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A Study on Assessment of Nutritional Awareness among the Migratory Tribal Pregnant Women of Punjab

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Abstract

Nutritional deficiency in women is of particular concern because they may get pregnant and face the added nutritional, physical, and emotional demands of pregnancy, childbirth, and nursing. The objective of the study is to assess the nutritional awareness among the migratory tribal pregnant women of Punjab. The interview method was used to investigate the nutritional awareness of tribal pregnant women. Three hundred pregnant women were selected as sample population from four different tribal groups of Punjab. Structured questionnaire was used as a tool. The majority of the respondents 272 (90.67%) did not have knowledge about the nutritional requirement of the pregnant women, government policies of Iron, and Vitamin A supplementation for pregnant women for combating anemia, iron Vitamin-A-rich rich food, addition of citrus fruits in their diet, the importance of germinated food grains, folic acid-rich foods, nutritional deficiency disease during pregnancy, iodine deficiency during pregnancy, consumption of Iron and Folic acid Supplements in their diet, quantity of food intake during pregnancy, harmful effects of Under Nutrition, source of carbohydrates, protein, iron, vitamin and minerals, importance of nutrition in fetus growth, weight gain during pregnancy, water intake during pregnancy, absorption of Calcium and Iron in the body, the need of Vitamin-C in the body, and need of Zinc in the body.

Keywords: Nutritional awareness, Nutritional deficiency, Pregnant women

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Introduction

India has largest number of tribal populations. Of total Indian population, approximately 8% are tribal communities. There is a scarcity of information on the anthropometric and body composition characteristics, as well as the nutritional health of India's tribal population.[1,2] A human being who has reached reproductive age is referred to as an adult. Adult has extra implications in the human context, including social and legal notions; a legal concept for a person who has reached the age of adulthood and is thus considered independent, self-sufficient, and accountable.[3,4] The most of the women in underprivileged areas are malnourished. Their dietary energy intake is not sufficient to compensate for their heavy physical activities.[5,6]

Women's dietary intake is lower than that of their adult male counterparts. Chronic malnutrition persists, particularly among women of various ages, because they are locked in a cycle of ignorance, poverty, insufficient nutritious food intake, and illness.[7] Finally, a woman's health has an impact on her family's financial well-being, and a woman in bad health will be less productive in the workforce. Women suffer from dietary deficiency at a higher rate than any other demographic.[8,9] The fact that adulthood is a time when inadequate nutrition can lead to health problems that last a lifetime adds to the significance of this statistic. Nutritional deficiency in women is of particular concern because they may get pregnant and face the added nutritional, physical, and emotional demands of pregnancy, childbirth, and nursing.[10,11] A biochemical test measures the amount or activity of a certain enzyme in a sample of blood, urine, or other body tissue. Pregnant women, non-pregnant women, school students, and preschool children are the most affected population groups in developing countries.[12] Iron deficiency anemia is the third most common condition among women aged 15–45. Women and breastfeeding women need 30 mg of iron per day, whereas pregnant women need 38 mg.[13-15]

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Objective

The aim of the study was to study the assessment of nutritional awareness among the migratory tribal pregnant women of Punjab.

Methodology

The present research was both qualitative and descriptive. As a result, the interview method was used to investigate the nutritional awareness of tribal pregnant women. Three hundred pregnant women were selected for sample population from four different tribal groups. The research tool used was structured questionnaire.

Questions related to nutritional awareness assessment such as knowledge about nutritional requirement of pregnant women, government policies of supplements, intake of supplements, cooking practices, importance of supplements, dietary changes during pregnancy and, knowledge of harmfulness, and importance of essential and non-essential elements for pregnant women. These questions which were interviewed to pregnant women helped researcher to identify nutritional awareness. Statistical Package for the Social Sciences (SPSS 22.0) software was used to analyze data.

Results

The study also aimed to assess the nutritional awareness among the selected pregnant women.

Table 1 shows the trend of knowledge about nutritional requirements of pregnant women. The majority of the respondents 272 (90.67%) did not have knowledge about the nutritional requirement of the pregnant women. Only 1/10th, that is, 28 (9.33%) of the pregnant women have proper knowledge about the nutrition requirement of the pregnant women.

Table 2 shows that the majority of the respondents 221 (73.67%) did not have knowledge of government policies of iron and Vitamin A supplementation for pregnant women for combating anemia. Around one-fifth 79 (26.33%) of the pregnant women have knowledge about the government policies of iron and Vitamin A supplementation for pregnant women for combating anemia.

Table 3 shows that the majority of the respondents 228 (76.00 %) did not use iron utensils for cooking. Around one-fifth 72 (24.00%) use iron utensils for cooking.

Table 4 shows that the majority of the respondents 262 (87.33%) did not have knowledge about iron and Vitamin-A-rich rich food. Around one-tenth of nth 38 (12.67%) have knowledge about iron Vitamin A rich food.

Table 5 shows that the majority of the respondents 234 (78.00%) did not have knowledge of calcium-rich food. Around 66 (22%) have knowledge about calcium-rich food.

Table 1: Frequency and percentage distribution of respondents according to their knowledge about nutritional requirement for pregnant women (*n*=300)

Knowledge about Nutritional Requirement for Pregnant Women	*Frequency*	*Percentage*
Did not have Knowledge	272	90.67
Have Knowledge	28	9.33

Table 2: Frequency and percentage distribution of respondents according to their Knowledge about government policies of iron and Vitamin A supplementation for pregnant women for combating anemia (*n*=300)

Knowledge about government policies of Iron and Vitamin A supplementation	*Frequency*	*Percentage*
Did not have knowledge	221	73.67
Have knowledge	79	26.33

Table 3: Frequency and percentage distribution of respondents according to their usage of iron utensils for cooking (*n*=300)

Use of iron utensils for cooking	*Frequency*	*Percentage*
Did not Use iron utensils	228	76.00
Use iron utensils	72	24.00

Table 4: Frequency and percentage distribution of respondents according to their knowledge about iron and Vitamin A-rich foods (*n*=300)

Knowledge about iron and vitamin a-rich foods	*Frequency*	*Percentage*
Did not have Knowledge	262	87.33
Have Knowledge	38	12.67

Table 5: Frequency and percentage distribution of respondents according to their knowledge of calcium-rich foods (*n*=300)

Knowledge about calcium-rich foods	*Frequency*	*Percentage*
Did not have Knowledge	234	78.00
Have Knowledge	66	22.00

Table 6 shows the trend of the addition of citrus fruit in their diet. The majority of the respondents 272 (90.67%) did not include citrus fruits in their diet. Around 28 (9.33%) included citrus fruits in their diet.

Table 7 shows the trend according to their knowledge of the importance of germinated food grains. The majority of the respondents 265 (88.33%) did not have knowledge of the importance of germinated food grains. Only around 35 (11.67%) have knowledge about the importance of germinated food grains.

Table 8 shows the trend according to their knowledge of folic acid-rich foods. The majority of the respondents 260 (86.67%) did not have knowledge of folic acid-rich foods. Just 40 (13.33%) had knowledge about folic acid-rich.

Table 9 shows the trend of the awareness of nutritional deficiency disease during pregnancy. The majority of the respondents 271 (90.33%) did not have awareness of nutritional deficiency disease during pregnancy. Few 29 (9.67%) had awareness of nutritional deficiency disease during pregnancy.

Table 10 shows the trend of the knowledge about iodine deficiency during pregnancy. The majority of the respondents 282 (94.00%) were not having knowledge about iodine deficiency during pregnancy. Just 18 (6.00%) had knowledge about iodine deficiency during pregnancy.

Table 6: Frequency and percentage distribution of respondents according to the inclusion of citrus fruits in their diets (*n*=300)

Citrus fruits in diet	*Frequency*	*Percentage*
Did not included	272	90.67
Included	28	9.33

Table 7: Frequency and percentage distribution of respondents according to their knowledge about the importance of germinated food grains (*n*=300)

Knowledge about the importance of germinated food grains	*Frequency*	*Percentage*
Did not have knowledge	265	88.33
Have knowledge	35	11.67

Table 8: Frequency and percentage distribution of respondents according to their knowledge about folic acid rich foods (*n*=300)

Knowledge about folic acid rich foods	*Frequency*	*Percentage*
Did not have Knowledge	260	86.67
Have Knowledge	40	13.33

Table 9: Frequency and Percentage Distribution of Respondents according to their awareness of nutritional deficiency diseases during pregnancy (*n*=300)

Awareness of nutritional deficiency diseases during pregnancy	*Frequency*	*Percentage*
Were not aware	271	90.33
Aware	29	9.67

Table 10: Frequency and percentage distribution of respondents according to their knowledge about iodine deficiency during pregnancy (*n*=300)

Knowledge about iodine deficiency during pregnancy	*Frequency*	*Percentage*
Were not Aware	282	94.00
Aware	18	6.00

Table 11 shows the trend of consumption of iron and folic acid supplements in their diet. The majority of the respondents 278 (92.67) did not took the consumption of iron and folic acid supplements in their diet. Only 22 (7.33%) were taking consumption of iron and folic acid supplements in their diet.

Table 12 shows the trend of the knowledge about the quantity of food intake during pregnancy. The majority of the respondents 237 (79.00%) did not have knowledge about the quantity of food intake during pregnancy. About 63 (21.00%) have knowledge about the quantity of food intake during pregnancy.

Table 13 shows the trend of the knowledge about the harmful effects of under nutrition. The majority of the respondents 270 (90.00%) did not have knowledge about the harmful effects of under nutrition. Around 30 (10.00%) have knowledge about the harmful effects of under nutrition.

Table 14 shows the trend of the knowledge about the source of carbohydrates, protein, iron, vitamin, and minerals. The majority of the respondents 277 (92.33%) did not have knowledge about the source of carbohydrates, protein, iron, vitamin, and minerals. Around 23 (7.67%) have knowledge about the source of carbohydrates, protein, iron, vitamin, and minerals.

Table 15 shows the trend of the knowledge about the importance of nutrition in fetus growth. The majority of the respondents 272 (90.67%) did not have knowledge about the importance of nutrition in fetus growth. Approximately 28 respondents (9.33%) have knowledge about the importance of nutrition during fetus growth.

Table 16 shows the trend of the knowledge about weight gain during pregnancy. The majority of the respondents 244 (81.33%) did not have knowledge about weight gain during pregnancy. Around 56 (18.67%) have knowledge about weight gain during pregnancy.

Table 17 shows the trend of the knowledge about water intake during pregnancy. The majority of the respondents 266 (88.67%) did not have knowledge about water intake during pregnancy. Around 34 (11.33%) have knowledge about water intake during pregnancy.

Table 18 shows the trend of the knowledge about the absorption of calcium and iron in the body. The majority of the respondents 271 (90.33%) did not have knowledge about the absorption of calcium and iron in the body. Around 29 (9.67%) have knowledge about the absorption of calcium and iron in the body.

Table 19 shows the knowledge about requirement of Vitamin C in the body. The majority of the respondents 200 (66.66%) did not have knowledge about the need of Vitamin C in the body. Around 100 (33.33%) have knowledge about the need of Vitamin C in the body.

Table 20 shows the trend of the knowledge about the need of zinc in the body. The majority of the respondents 270 (90.00%) did not have knowledge about the need of zinc in the body. Around 30 (10.00%) have knowledge about the need of zinc in the body.

Table 11: Frequency and percentage distribution of respondents according to their consumption of iron and folic acid supplements (*n*=300)

Consumption of Iron and Folic acid Supplements	*Frequency*	*Percentage*
Did Not Took supplements	278	92.67
Took supplements	22	7.33

Table 12: Frequency and percentage distribution of respondents according to their knowledge about quantity of food intake during pregnancy (*n*=300)

Knowledge about Quantity of Food Intake	*Frequency*	*Percentage*
Did not have Knowledge	237	79
Have knowledge	63	21

Table 13: Frequency and percentage distribution of respondents according to their knowledge about harmful effects of under nutrition (*n*=300)

Knowledge about harmful effects of under nutrition	*Frequency*	*Percentage*
Did not have knowledge	270	90
Have knowledge	30	10

Table 14: Frequency and percentage distribution of respondents according to their knowledge about the source of carbohydrate, protein, iron, vitamin, and minerals (*n*=300)

Knowledge about sources of various nutrients	*Frequency*	*Percentage*
Did not have knowledge	277	92.33
Have knowledge	23	7.67

Table 15: Frequency and percentage distribution of respondents according to their knowledge about importance of nutrition in fetus growth (*n*=300)

Knowledge about the importance of nutrition in fetus growth	*Frequency*	*Percentage*
Did not have knowledge	272	90.67
Have knowledge	28	9.33

Table 16: Frequency and percentage distribution of respondents according to their knowledge about weight gain in pregnancy (*n*=300)

Knowledge about weight gain in pregnancy	*Frequency*	*Percentage*
Did not have knowledge	244	81.33
Have knowledge	56	18.67

Table 17: Frequency and percentage distribution of respondents according to their knowledge about water intake during pregnancy (*n*=300)

Knowledge about Water Intake during Pregnancy	*Frequency*	*Percentage*
Did not have Knowledge	266	88.67
Have Knowledge	34	11.33

Table 18: Frequency and percentage distribution of respondents according to their knowledge about absorption of calcium and iron in body (*n*=300)

Knowledge about the Absorption of Calcium and Iron in body	*Frequency*	*Percentage*
Did not have knowledge	271	90.33
Have Knowledge	29	9.67

Table 19: Frequency and percentage distribution of respondents according to their knowledge about need of Vitamin C in body (*n*=300)

Knowledge about need of Vitamin C in body	*Frequency*	*Percentage*
Did not have Knowledge	200	66.66
Have Knowledge	100	33.33

Table 20: Frequency and percentage distribution of respondents according to their knowledge about need of zinc in body (*n*=300)

Knowledge about Need of Zinc in body	*Frequency*	*Percentage*
Did not have Knowledge	270	90
Have Knowledge	30	10

Conclusion

Nutritional deficiency in women is of particular concern because they may get pregnant and face the added nutritional, physical, and emotional demands of pregnancy, childbirth, and nursing. The objective of the study is to assess the nutritional awareness among the migratory tribal pregnant women of Punjab.

The majority of the respondents 272 (90.67%) did not have knowledge about the nutritional requirement of the pregnant women, government policies of iron and Vitamin A supplementation for pregnant women for combating anemia, iron Vitamin A-rich rich food, addition of citrus fruits in their diet, the importance of germinated food grains, folic acid-rich foods, nutritional deficiency disease during pregnancy, iodine deficiency during pregnancy, consumption of iron and folic acid supplements in their diet, quantity of food intake during pregnancy, harmful effects of under nutrition, source of carbohydrates, protein, iron, vitamin and minerals, importance of nutrition in fetus growth, weight gain during pregnancy, water intake during pregnancy, absorption of calcium and iron in the body, the need of Vitamin C in the body, and need of zinc in the body.

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