pISSN 2394-6032 | eISSN 2394-6040

Original Research Article

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20211229

Assess the knowledge and attitude regarding antenatal care among spouses of pregnant women attending antenatal OPD in selected tertiary care hospital Bhubaneswar, Odisha

Indresh Gupta^{1*}, Anindita Mandal²

Received: 11 February 2021 **Accepted:** 10 March 2021

*Correspondence:

Indresh Gupta,

E-mail: indreshg378@gmail.com

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ABSTRACT

Background: Antenatal care is an umbrella term used to describe the medical procedures and care that are carried out during pregnancy. Every day, approximately 830 women die from preventable causes related to pregnancy and childbirth. Worldwide, the annual number of maternal deaths per 100,000 live births fell by 44% between 1990 and 2015, from approximately 385 to 216. The sub-Saharan African region accounted for an estimated 66% (201,000) of global maternal deaths, followed by southern Asia at 22% (66,000 deaths). Basically, only 5% of the world's countries accounted for over half of maternal deaths.

Methods: A cross-sectional hospital based study was conducted on 384 spouses attending antenatal OPD. Interview Schedule was conducted to assess their knowledge and attitude using a self-structured questionnaire. Knowledge score of spouses has been computed on the basis of correct response to 18 knowledge questions and by converting it to percentage score.

Results: The mean knowledge score was 61.10% taken as the arithmetic average of all the scores. Mean attitude score was very high 94.29% with small SD 3.87. The attitude of spouse towards antenatal care is found to be extremely high. The educational status (p<0.000), age (p<0.002), type of family (p<0.018) and average income earned per month (p<0.000) were statistically significant to the level of knowledge.

Conclusions: The study shows that the knowledge and attitude among spouses of pregnant women about antenatal care is good.

Keywords: Antenatal mother, Knowledge and attitude, Spouses

INTRODUCTION

Pregnancy is that wonderful period in a woman's life when she spends each and every day in pleasant anticipation, waiting to hold her bundle of joy in her arms at the end of the ninth month. Everything feels rosy and she enjoys every bit of pampering that she gets from her husband, in-laws, and parents. Every woman hopes for a normal pregnancy and normal delivery so that she can cradle and nurse a healthy baby. For that mother has to get proper antenatal care. Maternal mortality is unacceptably high. About 810 women die from pregnancy- or childbirth-related complications around the world every day in 2017. It was estimated that in 2015, roughly 303 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. ²

¹Department of Community Health Nursing, Kalinga Institute of Nursing Sciences, KIIT Deemed to be University Bhubaneswar, India

²Department of Obstetrics and Gynaecology in Nursing, Community Health Officer, Jhargram, West Bengal, India

Among the several options available in India, creating awareness among husbands appears to be an important prerequisite. The father of today is expected to fulfill the role of providing as well as nurturing, caring and becoming an involved parent. The husband can be a stabilizing influence, a good listener to an expression of doubts and fears, and a source of physical and emotional reassurance.

Objective of the study was to determine the existing level of knowledge on antenatal care among spouses of Pregnant Women and to assess attitude toward antenatal care among spouses of Pregnant Women. To find out the association between knowledge and attitude with selected demographic variable.

METHODS

In this study, a hospital based cross sectional study design was adopted. The target accessible of the study includes the spouses of pregnant woman who attended antenatal clinic at PBMH and who met the criteria that the researcher established for a study. The study was conducted in Antenatal OPD of Pradyumna Bal Memorial Hospital, Bhubaneswar, Odisha, India.

As documented in different literature, the proportion of various heterogeneous (10%-65%) pattern in knowledge and attitude level of spouses of antenatal mother. Therefore a sample size is thought to be maximum by assuming the prevalence of 50%. Therefore by adapting the expected 50% of prevalence at 5% of absolute precision and 95% of desired confidence level, the require sample size is 384. Therefore a total of nearby 400 spouses of pregnant mother will be recruited for the current study. A consecutive sampling technique was adopted to select husbands of 384 pregnant woman.

Inclusion criteria

Spouses of pregnant women who ware gave the consent. Spouses of Primi Gravid mother Spouses of pregnant woman who were attending antenatal clinic selected Hospital. Spouses of pregnant woman who were willing to participate in the study.

Exclusion criteria

Spouses who work as health professionals. Spouses who are suffering with mental disorder.

Data collection tool

The study tool considered of two section I was demographic variables consist of baseline information of age, occupation, Socio economic status, educational status of spouses, type of family, family income per month, decision maker, age at marriage, and source of information. Section II was structured knowledge

questionnaire regarding selected aspects of Antenatal care. Section III: Likert Scale.

Development of tool

A structural questionnaire was used to assess the knowledge and attitude regarding antenatal care among spouses of pregnant woman. Prior to the study, written permission can be obtained authorities.

Further consent can be taken from samples regarding their willingness to participate in the study. The data will be collected by the investigator herself.

Data collection

Data was collected by the investigator after obtaining permission from the concerned authorities of selected hospital .Prior to the data collection, the spouses ware seated comfortably in a quiet environment.

The investigator was introducing himself, explain the objectives of the study, and obtain consent from the spouses of pregnant woman for maximum cooperation. Each day around 15-20 spouses of pregnant woman was interviewed using the closed-ended structured interview schedule.

Statistical analysis

Data entered in Microsoft excel and analysis was done. The association between pre-test knowledge score of mothers of under-five children and their selected sociodemographic variables was done by chi-square test and effectiveness of planned teaching programme was done by using paired 't' test. The level of significance was set at p-value <0.05.

Ethical clearance and informed consent

The study was carried out after obtaining approval from the institutional Ethical Committee of Kalinga institute of nursing sciences KIIT University Bhubaneswar .The participants were briefed about the purpose of the study and informed consent was obtained prior to the data collection.

RESULTS

Level of knowledge regarding Antenatal care among the spouses of pregnant woman those attending antenatal clinic

The level of knowledge among the subjects of that, the majority of spouses had good knowledge the mean knowledge score was 61.10% taken as the arithmetic average of all the scores.

The standard deviation which is a measure of the variability stood at 17.2 and quite low. (Table no 4.2.2)

Table 1: Mean and standard deviation of knowledge score.

Statistic	Knowledge score
N	384
Mean	61.10
SD	17.22
Minimum	16.67
Maximum	94.44

The majority of the spouses had adequate knowledge (48.7%) and moderately knowledge (46.6%). Only 4.7% have inadequate knowledge about antenatal care during pregnancy.

Table 2: Frequency and percentage distribution according to knowledge score.

Knowledge score	Frequency (f)	Percentage
Adequate	18 (1-7)	4.7
Moderately	179 (8-13)	46.6
Inadequate	187 (13-18)	48.7

Knowledge score with age of spouse. It is found to be significantly different (p=0.002). The spouse having age 20 or below have the significantly lower score than the spouses within age group 21-30 years and 31 - 40 years (p <0.05) (Table 2).

Level of attitude regarding Antenatal care among the spouses of pregnant woman those attending antenatal clinic

Mean attitude score was very high 94.29% with small SD 3.87. Minimum score 78.2% and Max score 100. The attitude of spouse towards antenatal care is found to be extremely high this low variability indicated that the attitude scores of the spouse of pregnant women are closely spread around the average or mean (Table 3).

Association between knowledge and demographic variables

Above data reveals that the knowledge score with age of spouse, it is found to be significantly different (p=0.002). The spouse having age 20 or below have the significantly lower score than the spouses within age group 21-30 years and 30-40 years (p<0.05). Comparison of knowledge score indicated that with the education level of the spouses their knowledge score increases and the difference of mean knowledge score among educational level was found to be significant (p=0.000).

Spouses without any formal education have significantly lower score than all other higher level of education (p<0.05). Knowledge score of spouses with primary education did have significant difference from the spouses with graduate and above.

Table 3: Attitude score criteria.

Attitude score criteria	Percentage				
Negative	0-33				
Neutral	34-67				
Positive	67-100				
Deviation of attitude score					
N	384				
Mean	94.29				
SD	3.87				
Minimum	78.82				
Maximum	100				

Table 4: Association between knowledge and demographic variables (N=384).

demographic variables (14–304).								
Association of knowledge score with age of spouses								
Knowledge score	f	Mean	SD	P value				
≤ 20	5	34.44	6.09					
21-30	295	61.09	17.45	0.002				
31-40	84	62.7	15.56					
Association of knowledge score with education								
status								
Educational status	f	Mean	SD	P value				
of spouse	1	Wican		1 value				
No formal	20	43.33	14.6					
education		43.33						
Primary education	52	56.2	17.17					
Secondary	39	58.4	14.3	0.000				
education								
Higher Secondary	59	61.49	15.19					
Graduate and above	214	64.33	17.23					
Association of knowl	ledge s	core witl	ı occupa	tional				
status of spouses								
Occupation status	N	Mean	SD	P value				
of spouse	- '			P value				
of spouse Private sector	149	62.08	15.67	P value				
Of spouse Private sector Public sector	149 118	62.08 62.29	15.67 16.72					
of spouse Private sector Public sector Business	149 118 78	62.08 62.29 59.19	15.67 16.72 20.8	P value 0.450				
of spouse Private sector Public sector Business Unemployed care	149 118 78 19	62.08 62.29 59.19 57.02	15.67 16.72 20.8 15.14					
of spouse Private sector Public sector Business Unemployed care Other	149 118 78 19 20	62.08 62.29 59.19 57.02 58.06	15.67 16.72 20.8 15.14 17.7	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowledges	149 118 78 19 20	62.08 62.29 59.19 57.02 58.06	15.67 16.72 20.8 15.14 17.7	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family	149 118 78 19 20	62.08 62.29 59.19 57.02 58.06	15.67 16.72 20.8 15.14 17.7	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in	149 118 78 19 20	62.08 62.29 59.19 57.02 58.06	15.67 16.72 20.8 15.14 17.7	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees	149 118 78 19 20 edge s	62.08 62.29 59.19 57.02 58.06 core by s	15.67 16.72 20.8 15.14 17.7 cocio eco	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000	149 118 78 19 20 ledge s	62.08 62.29 59.19 57.02 58.06 core by s	15.67 16.72 20.8 15.14 17.7 cocio eco	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000	149 118 78 19 20 ledge s	62.08 62.29 59.19 57.02 58.06 core by s Mean 47.22 57.74	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34	0.450 nomic P value				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000 11001-15000	149 118 78 19 20 edge s f 18 89 129	62.08 62.29 59.19 57.02 58.06 core by s Mean 47.22 57.74 59.56	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34 17.65	0.450				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000 11001-15000 15001-25000	149 118 78 19 20 ledge s f 18 89 129 94	62.08 62.29 59.19 57.02 58.06 core by s Mean 47.22 57.74 59.56 64.6	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34 17.65 16.17	0.450 nomic P value				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000 11001-15000 15001-25000 ≤ 25001-29000	149 118 78 19 20 edge s f 18 89 129 94 54	62.08 62.29 59.19 57.02 58.06 Core by s Mean 47.22 57.74 59.56 64.6 68.83	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34 17.65 16.17 14.13	0.450 nomic P value				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000 11001-15000 15001-25000 ≤ 25001-29000 Association of knowl	149 118 78 19 20 edge s f 18 89 129 94 54 edge s	62.08 62.29 59.19 57.02 58.06 core by s Mean 47.22 57.74 59.56 64.6 68.83 core with	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34 17.65 16.17 14.13 1 types o	0.450 nomic P value 0.000				
of spouse Private sector Public sector Business Unemployed care Other Association of knowl status of family Family income in Rupees ≥ 5000 5001-10000 11001-15000 15001-25000 ≤ 25001-29000	149 118 78 19 20 edge s f 18 89 129 94 54	62.08 62.29 59.19 57.02 58.06 Core by s Mean 47.22 57.74 59.56 64.6 68.83	15.67 16.72 20.8 15.14 17.7 cocio eco SD 18.98 16.34 17.65 16.17 14.13	0.450 nomic P value				

184

63.25

0.018

The knowledge score did not differ significantly among the spouses with education level of secondary, higher and graduate and above (p>0.05). Association of knowledge score by occupation status of spouses did not differ significantly. p=0.450 It is seen that with the increase in income level of the family, there is significant increase in the knowledge score p=0.000. Association of mean knowledge score with types of family highly significant p=0.018, it means positive relationship between the knowledge score with types of family (Table 4).

Table 5: Association of attitude score with demographic variable.

Age group	No	Mean	SD	P value			
≤ 20	5	96.47	3.33	0.32			
21-30	295	94.17	3.94				
31-40	84	94.57	3.62				
Association of attitude score with education status							
Family type	No	Mean	SD	P value			
Nuclear	200	94.44	3.93	0.441			
Joint	184	94.13	3.8	0.441			
Association of attitude score with education status							
Education of spouse	f	Mean	SD	P value			
No formal education	20	95	4.09	_			
Primary education	52	94.64	3.4				
Secondary education	39	95.02	3.45	0.297			
Higher Secondary	59	93.52	3.24				
Graduate and above	214	94.22	4.16				
Association of attitude score with occupation status							
Occupation of spouses	No	Mean	SD	P value			
Private sector	149	94.43	3.53				
Public sector	118	94.07	4.26				
Business	78	94.4	3.86	0.902			
Unemployed	19	93.81	3.92				
Other	20	94.59	4.15				
Association of attitude score by socio economic status of family							
Income level	No	Mean	SD	P value			
≤ 5000	18	94.31	3.7				
5001-10000	89	94.62	3.59				
11001-15000	129	94.66	3.74	0.251			
15001-25000	94	93.97	4.27				
≥ 25001-29000	54	93.4	3.87				

f: Frequency

Association of attitude score with demographic variable

Attitude score with age of spouse. It is found to be did not differ significantly (p=0.320). Association of mean attitude score with type of family did not differ significantly p=0.441 association of attitude score indicated that with the education level of the spouses their

attitude score increases and the difference of mean attitude score among educational level was found to be not significant (p=0.297). Association of knowledge score by occupation status of spouses did not differ significantly. p=0.902.Association of mean attitude score by income level of did not differ significantly p=0.251 (Table 5).

DISCUSSION

This study was conducted to find out the knowledge and attitude of spouses of pregnant woman regarding antenatal care. Out of 384 cases majority of the spouses (76.8%) were in the age group 21-30 years. The mean knowledge score was 66.10 ± 17.22 . The educational status (p<0.000), age (p<0.002), type of family (p<0.018) and average income earned per month (p<0.000) were statistically significant to the level of knowledge.

A similar study conducted by Raymond et al, on husbands of primi gravida attending the ANC at Tertiary and Secondary Health facilities in Ogbomoso. The mean age of respondent was 30.6±5.3 years. The mean knowledge score was 63.55±6.27. The educational status (p<0.001), occupation (p<0.001), type of marriage (p=0.005) and average income earned per month (p<0.002) were statistically related to the level of knowledge. In this study revealed that, when asked the is the danger sign of pregnancy 61.5% spouses considered bleeding only 38.5% considered constipation, backache, haemorrhoid as a danger sign.

A study was conducted by Iliyasu et al in Northern Nigeria on husbands' participation in antenatal care among 400 men. When asked to identify situations they would consider as danger signs in pregnancy, more than half (51.9 percent) considered bleeding, about a third considered convulsions (37.8 percent) and loss of consciousness (33.2 percent). Others considered a pale appearance in the mother (21.6 percent) and cessation of foetal movement (15.4 percent) as danger signs. Fever was considered a serious sign by only 4.1 percent of respondents.4 This study revealed that 8.6 % of the husbands were not aware of the need of antenatal care. A similar study conducted by Rohini et al in Maharashtra, India, to assess the husband's involvement in antenatal care revealed that 9 percent of the husbands were not aware of the need of antenatal care.²³

CONCLUSION

The present study assessed the knowledge and attitude among spouses of pregnant antenatal care and found that the spouses had good knowledge related to antenatal care and attitude also positive regarding antenatal care.

ACKNOWLEDGEMENTS

Authors would like to thank their college management for supporting them to do this study. Also to Anindita

Mandal, Community Health officer, Jhargram, West Bengal for the inspiring guidance, suggestions and constant encouragement throughout the research study to make this study fruitful and successful learning experience.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

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Cite this article as: Gupta I, Mandal A. Assess the knowledge and attitude regarding antenatal care among spouses of pregnant women attending antenatal OPD in selected tertiary care hospital Bhubaneswar, Odisha. Int J Community Med Public Health 2021;8:1757-61.