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A Study to Assess the Knowledge on Minor Disorders of Pregnancy and its Management among Antenatal Mothers of Selected Hospitals of Tinsukia District, Assam

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Abstract: ***Minor disorders of pregnancy can cause a lot of discomfort and interfere with nutrition and if left untreated become medical disorders of pregnancy so education is needed to prevent complications and hospitalization. The objective of the study was to assess the knowledge on minor disorders of pregnancy and its management among antenatal mothers of selected hospitals of Tinsukia Districts, Assam. Convenience sampling technique was used on 100 Antenatal mothers who were fulfilling the inclusion criteria. A structured interview schedule was developed to assess the knowledge on minor disorders of pregnancy and its management. Results shows 51% had moderate knowledge, 24% had adequate knowledge and 25% had inadequate knowledge on minor disorders of pregnancy, 50% had adequate knowledge, 28% had moderate knowledge and 22% had inadequate knowledge on management of minor disorders of pregnancy. There is a significant association between knowledge of antenatal mothers on minor disorders of pregnancy and its management with demographic variables age, religion, education, occupation, family income, type of family, parity, gravida and area of residence. Study concludes that majority of the antenatal mothers had adequate knowledge on management of minor disorders of pregnancy but there is a lack of knowledge regarding minor disorders of pregnancy.***

Keywords: Knowledge; minor disorders; pregnancy; management; antenatal mothers

1. Introduction

"Pregnancy is special, let make it as safe"
- WHO Theme, 1998

Pregnancy is a great anabolic activity when the most rapid rate of growth takes place. It is a condition in which the fetal growth is accompanied by extensive changes in maternal body composition and metabolism. A number of factors have an influence on pregnancy outcome, such as economic and educational status of the mother, age, parity, weight gain during pregnancy, duration of gestation, maternal hemoglobin level and height and weight of pregnant women.[1]

Though pregnancy is considered as normal phenomenon but many women experience some common disorders during pregnancy. The majority of this discomforts experienced during pregnancy can be related to either hormonal changes or the physical changes related to the growing fetus.[2]

Minor disorders may occur due to hormonal changes, accommodation changes, metabolic changes and postural changes. Every system of the body is affected by pregnancy and the mother need knowledge to cope with the experience of pregnancy. She also needs knowledge when she is presented with discomforting or worrying symptoms.[3]

Some of the common minor disorders which most of the women are facing can be included as Nausea and vomiting, Heartburn, Pica, Constipation, Backache, Leg cramps, Frequency of micturition, Vaginal discharge (Leucorrhea), Ankle edema and Insomnia.

2. Literature Review

Bhattacharya, R. (2011) conducted a study on effectiveness of structured teaching programme on Knowledge, Attitude and Practices related to antenatal care (minor disorders of pregnancy) among the tribal antenatal mothers selected rural areas of west Tripura District. An evaluative approach was adopted for the study and one group pretest, posttest design was used. Study was conducted in the sub center under the Jirania Community Health Center, West District of Tripura. The total sample of the main study consisted of 100 antenatal mothers who were chosen for the study by simple random sampling technique. Data was collected from the sample by administering structured interview schedule questionnaire. The researcher found that the overall knowledge of the antenatal mothers revealed that 49% had moderately adequate knowledge, 22% had inadequate knowledge and only 29% had adequate knowledge. The mean knowledge score obtained by the antenatal mothers was 12.820 which showed that subjects had moderately adequate knowledge. There was significant association between educational status and monthly income with knowledge score of the antenatal mother.[4]

Sreelekha C, (2007) has conducted an experimental study to assess the effectiveness of structured teaching programme on knowledge of minor disorders of pregnancy and its management among antenatal mothers in Raichur, Karnataka, India. In this study researcher used one group of pre test and post test Quasi experimental design and convenient sampling technique was used to achieve the objectives of the study and the sample size was 40. Data was collected by using structured interview schedule. Majority of the mothers, 77.5% obtained information about minor

disorders of pregnancy through their relatives. The result that in pre test majority of antenatal mothers had low knowledge and none of them had high knowledge and also there was no significant association was found between the knowledge of antenatal mothers regarding minor disorders of pregnancy with selected back ground characteristics.[5]

Ganavathi K M. (2006) conducted a study to assess the knowledge and practice of antenatal mothers regarding minor ailments and their remedies in selected hospitals of Dakshina Kannada, India. A survey approach was used in this study. A descriptive co relational survey designed was employed to seek the relationship between knowledge and practice of antenatal mothers regarding minor ailments and their remedies in selected hospitals of Dakshina, Kannada. The study consists of 100 antenatal mothers who were selected by multistage random sampling technique. Data was collected from the sample by administering structured interview. Results reveal that 87% had average knowledge and only 10% had poor knowledge regarding minor ailments and their remedies. Total mean and standard deviation for knowledge score was 13.71 and 15.84 respectively. The study also revealed that there is no association between knowledge regarding minor ailments and their remedies with selected demographic variables.[6]

Objectives

1) To assess the knowledge of antenatal mothers on minor disorders of pregnancy.
2) To assess the knowledge of antenatal mothers on management of minor disorders of pregnancy.
3) To find out the association of knowledge on minor disorders of pregnancy with selected demographic variables namely age, religion, education, occupation, family income, type of family, parity, gravida and area of residence.
4) To find out the association of knowledge on management of minor disorders of pregnancy and its management with selected demographic variables namely age, religion, education, occupation, family income, type of family, parity, gravida and area of residence

Hypotheses:

Hypotheses are tested at 0.05 Level of Significance.

H_1 – There is a significant association between knowledge scores on minor disorders of pregnancy with age, religion, education, occupation, family income, type of family, parity, gravida and place of residence.

H_2 . There is a significant association between knowledge scores on management of minor disorders of pregnancy with age, religion, education, occupation, family income, type of family, parity, gravida and place of residence.

3. Methodology

A descriptive research approach was adopted for the assessment of knowledge on minor disorders of pregnancy and its management among the antenatal mothers and the research design adopted was a survey design. The study was conducted after getting approval from the institutional ethical committee. Formal permission was obtained from the Medical Superintendent of Civil hospital Tinsukia.

The study subjects were assured for confidentiality of the data obtained. Informed consent was taken before conducting the study. Using Convenience sampling technique, 100 pregnant mothers were selected for the study.

Tools used:

The structured interview schedule consists of three sections –I, II and III and it is as follows –

Sections I: This section of the structured interview schedule is prepared to collect demographic variables of the Antenatal mothers which include age, religion, education, occupation, family income, type of family, parity, gravida and area of residence.

Sections II: This section of the structured interview schedule is prepared to assess the knowledge of the antenatal mothers regarding minor disorders of pregnancy. It consists of total 15 multiple choice questions on selected minor disorders of pregnancy namely Nausea and Vomiting, Heartburn, Pica, Constipation, Backache, Leg Cramps, Frequency of Micturition, Vaginal Discharge, Ankle Edema and Insomnia.

Sections III: This section of the structured interview schedule is prepared to assess the knowledge of the antenatal mothers on management of minor disorders of pregnancy. It consists of total 7 multiple choice questions on measures taken at home to relieve the minor disorders of pregnancy.

4. Results/ Discussion

Table 1 depicts the Frequency and percentage distribution of demographic data of antenatal mothers, where it shows that Majority of pregnant mothers, 69% were in the age group between 18 – 24 years, in view of religion, 81% belonged to Hindu. Regarding education 31% of the pregnant mothers studied up to primary school.69% of the pregnant mothers are housewives and 34% pregnant mothers have monthly income of Rs 6001 – 9000. Majority of pregnant mothers, 55% belong to joint family, out of 100 antenatal mothers 78% are primi and 74% were in Gravida 1. Regarding place of residence, 50% antenatal mothers reside in rural place.

Table 1: Frequency and percentage distribution of demographic data among antenatal mothers, (N=100)

SL. No.	Demographic Variables	Total Frequency	Total Percentage
1	AGE		
	(a) 18 years - 24 years	69	69.00%
	(b) 25 years - 31 years	28	28.00%
	(c) 32 years - 38 years	3	3.00%
	(d) Above 38 years	0	0.00%
2	RELIGION		
	(a) Hinduism	81	81.00%
	(b) Muslim	13	13.00%
	(c) Christian	6	6.00%
	(d) Any other	0	0.00%
3	EDUCATIONAL STATUS		
	(a) Illiterate	28	28.00%
	(b) Primary	31	31.00%
	(c) Matriculate	17	17.00%
	(d) Higher secondary	18	18.00%
	(e) Graduate	6	6.00%

4	OCCUPATION		
	(a) Housewife	69	69.00%
	(b) Service	12	12.00%
	(c) Business	4	4.00%
	(d) Any other	15	15.00%
5	FAMILY INCOME		
	(a) < Rs.3000	21	21.00%
	(b) Rs.3001 – Rs.6000	20	20.00%
	(c) Rs.6001 – Rs.9000	34	34.00%
	(d) Rs.9001 – Rs.12000	16	16.00%
	(e) Above Rs.12000	9	9.00%
6	TYPE OF FAMILY		
	(a) Nuclear family	45	45.00%
	(b) Joint family	55	55.00%
7	PARITY		
	(a) Primi	78	78.00%
	(b) Multi	22	22.00%
8	GRAVIDA		
	(a) Gravida 1	74	74.00%
	(b) Gravida 2	20	20.00%
	(c) Gravida 3	5	5.00%
	(d) Gravida 4	1	1.00%
9	PLACE OF RESIDENCE		
	(a) Rural	50	50.00%
	(b) Urban	50	50.00%

Section II. Analysis of data on knowledge scores of minor disorders of pregnancy

This section presents the level of knowledge of pregnant mothers on minor disorders of pregnancy, (N=100)

Level of knowledge	Score Range
Adequate Knowledge (Mean + SD)	Above 12
Moderate Knowledge (Mean – SD to Mean + SD)	6 – 11
Inadequate knowledge (Mean – SD)	Below 5

Table 2: Data shows that majority 51% of the pregnant mothers has moderate knowledge on minor disorders of pregnancy, 24% have knowledge and only 25% of the pregnant mothers had inadequate knowledge.

Table 2: Overall knowledge on minor disorders of pregnancy among pregnant mother's based on criteria measures, (N=100)

Sl. no.	Group	Score range	No. of respondents	Percentage
1	Adequate Knowledge	Above 12	24	24.00%
2	Moderate Knowledge	6 – 11	51	51.00%
3	Inadequate knowledge	Below 5	25	25.00%
	Total	15	100	100.00%

Section III: Analysis of data on knowledge scores on management of minor disorders of pregnancy

Similarly, this section also presents the level of knowledge of pregnant mothers on management of minor disorders of pregnancy, (N=100)

Level of knowledge	Score Range
Adequate Knowledge (Mean + SD)	Above 6
Moderate Knowledge (Mean – SD to Mean + SD)	4 – 5
Inadequate knowledge (Mean – SD)	Below 3

Table 3: Shows that majority 50% of the pregnant mothers have adequate knowledge on management of minor disorders of pregnancy, 28% have moderate knowledge and only 22% of the pregnant mothers have inadequate on management of minor disorders of pregnancy.

Table 3: Overall knowledge on management of minor disorders of pregnancy among pregnant mother's based on criteria measures, (N=100)

Sl. no.	Group	Score range	No. of respondents	Percentage
1	Adequate Knowledge	Above 6	50	50.0%
2	Moderate Knowledge	4 – 5	28	28.0%
3	Inadequate knowledge	Below 3	22	22.0%
	Total	7	100	100.0%

Table 4 Shows that the mean percentage of area wise knowledge on minor disorders of pregnancy is 57%, whereas mean percentage of knowledge on management on minor disorders of pregnancy is 72% respectively.

Table 4: Area wise knowledge scores on minor disorders of pregnancy and its management (N=100)

S. No.	Knowledge Area	Maximum Score	Mean	Mean Percentage
1	Knowledge on minor disorders of pregnancy	15	8.57	57
2	Knowledge on management of minor disorders of pregnancy	7	5.04	72

Maximum score = 22

TABLE - 5 Shows the mean value of knowledge on minor disorders of pregnancy and its management is 8.57 and 5.04 respectively. Standard deviation of knowledge on minor disorders of pregnancy and its management is 3.56 and 1.63 respectively. The minimum score of knowledge on minor disorders of pregnancy is 2 and maximum is 15. The minimum score of knowledge on management of minor disorders of pregnancy is 1 and maximum is 7.

Table 5: Knowledge scores of samples on minor disorders of pregnancy and its management – mean and standard deviation (N=100)

S. No.	Variables	Knowledge on minor disorders of pregnancy	Knowledge on management of minor disorders of pregnancy
1	Mean	8.57	5.04
2	Standard deviation	3.56	1.63
3	Minimum score	2	1
4	Maximum score	15	7

Section IV. Association of knowledge on minor disorders of pregnancy with selected demographic variables namely age, religion, education, occupation, family income, type of family, parity, gravida and area of residence.

Table 6: Association between knowledge on minor disorders of pregnancy with selected demographic variables, (N=100)

Sl. No	Demographic Variables	Knowledge Score			Total	df	Chi - square value (χ^2)	P value
		Adequate knowledge	Moderate knowledge	Inadequate Knowledge				
1.	**AGE**							
	a) 18 years – 24 years	9	46	14	69	4	12.63	0.01***S**
	b) 25 years –31 years	11	12	5	28			
	c) 32 years – 38 years	3	0	0	3			
	d) Above 38 years	0	0	0	0			
2.	**RELIGION**							
	a) Hinduism	23	42	16	81	4	14.72	0.00***S**
	b) Muslim	0	10	3	13			
	c) Christian	0	6	0	6			
	d) Any other	0	0	0	0			
3.	**EDUCATIONAL STATUS**							
	a) Illiterate	0	15	13	28	8	38.01	0.00***S**
	b) Primary	7	18	6	31			
	c) Matriculate	3	14	0	17			
	d) Higher Secondary	7	11	0	18			
	e) Graduate	6	0	0	6			
4.	**OCCUPATION**							
	a) Housewife	9	47	13	69	6	37.18	0.00***S**
	b) Service	11	1	0	12			
	c) Business	1	3	0	4			
	d) Any other	2	7	6	15			
5.	**FAMILY INCOME**							
	a) <Rs.3000	0	12	9	21	8	53.72	0.00***S**
	b) Rs.3001 - Rs.6000	0	13	7	20			
	c) Rs.6001 - Rs.9000	10	21	3	34			
	d) Rs.9001 - Rs.12000	4	12	0	16			
	e) Above Rs.12000	9	0	0	9			
6.	**TYPE OF FAMILY**							
	a) Nuclear family	19	18	8	45	2	8.868	0.01***S**
	b) Joint family	4	40	11	55			
7.	**PARITY**							
	a) Primi	20	43	15	78	2	8.790	0.01***S**
	b) Multi	3	15	4	22			
8.	**GRAVIDA**							
	a) Gravida 1	20	39	15	74	6	21.20	0.00***S**
	b) Gravida 2	3	11	0	14			
	c) Gravida 3	0	4	0	4			
	d) Gravida 4	0	4	4	8			
9.	**AREA OF RESIDENCE**							
	a) Rural	2	33	15	50	2	10.89	0.00***S**
	b) Urban	21	25	4	50			

***P<0.05 level of significance, *S= Significant**

Table 6: depicts the association between knowledge score and selected demographic variables in which age, religion, education, occupation, family income, type of family, parity, gravida and area of residence were found to be statistically significant and hence H_1 is accepted.

Section V. Association of knowledge on management of minor disorders of pregnancy with selected demographic variables namely age, religion, education, occupation, family income, type of family, parity, gravida and area of residence.

Table 7: Association between knowledge on management of minor disorders of pregnancy with selected demographic variables, (N=100)

Sl. No	Demographic Variables	Knowledge Score			Total	df	Chi - square value (χ^2)	P value
		Adequate knowledge	Moderate knowledge	Inadequate Knowledge				
1.	**AGE**							
	a) 18 years – 24 years	27	27	15	69	4	16.33	0.00***S**
	b) 25 years –31 years	20	1	7	28			
	c) 32 years – 38 years	3	0	0	3			
	d) Above 38 years	0	0	0	0			
2.	**RELIGION**							
	a) Hinduism	45	21	15	81			

	b) Muslim	2	7	4	13	4	11.56	0.02***S**
	c) Christian	3	0	3	6			
	d) Any other	0	0	0	0			
3.	**EDUCATIONAL STATUS**							
	a) Illiterate	8	10	10	28	8	28.40	0.00***S**
	b) Primary	10	13	8	31			
	c) Matriculate	10	5	2	17			
	d) Higher Secondary	16	0	2	18			
	e) Graduate	6	0	0	6			
4.	**OCCUPATION**							
	a) Housewife	27	25	17	69	6	20.77	0.00***S**
	b) Service	12	0	0	12			
	c) Business	4	0	0	4			
	d) Any other	7	5	3	15			
5.	**FAMILY INCOME**							
	a) <Rs.3000	7	6	8	21	8	34.13	0.00***S**
	b) Rs.3001 - Rs.6000	2	9	9	20			
	c) Rs.6001 - Rs.9000	19	10	5	34			
	d) Rs.9001 - Rs.12000	13	0	3	16			
	e) Above Rs.12000	9	0	0	9			
6.	**TYPE OF FAMILY**							
	a) Nuclear family	34	4	7	45	2	22.90	0.00***S**
	b) Joint family	16	24	15	55			
7.	**PARITY**							
	a) Primi	36	24	18	78	2	2.20	0.33***NS**
	b) Multi	14	4	4	22			
8.	**GRAVIDA**							
	a) Gravida 1	33	23	18	74	6	14.32	0.02***S**
	b) Gravida 2	11	3	0	14			
	c) Gravida 3	4	0	0	42			
	d) Gravida 4	2	2	4	8			
9.	**AREA OF RESIDENCE**							
	a) Rural	17	15	18	50	2	14.17	0.00***S**
	b) Urban	33	13	4	50			

***P<0.05 level of significance, *NS= Not Significant**

Table 7: Shows that age, religion, educational status, occupation, family income, type of family, gravida and place of residence have significant association with knowledge of pregnant mothers on management of minor disorders of pregnancy while parity have no significant association with knowledge of pregnant mothers on management of minor disorders of pregnancy.

5. Conclusion

Although pregnancy is not a disease but a normal physiological process, however, it is associated with certain risk to health and survival both for women and for the infant she bears. Hence provision of information and adequate knowledge may help the mothers to adopt and maintain healthy practices and lifestyles, which will help the mothers to bring forth a healthy baby. Pregnant woman with her own knowledge and perceptions influenced the well - being of herself. In this way improving mother's knowledge and modifying her beliefs regarding minor disorders of pregnancy can positively influence the maternal health. Further, it facilitates the birth of a normal healthy baby with healthy mother. Before proper health education programme can be designed for the antenatal mothers it is necessary that the base level of knowledge regarding minor disorders during pregnancy may be assessed. The result of this study also indicated that there is need to develop awareness among the antenatal mothers as one of the step to reduce maternal complications.

6. Future Scope

The study can be replicated on larger sample in different hospitals where findings can be generalized. A comparative study can be done to assess the knowledge of antenatal mothers in urban and rural settings.

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