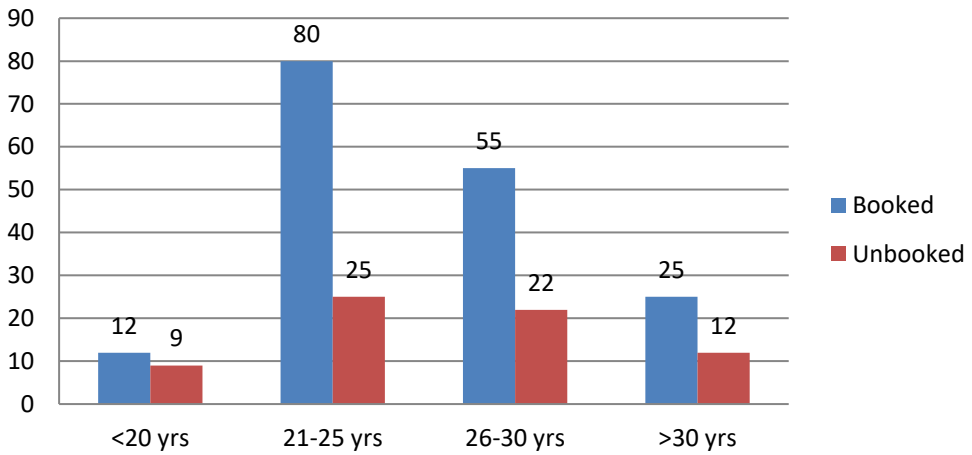

Table:2

Knowledge about	**Correct**	**Incorrect**
Confirmation of pregnancy and registration	151 (62.5%)	89 (37.08%)
Time of first visit to doctor	130 (54.16%)	110 (45.83%)
Frequency antenatal check up till 7th months	96 (40%)	144 (60%)
Frequency of antenatal check-up between 7^{th}-9^{th} months of pregnancy	77 (32.08%)	163 (67.91%)
Frequency of antenatal check-up after 9^{th} month of pregnancy	37 (15.41%)	203 (84.58%)
Perception of first fetal movement	149 (62.08%)	91 (37.91%)
Knowledge about fetal well being	140 (58.33%)	100 (41.66%)
Knowledge about warning sign during pregnancy	72 (30%)	168 (70%)
Action to be taken in case of vaginal bleeding	172 (71.66%)	68 (28.33%)
Examinations to be done during antenatal check up	34 (14.16%)	206 (85.83%)
No. of TT immunization	162 (67.25%)	78 (32.5%)
Reasons for adequate diet during pregnancy	201 (83.75%)	39 (16.25%)
Reasons for need of extra iron during pregnancy	130 (54.16%)	110 (45.83%)
Necessity of periconceptional folic acid intake	68 (28.33%)	172 (71.66%)

Among the various parameters of ANC, 83.75% of subjects had correct knowledge regarding reasons for adequate diet in pregnancy, followed by knowledge regarding actions to be taken in case of vaginal bleeding (71.66%). This was the least knowledge regarding examinations to be done during antenatal checkups (14.16%). There was also good knowledge regarding the number of TT immunizations

(67.25%), confirmation and early registration of pregnancy (62.5%), and perception of the first foetal movement (62.08%). [Table2].

Table: 3

Those having correct knowledge about	No. of subjects	Booking status	
		Booked	Unbooked
Confirmation of pregnancy and registration	151	118 (78.14%)	33 (21.85%)
Time of first visit to doctor	130	94(72.30%)	36 (27.69%)
Frequency antenatal check up till 7th months	96	67 (69.79%)	29 (30.20%)
Frequency of antenatal checkup between 7^{th}-9^{th} months of pregnancy	77	52 (67.53%)	25 (32.46%)
Frequency of antenatal checkup after 9^{th} month of pregnancy	37	27 (72.97%)	10 (27.02%)
Perception of first fetal movement	149	116 (77.85%)	33 (22.14%)
Knowledge about fetal well being	140	114 (81.42%)	26 (22.8%)
Knowledge about warning sign during pregnancy	72	52 (72.22%)	20 (27.7%)
Action to be taken in case of vaginal bleeding	172	120 (69.76%)	52 (30.23%)
Examinations to be done during antenatal check up	34	26 (76.47%)	8 (23.52%)
No. of TT immunization	162	87 (53.7%)	75 (46.29%)
Reasons for adequate diet during pregnancy	201	128 (63.68%)	73 (36.3%)
Reasons for need of extra iron during pregnancy	130	93 (71.5%)	37 (71.5%)
Necessity of periconceptional folic acid intake	68	55 (80.88%)	13 (88.4%)

Among the subjects having correct knowledge about various parameters of ANC, the booking percentage was highest among them who had correct knowledge regarding foetal well-being (81.42%), followed by those having correct knowledge regarding the necessity of periconceptional folic acid intake. The people with the lowest booking percentage (53.7%) were among those who had the correct knowledge regarding TT immunization. [Table3].

Discussion

In the present study, 43.75% of respondents belonged to the age group of 21–15 years. In a study conducted by Rozliza et al., the majority of the respondents were from the age group of 20–29 years.[6] In our study, age groups of 21 to 30 years showed the most caution regarding antenatal care. Most of the subjects were Hindu. Similar findings were also observed by Padam Singh et al. Most of the subjects were illiterate. A study by Alam AY also found a similar finding: around 70% of subjects were illiterate by education.[7] There was a good booking status among husbands of subjects who were educated up to high school. A study done by Simkhada B et al. also observed a higher level of utilisation of antenatal care services among those whose husbands had better education.[8] This finding may have an inherent instinct in our society that if a husband believes and approves prenatal care, then the likelihood of a woman using prenatal care increases. In our study, most subjects were housewives, showing similar findings to those of Alam AY et al.[9] 62.5% of subjects had correct knowledge regarding confirmation and early registration of pregnancy. In a study conducted by Rozliza AM et al.[6], 73.1% of subjects had

knowledge regarding early registration. The overall correct knowledge regarding various components of ANC was not so satisfactory, except for a few. The most worrisome was the low level of correct knowledge regarding warning signs during pregnancy. Shirin S et al.[10] also found that respondents knowledge regarding warning signs of pregnancy was very poor. Apart from having correct knowledge regarding ANC, the booking status varied too much. It had been observed that, in spite of having good knowledge about a few components of ANC booking, the cases were found to be low.

The limitation of the study: In the present study, there is a small sample size and short duration of the study.

Conclusion

The still higher proportion of pregnant women has inadequate knowledge, and most of them have poorly practiced ANC care. Their knowledge on certain aspects of ANC was very poor, especially regarding the importance of early antenatal check-ups and their utilization. There is a need for comprehensive mother-and-child health care and family services as a compact family welfare service. Specific intervention programmes need to be planned and conducted to improve their maternal health practices and, eventually, their health status. The matter of established fact is that knowledge increases awareness, and awareness increases better utilisation of resources. This needs attention to be paid regarding appropriate antenatal care, increased booking status, and increased institutional deliveries.

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