

A Study to Assess the Knowledge regarding Antenatal Care among Primi Mothers with View to Provide Need Based Teaching in a Selected Hospital of Dehradun, Uttarakhand

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Abstract: *Antenatal care is necessary for a pregnant mother and baby's health at the end of gestation. A cross sectional design study was conducted to assess the knowledge regarding antenatal care among primi mothers. Methodology: The study was conducted on 103 primi mothers who were selected by using total enumerative sampling technique. Data was collected by structure knowledge questionnaire through interview method. Result: The finding of the study revealed that the overall mean knowledge score was 13.76 ± 4.9 . According to area the highest mean score was in the warning signs 1.47 ± 1.12 . Majority 42.7 %, 36 % & 21% primi mothers had average, good and poor regarding antenatal care. Dietary pattern of mothers had significant association with level knowledge regarding antenatal care. Conclusion: From the study findings it could be concluded that primi mothers had average knowledge regarding antenatal care. Thus, health education programs are required to enhance the knowledge regarding antenatal care.*

Keywords: Antenatal care, Primi mothers, Knowledge.

1. Introduction

Antenatal care is continuing care that begins before pregnancy and end at delivery of baby and the postpartum period. Main focus of antenatal care is to deliver a single healthy baby at term 38 to 42 weeks; the weight of fetus is 2.5kg or more. No maternal complication during the time of delivery.^[1]

In 2016 the WHO include new guideline are recommendation for pregnant women have eight antenatal visit are needed during pregnancy. WHO compare the contact schedule of the previously recommended Focused ANC visit model and the newly FANC model.

WHO old FANC Model recommended that first visit 8 to 12 weeks and in new model visit 1 up to 12 weeks in first trimester in fist visit. Second visit 24 to 26 weeks in old model and second visit 20 weeks, third visit 26 weeks in second trimester. In third trimester according to old model third visit are 32 weeks and 4th visit are 36 to 38 weeks and new model 4th visit are 30 weeks, 5th visit are 34 weeks, 6th visit are 36th weeks, 7th visit are 38 weeks , 8th are 40 weeks , return for delivery at 41 weeks if not give birth.^[2]

The pregnant women needs supplement in pregnancy i.e. iron 60 mg, 0.5- 1.0 mg folic acid required daily and 1000-2000/ day calcium is required in pregnancy.^[3]

2. Literature Review

Ahirwar N.(2018) conducted a descriptive case control study on to assess knowledge ,attitude and practices of antenatal care among antenatal women attending outdoor clinic in tertiary care hospital. The finding of the study was

86.16% subjects visited ANC clinic during first trimester, 66.33% knew correctly about frequency of antenatal visits, 97.50% knew about tetanus immunization. Likewise, 78.33% had positive attitude towards antenatal checkups and early registration. Similarly, 70.4% took adequate antenatal care, 93.33% took iron folic acid tablets.^[4]

2.1 Problem Statement

A study to assess the knowledge regarding antenatal care among primi mothers with view to provide need based teaching in a selected hospital of Dehradun , Uttarakhand.

2.2 Objectives

- 1) To assess the knowledge regarding antenatal care among antenatal mothers.
- 2) To find association between level of knowledge of antenatal care among antenatal mothers with their selected demographic variables.

2.3 Hypothesis

All hypotheses were be tested at $P < 0.05$ level of statistical significant

H₁: There would be significant association between the level of knowledge with their selected demographic variable.

3. Material and Methods

In the present study quantitative approach with cross sectional design was used, total enumerative sampling technique was used to select 103 primi mothers from antenatal OPD of Himalayan Hospital, Dehradun, Uttarakhand. The data were collected by structured

knowledge questionnaire to assess the knowledge regarding antenatal care among primi mothers and demographic variables use to collect the baseline data of primi mothers. The purposes of data collection explained to participants and written consent was taken. Tools were structured knowledge questionnaire that contain 24 question related to antenatal care. Each question carry 1 mark for correct response and 0 mark for wrong response. The scoring of tool were interpreted as 0- 8 poor, 9 – 16 average, 17 – 24 good.

4. Analysis and Interpretation

Section - A:

Table 1: Frequency and percentage distribution of selected demographic profile of primi mothers, n= 103

S. No.	Demographic Variables	Frequency	Percentage
Age in year			
1	a. 18 – 22	41	39.8
	b. 23 - 27	44	42.7
	c. 28 – 32	18	17.5
Duration of marriage			
2	a. Less than 2years	74	71.8
	b. 2 – 4 years	20	19.4
	c. 4 – 6 years	9	8.7
Education			
3	a. No formal education	20	19.4
	b. Primary	17	16.5
	c. Secondary	24	23.4
	d. Graduate	42	40.7
Dietary pattern of the mother			
4	a. Vegetarian	49	47.6
	b. Non- vegetarian	54	52.4
Occupation			
5	a. Home maker	90	87.48
	b. Government employee	2	1.92
	c. Private employee	9	8.7
	d. Self employment	2	1.9
Type of family			
6	a. Nuclear	22	21.4
	b. Joint	81	78.6
Family income per month			
7	a. 5000 – 15000	68	66
	b. 15000 – 25000	16	15.5
	c. 25000 – 35000	11	10.7
	d. 35000 – 45000	8	7.8
Place of residence			
8	a. Urban	9	8.7
	b. Rural	85	82.6
	c. Semi urban	9	8.7
9. a. Previous knowledge regarding antenatal care			
9. a.	a. Yes	20	19.4
	b. No .	83	80.6
9. b. If yes, mention sources of information- From – n= 20			
9. b.	a. Family	9	45
	b. Internet	11	55
10 Trimester			
10	a. 1 st trimester	45	43.7
	b. 2 nd trimester	23	22.3
	c. 3 rd trimester	35	34

Table No. 1 Data present in table no.1 shows that the frequency and percentage of socio – demographic profile of primi mothers which shows that the majority of primi mothers i.e. (42.37 %) were in the age group 18 – 22 years,

duration of marriage life the majority of primi mothers i.e. (71.8 %) were less than 2 years of marriage, education the majority of primi mothers i.e. (40.7 %) were graduated, dietary pattern the majority of primi mothers i.e. (52.4%) were non vegetarian, occupation the majority of primi mothers i.e. (87.48%) were home maker, type of family (78.6%) of study primi mothers were having joint family, family income per month the majority of primi mothers i.e. (66.0%) were having 5000 – 15000 per month, place of residence the majority of primi mothers i.e. (82.52%) were from rural area, pervious knowledge regarding antenatal care the majority of primi mothers i.e. (80.6%) of study participant were not having pervious knowledge, (55%) were have got knowledge from internet, trimester the majority of primi mothers i.e. (43.7 %) were 1st trimester.

Section B : Analysis based on the objectives of the study

Table 2: Mean, SD, Median Range Score& mean percentage of level of knowledge of antenatal care among primi mothers, n= 103

Level of Knowledge	Maximum score	Obtained Range of Score	Median	Mean ±SD	Mean Percentage
	24	5- 23	14	13.76±4.90	57.45

Table no. 2: data present in table no. 2 shows that level of knowledge regarding antenatal care. Maximum score was 24. The lowest obtain range of score was 5 and the highest obtain range of score was 23. The mean score was 13.76 ± 4.90. mean percentage for knowledge was 57 %.

Table 3: Area wise level of knowledge regarding antenatal care among primi mothers, n=103

S.No.	Area wise level of awareness	Total Item	Mean ±SD	Mean %
1.	Warning signs	2	1.47 ±1.12	73.5
2.	Nutrition/ Supplement	7	4.56 ±1.92	65.1
3.	Immunization	2	1.20±0.75	60
4.	Precautions	3	1.78 ±1.12	59.3
5.	General information of antenatal care	7	3.60 ±1.61	51.4
6.	Antenatal exercise/ body mechanism	3	1.40±1.01	46.6

Table no. 3 Data presented in table no 3 shows that level of knowledge according to area the highest mean score in the area of warning signs (1.47 ±1.12) and lowest in antenatal exercise/body mechanism (1.40 ±1.01). Hence it was interpreted that all 6 domain level of awareness was satisfactory.

Figure 1: Percentage wise distribution of level of knowledge of primi mothers regarding antenatal care

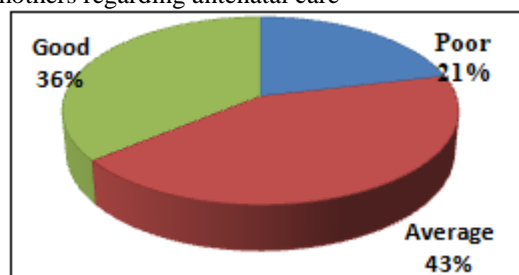


Figure 1: Illustrate majority (42.7 %) primi mothers had average knowledge, (35.95%) of them had good knowledge.

Table 4: Frequency and parentage distribution of item of according each item related to antenatal care, n=103

S. No.	Items	Frequency	Percentage
General information of antenatal care			
1.	Antenatal period is 9 months 7days	91	88.34
2.	4 antenatal visits are necessary in pregnancy	66	64
3.	First sign of pregnancy felt by mother is Amenorrhea	59	57.28
4.	The pregnant women can feel fetal movement by Kick of the fetus	53	51.4
5.	Pregnant women should have her 1st check up Soon after missed period	39	37.86
6.	Normal weight gain during pregnancy is 10-12 kg	34	33
7.	First fetal movement can be felt during pregnancy in 4-5 months.	29	28.15
Nutrition / Supplement			
8.	During pregnancy Iron and protein rich diet improve the Hb level.	83	80.58
9.	High nutritious diet is necessary during pregnancy to Promote health status of mother & fetus	72	69.90
10.	During pregnancy, pregnant mother should take supplement regularly Iron, folic acid /calcium	71	68.93
11.	During pregnancy the iron and folic acid supplement is necessary to Increase hemoglobin	68	66
12.	Pregnant mother should be take iron tablets from First trimester	59	57.28
13.	The food items rich in vitamin C is orange .	56	54.36
14.	Calcium intake during pregnancy is for development of fetus bone	55	53.39
Antenatal exercise / Body mechanics			
15.	During pregnancy appropriate position for taking rest is left lateral	66	64
16.	Importance of antenatal exercise is Prevent low back pain	56	54.36
17.	Maintenance of body posture during pregnancy is required to Preventing the back strain and injury	23	22.33
Immunization			
18.	During pregnancy the pregnant women should be immunized to tetanus	66	64
19.	During pregnancy the doses of TT is 2.	58	56.31
Warning Signs			
20.	During pregnancy the immediate action to be taken for warning signs is Consult with doctor	85	82.52
21.	In pregnancy which signs is considered as abnormal Bleeding in any trimester .	57	55.33
Precautions during pregnancy			
22.	Pregnant women should wear loose cotton clothes	72	69.90
23.	During pregnancy the suitable time for travelling 4-6 months	44	42.71
24.	The delivery should be conducted in health care centre.	70	67.9

Table 4: Data present in table no. 4 shows that the frequency and percentage of distribution of item of knowledge level of primi mothers regarding antenatal care

which show that the maximum number of primi mothers i.e. (88.34%) were had knowledge regarding antenatal period is 9months 7 days, nutrition/ supplement in this maximum number of primi mothers i.e. (80.58%) were had knowledge regarding to improve the Hb level during pregnancy, antenatal exercises/ body mechanics maximum number of primi mothers i.e. (64%) were had knowledge regarding during pregnancy appropriate position for taking rest is left lateral, immunization the maximum number of primi mothers i.e. (64%) were had knowledge regarding during pregnancy the pregnant women should be immunized to tetanus,warning sign the maximum number of primi mothers i.e. (82.54 %) were had knowledge regarding during pregnancy the immediate action to be taken for warning signs is Consult with doctor, precautions during pregnancy the maximum number of primi mothers i.e. (69.90%) knowledge regarding pregnant women should wear loose cotton clothes.

Table 5: Association between level of knowledge of antenatal care among primi mothers with selected demographic variables, n= 103

S.No.	Demographic variable	Below median	Above median	Chi square	P value
		≤14	≥14		
Age in year					
1	a. 18 – 27 years	41	36	0.39	0.53
	b. 28 – 35 years	12	14		
Duration of marriage life					
2	a. Less than 4 years	46	41	0.45	0.5
	b. 4 – 6 years	7	9		
Trimester					
3	a. 1 st trimester	22	23	0.23	0.88
	b. 2 nd trimester	12	11		
	c. 3 rd trimester	19	16		
Education					
4	a. No formal education	10	10	0.02	0.88
	b. Formal	43	40		
Dietary pattern of the mother					
5	a. Vegetarian	23	26	5.19*	0.02
	b. Non- vegetarian	50	24		
Occupation					
6	a. Home maker	47	43	0.16	0.68
	b. Working	6	7		
Type of family					
7	a. Nuclear	10	12	0.4	0.52
	b. Joint	43	38		
Family income per month					
8	a. 5000 – 25000	45	39	0.81	0.36
	b. 25001 – 45000	8	11		
Place of residence					
9	a. Urban	8	10	0.42	0.512
	b. Rural	45	40		
Previous knowledge regarding antenatal care is					
10	a. Yes	11	9	0.12	0.72
	b. No	42	41		

df₁ = 3.84 , df₂ = 6.97 at p < 0.05 level of significance *

Table no. 5 Illustrate that the description of association of level knowledge with their selected demographic variables. There were statically significant association found the level of knowledge and datary pattern & other demographic variables has no significant association with the level of knowledge. Hence it could be influenced that their was an

impact of dietary pattern in the knowledge among primi mothers.

5. Discussion

The finding of the study have been discussed with the reference of the objectives and statistical analysis and findings of the researcher done some field. The present revealed that there was the overall mean knowledge score was 13.76 ± 4.9 . according to area the highest mean score was in the warning signs (1.47 ± 1.12) and lowest in antenatal exercise (1.40 ± 1.01). Majority 42.7 % primi mothers had average knowledge, 36 % of them had good knowledge and 21 % had poor knowledge regarding antenatal care.

6. Conclusion

The finding of the study concluded that only 42.7% primi mothers had good knowledge regarding antenatal care which indicated that there was still lack of knowledge in few aspects of antenatal care. Hence health teaching programs are necessary to enhance the knowledge among primi mothers which may further help to reduce lackness in antenatal care during prenatal period .From the result of the study it can be concluded that the demographic age, duration of marriage life, trimester, residence, family monthly income, education, dietary pattern, type of family, occupation, previous knowledge regarding antenatal care not having association with knowledge score.

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