

A Study to Assess the Knowledge of Antenatal Care among Antenatal Mothers in a Tertiary Hospital of North Goa

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Abstract

The potential of antenatal care for reducing maternal morbidity and improving new born survival and health is widely acknowledged. Giving pregnant women relevant information to make informed decision remains a challenge to health professionals. Antenatal care plays an important role in achieving successful labour & delivery process. Regular check-ups help in physical & mental preparation in the days to come leading to mother-child well being and easy delivery.

Most of the mothers lack in knowledge regarding antenatal care and visits, resulting in maternal & foetal morbidity and mortality. Therefore, there was a felt need to assess the knowledge of antenatal mothers regarding antenatal care and to find the association between the knowledge scores of antenatal mothers and selected demographic variables. In this study quantitative research approach was used. The research design selected was exploratory, descriptive, survey type. The study tool used was a structured questionnaire with convenience sampling with 200 primigravida antenatal mothers. The data was analysed in terms of frequency and percentage. The result indicated that majority of them (63%) had average knowledge, 35 percent had good knowledge and 2 percent had poor knowledge regarding antenatal care.

Key words: Antenatal care, Pregnant women

Healthy mothers and children are the real wealth of the society. Every woman during her life span aspires to be a mother. Pregnancy and child birth are special events in a woman's life. Sometimes during the child birth process, complications may lead to maternal mortality and morbidity. Therefore the timely and proper management is of utmost importance throughout pregnancy. Thousands of women could be saved each year if they had access to skilled care during pregnancy and child birth.

According to WHO, giving quality antenatal care will reduce pregnancy-related diseases and deaths, thus protecting both antenatal mothers and babies. WHO also recommended that all women should receive four antenatal visits to treat problems, and given immunisation. Antenatal care is a care provided by skilled professionals for women throughout their pregnancy.

Need for Study

A cross-sectional study was carried out in Octo-

ber-November 2013 in a rural area of North India among antenatal mothers aged 15-49 years to assess the knowledge of antenatal care services, its utilisation and delivery practices. Random sampling method was used with pre-designed, pre-set and semi open-ended questionnaire. On assessment, the result showed 182/211 (82.6%) respondents knew about early registration, iron, folic acid tablets supplements; 199/211 (94.3%) and 130/211 (61.6%) had adequate knowledge about the increase in food intake and importance of TT injections. But knowledge about antenatal visits was poor as only 23/211 (10.9%) knew that 3 antenatal visits were essential.

A descriptive study was conducted regarding antenatal diet in a rural area of South India. Convenience sampling method was used in 30 antenatal mothers. A questionnaire was used to collect data and analyse by descriptive statistics. The result showed that 7 (23.33%) of antenatal mothers had good knowledge, 13 (43.33%) had average and 10 (33.33%) had poor knowledge of antenatal diet.

This study aimed to monitor the progress of pregnancy to support maternal health and normal

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foetal development by evaluating physical, psychological and sociological effects on the women and her family.

Objectives

1. To assess the overall knowledge scores on antenatal care among antenatal mothers.
2. To find the association between the knowledge scores and the selected demographic variables.

Research variables: Knowledge regarding antenatal care; *Demographic variables:* Age, religion, education.

It was considered that the study will help us to assess the overall knowledge score on antenatal care of antenatal mothers; clear the doubts and misconceptions regarding pregnancy and antenatal care; and plan further if a health education or teaching needs to be imparted.

Hypothesis

H0 – There will be no significant association between the knowledge scores regarding antenatal care among the antenatal mothers and the selected demographic variables at 0.05 level of significance.

H1 – There will be a significant association between the knowledge scores regarding antenatal care among the antenatal mothers and the selected demographic variables at 0.05 levels of significance.

Assumptions: The antenatal mothers may not have the knowledge regarding antenatal care.

Review of Literature

A cross sectional survey was conducted on antenatal care utilisation among 5344 pregnant women from 14 states of India by random cluster sampling and data collected by using questionnaire. The result showed that 73.9 percent had atleast one contact with auxillary nurse midwife, 51.7 percent had received antenatal care and preferred institutional delivery and 27.6 percent who had not availed antenatal care services. Therefore the need for improving awareness on antenatal health and care services.

A study conducted at Safdarjang Hospital, New Delhi by ICMR revealed that 42.6 percent of perinatal deaths would be attributed to preventable causes which are directly or indirectly related to maternal diseases, complications of pregnancy and method of delivery. A sample of 310 mothers belonging to low socio economic class and another sample of 180 antenatal mother belonging to high socio economic class attending nursing home clinic were studied and classified in to 3 groups based on risk. Two-third were classified as low risk, 5 percent as high risk and the rest as moderate risk.

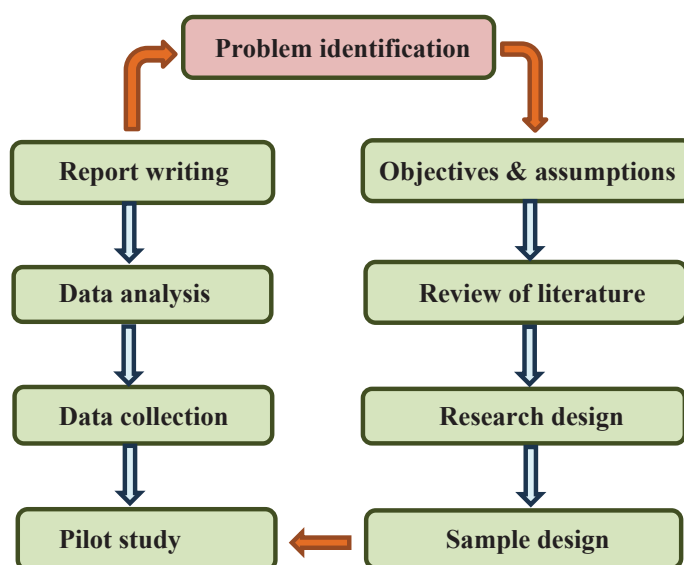


Figure 1: Schematic representation of research methodology.

Methodology

In this study a quantitative research approach was used. Exploratory research design aims at exploring possibility of doing research on certain subjects, selection of design depends upon the purpose of study, research approach and variables to be studied.

Here exploratory, descriptive survey design was used. The sample were pregnant women visiting the OPD; the sample size comprises of 200 samples.

The sampling technique used was convenience sampling and the research variable was the knowledge regarding antenatal care in tertiary hospital in North Goa.

Table 1: Frequency and percentage distribution of sample characteristics

	Frequency (F)	Percentage (%)
Age in years		
18-22	54	27
23-27	98	49
28-32	48	24
Education		
Primary school	40	20
High School	68	34
PUC	74	37
Graduate	18	9
Religion		
Hindu	132	66
Christian	40	20
Muslim	28	14

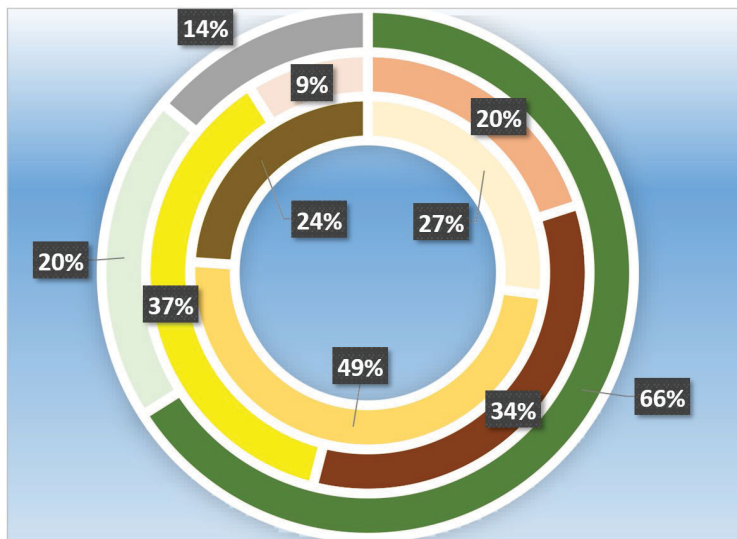


Figure 1: Percentage wise distribution of sample characteristics.

The purpose of study was explained to the mothers for data collection and cooperation was achieved for giving questionnaire.

Inclusion criteria: The samples were women pregnant for the first time who could read and understand English & Konkani; pregnant women visiting the OPD.

Exclusion criteria: Samples who already have a child; cannot read and speak English and Konkani; and who were not willing to participate in the study.

Data collection: The data collection was done in one week from 3 to 8 October 2022 by giving questionnaire to the pregnant mothers after taking their consent.

Plan for data analysis: The data was analysed by using descriptive and inferential statistics and was presented in the form of tables and figures.

In this study the tool used was structured questionnaire.

Results

The data obtained from 200 samples visiting OPD of a tertiary Hospital in North Goa was analysed and presented under these following sub-headings:

Section 1: Description of sample characteristics

Section 2: Description of antenatal women's level of knowledge regarding antenatal care.

Section 3: Association between antenatal women's knowledge regarding antenatal care and selected demographic variables.

The data in the Figure 3 revealed that majority (63%) sample had average knowledge, 35 percent had good knowledge and 2 percent had poor knowledge.

Major finding of the study

Demographic variables (Tables 1-2; Fig 3)

- Majority (66%) of the selected population were Hindu.
- Almost half (49%) were in the age group of 23-27 years.
- Almost a third (37%) were educated up to PUC level.
- More than half (63%) of the population had average knowledge regarding care.

Level of knowledge

It was found that 63 percent of the population had average knowledge, 35 percent had good knowledge and only 2 percent had poor knowledge.

Discussion

Association between knowledge scored and demographic variables

A statistically significant association was found between the mothers, knowledge regarding the antenatal care and selected demographic variables such as:

- Mothers education ($\chi^2=145.57$, $p=0.01$),
- Age ($\chi^2=34.09$, $p=0.07$) and
- Religion ($\chi^2= 17.04$, $p=0.07$)

Results of this study were consistent with another cross-sectional study conducted among antenatal mothers in Thiana town. Structured in-

Table 2: Association between knowledge scores and the selected demographic variables.

Good knowledge		Average knowledge	Poor knowledge	χ^2	df	p value
	f%	f%	f%			
Age in years						
18-22	3	22	2	28.16	4	0.007
23-27	23	26	0			
28-32	9	15	0			
Education						
Primary School	0	18	2	145.7	6	0.001
High School	0	34	0			
PUC	26	11	0			
Graduate	9	0	0			
Religion						
Hindu	19	47	0	34.09	4	0.007
Christian	9	11	0			
Muslim	7	5	2			

Significant at 0.05 level of significance.

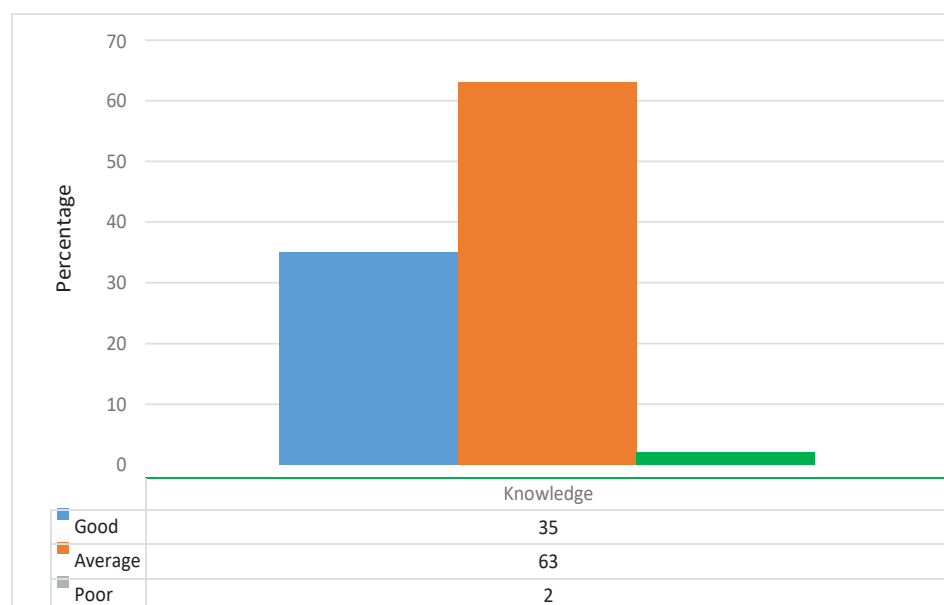


Figure 3: Frequency and percentage distribution of sample based on antenatal women's level of knowledge regarding antenatal care.

interview questionnaire was used for data collection. The data collected on study variable were tabulated in frequency tables and significant association between variables was tested using chi test of significance.

A total of 360 pregnant women were enrolled in study. It was revealed that about 76.06 percent of the women had the knowledge of antenatal care; 23.3 percent had poor knowledge. Religion and occupation, literacy status, gravidity showed statistically significant association ($p < 0.5$) with utilisation of antenatal care, but marital status, ethnicity showed no statistically significant association ($p < 0.05$) with antenatal care utilisation.

To sum up, there was significant association between the knowledge scores of antenatal mothers and the selected demographic variables.

Nursing Implications

Nursing practice: Nurses play a vital role in the health setting. They need to have good antenatal knowledge so that patients get maximum benefits. They should update their knowledge about the drugs, diagnostic measures and producers that are done during the antenatal period.

Nursing administration: Today, there is an increasing demand for quality care policies and execution of quality nursing care based on research finding. Nursing administrators should take initiative in creating plan and policies for the health teaching programmes for the population.

Nursing research: Further studies can be conducted in this area to assess the knowledge of antenatal mothers.

Limitations: The study was limited to 200 antenatal

mothers confined to tertiary hospital of North Goa visiting OPD; the sample size was small, so the generalisation of the findings is limited.

Recommendations

- The sample size can be increased for better investigation.
- More than one hospital can be used and the finding can be compared.
- Finding of the study can be utilised in planning interventions for improving knowledge of antenatal mothers.
- A similar comparative study can be done to compare the knowledge of antenatal care among antenatal mothers in

two different hospitals.

Conclusion

The finding revealed the following: majority of the antenatal mothers (63%) have good antenatal knowledge; less than half of the antenatal mothers (35%) have average antenatal knowledge and only a few of the antenatal mothers (2%) have poor antenatal knowledge.

There is significant association between the knowledge scores and the age of antenatal mothers (0.07) and association between education and knowledge scores (0.01) and association between religion and knowledge scores (0.02).

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