

A Descriptive Study to Assess the Knowledge Regarding Antenatal Diet among Pregnant Women at Selected Hospital, Amritsar in a View to Develop Health Education Booklet

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Abstract

Antenatal period is a very crucial period for both mother and fetus. Diet during pregnancy is played an important role for maintaining maternal health and growth and development of fetus. Pregnant women need more essential nutrient than nonpregnant women. Adequate supply of food during pregnancy can reduce the risk of baby developing neural tube defects such as spina bifida. Poor nutrition during pregnancy is well known to contribute the adverse pregnancy outcome. So, mother should take proper nutrition diet during pregnancy in order to prevent maternal and fetal complication and to promote delivery of the healthy baby. The objective of the present study was to assess the knowledge regarding antenatal diet among pregnant women at selected hospitals in Amritsar. A descriptive design was adopted. Sample size of 100 pregnant women was selected by purposive sampling technique. A self-structured knowledge questionnaire was used to collect the data from pregnant women. Descriptive and inferential was used in data analysis. The study result showed that out of 100 samples, majority (67%) of the pregnant women had good knowledge, (28%) had average knowledge, and only (5%) of them had poor knowledge on antenatal diet. There is a significant association of knowledge with selected socio-demographic variables as age ($\chi^2 = 32.98$), religion ($\chi^2 = 23.67$), education ($\chi^2 = 17.97$), family income ($\chi^2 = 22.59$) and there is no significant association with occupation ($\chi^2 = 7.15$), type of family ($\chi^2 = 4.57$), and source of information ($\chi^2 = 7.86$). The result of the study reveals that pregnant women of selected hospitals had more knowledge regarding antenatal diet.

Keywords: antenatal diet, knowledge, pregnant women

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INTRODUCTION

Antenatal period is a very crucial period for both mother and fetus, to get healthy baby from a healthy mother. Diet during pregnancy is played a very important role for growth and development of the fetus. For example, if tree is well nourished with water it will provide plenty of fruits like that only, when mother is provided with good nutritious diet during her pregnancy, it will result in delivery of a healthy baby. Pregnant women need more essential

nutrients from the beginning of second trimester until delivery, because baby needs additional 300 calories each day to support the growth of baby. Pregnancy period is a most stressful period in women life. During pregnancy, many change that take place in maternal body. The balance diet is required to maintain growth of fetus, placenta, and maternal tissues. As per WHO 75% of diet should consists of three serials. Fat and refined sugar provides 15% energy. Diet should include

protein, fat, carbohydrates, minerals, vitamins, and essential fatty acids. The diet should include 50–60% carbohydrates, 400–500 calories, 20–40% fat used mixed cereals, pulses, vegetables, and fruits. Total weight gain during pregnancy is 11–12 kg. Iron requirement is 300 mg/day calcium requirement is 1.0–1.2 gm. Poor nutrition during pregnancy is well known to contribute to adverse pregnancy outcome. Mothers who take unhealthy diet during their pregnancy are at a greater risk of exposing her child to developing long-term irreversible health issues including obesity, raised level of cholesterol, and blood sugar. So, mother should take proper nutritious diet during pregnancy in order to prevent maternal and fetal complication and to promote delivery of healthy baby.^[1]

Proper diet and nutrition during pregnancy is a subject that needs special attention, particularly during the first and second trimester. The fetus requires proper nutrients as well as energy so that it can develop new tissue, and the mother requires nutrients to build her blood volume and maternal stores. The demand for energy and all the nutrients is normally increased during this period. The requirement for most of the nutrients can be met through their inclusion into the mother's diet, whereas other nutrients, such as iron, require supplementation.

Most mineral can be obtained from a varied diet without supplementation even during pregnancy. If the mothers intake of nutrient is not sufficient that limit the supply of nutrients to the fetus this can lead to fetal malnutrition.^[2]

NEED FOR STUDY

Diet in pregnancy is very essential to provide delivery of healthy baby. During this period mother has to take extra amount of calories. She has to eat for herself and for the baby. The weight gained during pregnancy is around 11–

12 kg. The fetus receives its nutrients from the mother's diet, the nutrients stored in the mother bones, tissues, and synthesis of certain nutrients in the placenta. The transport of nutrients, hormones, and other substances from the mother to the fetus is facilitated through the placenta.

However, many pregnant women are unaware of the dietary patterns that should be followed during this period, and the physiological changes accompanying it. Due to illiteracy, they consume a normal woman's diet even at this period, which is insufficient for the growing fetus and can harm the baby with conditions such as, low-birth weight, malformation, IUGR, etc.

The insufficient intake of nutrients during pregnancy is a well-known factor that is known to contribute to adverse pregnancy outcomes.^[3]

In India, where malnutrition in mother causes nearly one third of baby to be born on with low-birth weight, around 1 in 12 die in first 5 years. One in five children who dies globally is in India. The highest dead of children below the age of 5 in East Asia and Pacific is inadequate birthing conditions (45%), including low-birth weight, as well as birth trauma or asphyxiation. Other leading causes of death are diarrhea (17%), acute respiratory infection (16%), accident (8%), vaccine preventable diseases, including measles and T.B. (7%) and vector bone diseases, e.g., malaria, malnutrition. Low-birth weight or low immunity is due to maternal malnutrition. Food shortage affects women more than men, especially in countries with low gender parity. In India, around 350 million people have shortage of food everyday, resulting anemia in pregnant women can be linked to around 20% of infant deaths.^[4]

OBJECTIVE

- (1) To assess the knowledge of pregnant women regarding antenatal diet.
- (2) To find out association of level knowledge score with selected socio-demographic variables.
- (3) To develop and information booklet for pregnant women regarding antenatal diet.

RESEARCH METHODOLOGY

The research design selected for this study was nonexperimental research design. Independent variable is the structured knowledge questionnaire on antenatal diet, and dependent variable of the studies is knowledge of pregnant women regarding antenatal diet. This study was conducted Shri. Guru Ram Charitable Hospital, Amritsar. Sample comprised of pregnant women who were attending O.P.D. at Shri. Guru Ram Charitable Hospital, Amritsar. The sample size comprises 100 pregnant women. In present study, nonprobability purposive-sampling technique was used. The tools consist of structured knowledge questionnaire. It is divided into parts:

Part I: This part of tool consists of question related to demographic data, it consists of 7 items.

Part II: This part of tool consists of items related to knowledge on antenatal diet, it consists of 34 items and those are the type of multiple choice questions that help in assessing their knowledge.

Each correct answer was given a score of one and wrong answer score of Zero respectively. The reliability of the tool was computed by split half Karl Pearson's correlation formula. The Reliability of co-efficient of knowledge found to be 0.93 the tool and subject were found to be suitable the study was found to be feasible

RESULT

Assessing the level of knowledge of sample regarding antenatal diet, grading the knowledge level of sample regarding antenatal diet. Table 1 shows that majority of pregnant women i.e. 67% had good knowledge, followed by 28% had average knowledge whereas only 5% had poor knowledge regarding antenatal diet. Hence, it was concluded that most of pregnant women had good knowledge regarding antenatal diet.

Table 1. Assess the Knowledge of Pregnant Women Regarding Antenatal Diet

Knowledge Level	Grading of Knowledge Score	(f)	%
Poor	0-11	5	5
Average	12-24	28	28
Good	25-34	67	67

The data depicted in Table 2 shows that mean, SD, and mean percentage of

knowledge questionnaire were 25.19, 4.16, and 74.08, respectively.

Table 2. Overall Level of Knowledge of Pregnant Women Regarding Antenatal Diet
N = 100

Parameter	Maximum Score	Mean	Standard Deviation	Mean (%)
Overall level of knowledge	34	25.19	4.16	74.08

Hence, it can be concluded that the mean % knowledge score of subject was good.

Table 3 shows that association of knowledge score regarding antenatal diet

among pregnant women at selected hospital, Chi-square test result depict the significant impact of age, religion, education, and family income on the knowledge score of pregnant women

regarding antenatal diet in selected hospital as the calculated value is more than tabulated value at 0.005 level of significance. The impact of occupation, type of family, and source of information

on knowledge of selected hospital found to be nonsignificant as the calculated value is less than tabulated value at 0.05 level of significance.

Table 3. Association Between Level of Knowledge Score Regarding Antenatal Diet Among Pregnant Women at Selected Hospital With Selected Socio-Demographic Variables

Sl. No	Demographic Variables	Total Frequency	Level of Knowledge						Calculated Value at $p = 0.05$, Level	df	Table Value
			Poor		Average		Good				
			F	%	F	%	f	%			
1	Age (in years)										
	<20 years	19	1	1	1	1	17	17			
	21–25 years	52	1	1	13	13	38	38	32.98*	6	12.59
	26–30 years	16	1	1	7	7	8	8			
	>31	13	2	2	7	7	4	4			
2	Religion										
	Hindu	19	1	1	3	3	15	15			
	Sikh	53	2	2	13	13	38	38	23.67*	6	12.59
	Muslim	14	1	1	1	1	12	12			
	others	14	1	1	11	11	2	2			
3	Educational status										
	5th pass	13	1	1	9	9	3	3			
	10th pass	19	2	2	5	5	12	12	17.97*	6	12.59
	12th pass	53	1	1	13	13	39	39			
	B.A. and above	15	1	1	1	1	13	13			
4	Occupational status										
	House wife	51	2	2	20	20	29	29			
	Non-govt	19	1	1	4	4	14	14	7.15	6	12.59
	Govt	11	1	1	1	1	9	9			
	Self-employed	19	1	1	3	3	15	15			
5	Family income										
	<5000 Rs	15	1	1	2	2	12	12			
	5001–10,000	58	2	2	24	24	32	32	22.59*	6	12.59
	10,001–15,000	16	1	1	1	1	14	14			
	>15,000	11	1	1	1	3	9	9			
6	Type of family										
	Nuclear	28	3	3	10	10	15	15	4.57	2	5.99
	joint	72	2	2	18	18	52	52			
7	Source of information										
	Media										
	Health worker	59	1	1	22	22	36	36			
	Family member	13	1	1	1	1	11	11	7.86	6	12.59
	Teacher	17	2	2	3	3	12	12			
		11	1	1	2	2	8	8			

F = frequency, % = percentage, df = degree of freedom, S = significant, NS = not significant.

Findings Related to Socio-Demographic Variables

- Majority of i.e. 52% pregnant women were from the age group of 21–25 years in selected hospitals, and minority i.e. 13% were in age group of <30 years.
- Majority i.e. 53% pregnant women were from Sikh family. Minority of 14% each belong to Muslim and others religions.
- Maximum i.e. 53% of pregnant women studied upto 12th and minority of i.e. 13% of pregnant women were studied upto 5th.

- Majority i.e. 51% of pregnant women are belongs to categories in house wife, and minority of i.e. 11% are govt. employee.
- Majority of the pregnant women 58% are monthly income Rs. 5001–10,000 per month, and minority of i.e. 11% pregnant women had monthly income >15,000.
- Maximum i.e. 72% of pregnant women are live in joint family and minimum i.e. 28% are live in nuclear family.
- Maximum of pregnant women i.e. 59% got information regarding antenatal diet from media, minimum i.e. 11% women got information from school teachers.

Finding related to assessment of knowledge regarding antenatal diet among pregnant women at selected hospital.

Majority of the pregnant women i.e. 67% had good knowledge regarding antenatal diet, 5% had poor level of knowledge regarding antenatal diet. Finding related to relationship of knowledge with selected socio-demographic variables.

The finding of the study shows that there is significant association between knowledge and selected socio-demographic variables such as variables as age ($\chi^2 = 32.98$), religion ($\chi^2 = 23.67$), education ($\chi^2 = 17.97$), family income ($\chi^2 = 22.59$) and there is no significant association with occupation ($\chi^2 = 7.15$), type of family ($\chi^2 = 4.57$), and source of information ($\chi^2 = 7.86$).

Implications

The finding of the study have implications in various area of nursing education, nursing practice, nursing research, nursing administration, and nursing services.

Nursing Administration

Nursing is an evolving procedure to improve the quality of care the practice should be evidence based. The nurse is an administrator who can organize and conduct teaching programmed for health personals in order to increase their knowledge and keep them aware about diet. Nursing administration should include in service education programmed and continuing education programmed so that can help the nursing personal in updating their knowledge regarding antenatal diet. Nurse educator should encourage the staff and student to do similar research in the different population and setting to find out their knowledge.

Nursing Research

Knowledge emerges from research evidence-based practice is to improve the quality of nursing care. This study focuses to assess the knowledge regarding antenatal diet among pregnant women. The research committee put some efforts to find out the knowledge regarding antenatal diet among pregnant women.

Nursing Education

Education is the core part of the person's life in the curriculum such type of topic must include on their particular subject, which will be helpful for the future caregiver. Various training programmed can be given to improve knowledge regarding antenatal diet among pregnant women. Nurse should posse the knowledge regarding antenatal diet among pregnant women.

Nursing Practice

In nursing practice, member involved were staff nurse, multipurpose health worker, health supervisor, counselor and other health personal, etc. They should posse knowledge regarding antenatal diet among pregnant women.

Hence, the nursing personal should initiate teaching programmed toward these activities.

Recommendations

Based on finding of the study the following recommendations are stated:

- A similar study can be undertaken with a larger sample to generalize the findings.
- A similar study can be conducted in different settings community.
- A same study can be replicated to assess the knowledge and practice among primi gravida mother regarding antenatal diet.

CONCLUSION

The study result proves that there is good level of knowledge regarding antenatal diet among pregnant women. The present study help researcher to find out that with the help of educational programme and counselling the pregnant women,

knowledge can be improved and their problem can be solved, respectively. Hence, researcher develops and distributed information booklet to the respondents to improve their knowledge and to promote the wellbeing of mother and fetus and the nation.

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