

A STUDY OF KNOWLEDGE AND ASSOCIATED FACTORS OF NUTRITION AMONG WOMEN

¹Shweta Kumari, ²Rubina Perween, ³Bandana Singh
¹Research Scholar, ²Research Scholar, ³Associate Professor
PG department of Home science, Patna University

Abstract

Adequate nutrition, a fundamental cornerstone of any individual's health, is especially critical for women because inadequate nutrition wreaks havoc not only on women's own health but also on the health of their children. The general objective of the study was to assess the knowledge of women on nutrition and associated factors in Patna, Bihar. Total 200 adult women were taken as sample out of which 100 women were from rural area and remaining 100 from that of urban area of Patna district only. Random Sampling method was applied for selecting sample from the population. Out of the 200 sampled women to be included in this study 198 responded to the questionnaires making a response rate of 99.3%. Different questions were asked to assess knowledge of women on nutrition and determinant factors in the study area. Out of 200 respondents responded for quantitative study, (52.5%), (50.6%), (72.3%), and (71.8%) of the respondents had the knowledge that food is important for bodies energy and heat, proper functioning of the body, growth and development and infection fighting respectively. Concerning the nutritional knowledge of the respondents about some common food sources of nutrients, most respondents (70.6%), (79.0%), (80.7%), (78.3%) and (88.1%) had no knowledge about common food sources of protein, carbohydrate, iron, vitamin A and iodine respectively. Based on the findings of the present study, it can be concluded that women had low-level of knowledge regarding the nutritional aspects in the studied area. There was significant positive relation between level of education, monthly income and nutrition information and knowledge. Hence, nutrition intervention such as nutrition education in different villages, health centers, and health posts is very important to impart the knowledge. Women organizations should be given responsibility for this in the community particularly for women concerning nutrition to increase the nutritional knowledge of women in the study area.

Key words: Nutrition, women, awareness, Knowledge

Introduction:

Adequate nutrition, a fundamental cornerstone of any individual's health, is especially critical for women because inadequate nutrition wreaks havoc not only on women's own health but also on the health of their children. Nutrition is the selection of foods and preparation of foods, and their ingestion to be assimilated by the body. By practicing a healthy diet, many of the known health issues can be avoided. The diet of an organism is what it eats, which is largely determined by the perceived palatability of foods. Dietitians are

health professionals who specialize in human nutrition, meal planning, economics, and preparation. They are trained to provide safe, evidence-based dietary advice and management to individuals (in health and disease), as well as to institutions. Clinical nutritionists are health professionals who focus more specifically on the role of nutrition in chronic disease, including possible prevention or remediation by addressing nutritional deficiencies before resorting to drugs. Government regulation of the use of this professional title is less universal than for "dietician. Awareness generation on various aspects of nutrition is the most important sustainable strategy to combat malnutrition and promote nutrition of the people. Advocacy and sensitization of policy makers, nutrition orientation of programme managers and capacity building of field functionaries is one of the important activities of Food and Nutrition Board towards creating nutritional awareness for promoting nutrition of the people. Different activities are carried out for different target groups for disseminating nutrition information

Objectives

The general objective of the study was to assess the knowledge of women on nutrition and associated factors in Patna, Bihar

Materials and Methods

The study was conducted in Patna, Bihar state.

Study designs

A cross-sectional descriptive institutional based study was conducted to assess knowledge of women about maternal nutrition and factors associated with it . It employed both quantitative and qualitative data collection method during January to June of the year 2017. Total 200 adult women were taken as sample out of which 100 women were taken from rural area and remaining 100 from that of urban area of Patna district only. Random Sampling method was applied for selecting sample from the population.

Variables

Dependent variable

- Knowledge of women about nutrition.

Knowledge of women about nutrition

Under the construct of nutrition knowledge, there were thirteen questions for quantitative study. Nutrition knowledge questions aimed in assessing nutrition knowledge of women on the aspects of nutritional

requirement. The questions assessed respondents' knowledge which was assumed to be measured through the following questions:

- Definition of food
- The good balanced diet
- Importance of food or Proper nutrition
- Sources of protein, carbohydrate, iron, iodine and vitamin A
- Negative consequences of malnutrition
- Husband or other family members influence and decision on the type and frequency of taking food

Accordingly, respondents were allowed to choose correct answers by indicating whether a given statement was yes or no. Finally, the knowledge of respondents on nutrition were scored and computed for the nutrition knowledge variables. One point was allocated to a correct response for all questions of nutrition knowledge in which the correct answers summed together.

Independent (determinant) variable

- Socio-demographic characteristics
- Nutrition information

Result and Discussion

Socio-demographic characteristics: Out of the 200 sampled women were included in this study 198 responded to the questionnaires making a response rate of 99.3%. Different questions were asked to assess knowledge of women on nutrition and determinant factors in the study area. The mean age (\pm SD) of the participants was 24.7 (\pm 5.12) years, while the age range was 16-38. However, considerably high proportions of the respondents (48.2%) were in the age range of 15-24 years. Besides, most study respondents were married (97.1%).

As far as education level of study population is concerned, almost two third (65.4%) of the respondents were illiterate. Concerning the occupation of respondents, the majority (85.7%) were house wives. As far as nutrition information are concerned, about (95.7%) of the respondents were living in rural and only (57.8%) of the respondents had nutritional information as here presented in **Table 1** below.

Table 1: Socio-demographic characteristics of study participants.

Characteristics n=419	Number (%)
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Age	
15-24	96 (48.2)
25-34	90 (44.9)
35-44	14 (6.9)
44+	0 (0.0)
Marital status	
Married	194 (97.1)
Divorced	1 (0.7)
Widowed	5 (2.2)
Religion	
hindu	74 (37.2)
Sikh	0 (0.0)
Catholic	19 (9.3)
Muslim	107 (53.5)
Educational status	
Illiterate	131 (65.4)
Primary(1-8)	50 (25.3)
Secondary(9-12)	19 (9.3)
Diploma and above	(0)
Occupational status	
Employed	4 (1.9)
House wife	171 (85.7)
Daily laborers	11 (5.3)
Business	14 (7.2)

Knowledge of women on nutrition: The findings from quantitative focus group discussion data analysis revealed that: Only two of the respondents mentioned the main food groups and common sources of protein, carbohydrate, iron, iodine and vitamin A even though most of the respondents described the importance of foods in different ways during pregnancy. Most respondents raised an idea that family member did not influence and decide on the type and frequency of their food.

Out of 200 respondents responded for quantitative study,(52.5%), (50.6%), (72.3%), and (71.8%) of the respondents had the knowledge that food is important for bodies energy and heat, proper functioning of the

body, growth and development and infection fighting respectively. However, (47.5%), (49.4%), (27.7%) and (28.2%) of the respondent did not know the importance of food for bodies energy, proper functioning of the body, growth and development and infection fighting respectively as indicated in Table 2 below.

Concerning the respondents knowledge about the meaning of food, only (42.2%) of the respondents knew and correctly answered the meaning of foods while (57.8%) of the respondents did not know the meaning of food.

Regarding to the main food group or balance diet question offered to respondents to assess their nutritional knowledge, majority (74.0%) of the respondents did not knew the main food groups or the balance diet while (26.0%) of the respondent knew about the main food groups or the balance diet.

Concerning the nutritional knowledge of the respondents about some common food sources of nutrients, most respondents (70.6%), (79.0%), (80.7%), (78.3%) and (88.1%) had no knowledge about common food sources of protein, carbohydrate, iron, vitamin A and iodine respectively. But the rest (29.4%), (21%), (19.3%), (21.7%) and (11.9%) had the knowledge about common food sources of protein, carbohydrate, iron, **vitamin A** and iodine respectively as listed in **Table 2** below.

Table 2: knowledge characteristics of study participants of women.

Knowledge indicators n=200	Response in number (%)	
	Yes	No
Knowledge about the meaning of food	84.4 (42.2)	115.6 (57.8)
Importance of food for growth and development	144.6 (72.3)	53.4 (27.7)
Importance of food for body's heat and energy	105 (52.5)	95(47.5)
Importance of food for proper functioning of the body	101.2 (50.6)	98.8(49.4)
Importance of food for infection fighting	143.6(71.8)	56.4 (28.2)
Knowledge about the main food groups or balance diet	52 (26.0)	148 (74.0)
Knowledge about food sources of protein	58.8 (29.4)	141(70.6)
Knowledge about food sources of carbohydrates	42 (21.0)	158 (79.0)
Knowledge about food sources of iron	38.6 (19.3)	161 (80.7)
Knowledge about food sources vitamin A	43.4 (21.7)	156 (78.3)
Knowledge about food sources of iodine	23.8 (11.9)	176 (88.1)
Knowledge about husband or family member should	91.6 (45.8)	108 (54.2)

not influence and decide on the type and frequency of taking food		
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In general, up on the answers given by the respondents to the knowledge assessing questions, 64.4% of the respondents were found to be knowledgeable about nutrition during pregnancy.

Associated factors of nutritional knowledge of women:

Table 3: Multivariable of nutrition knowledge by socio-demographic of study participants.

Variables	Knowledge %	
	Yes	No
Age category		
15-24	147(73.3)	53(26.7)
25-34	107(53.7)	93(46.3)
35-44	145(72.4)	55(27.6)
44+	-	-
Educational status		
Illiterate	105 (52.6)	95 (47.4)
Primary(1-8grade)	164(81.9)	36(18.1)
Secondary(9-12)	200(100)	0
Diploma and above	200(100)	0
Estimated Monthly income		
< 1000	118(59.2)	82(40.8)
1000-2000	148(73.8)	52(35.3)
>2000	187(93.5)	13(6.5)
Husband educ. level		
Illiterate	113(56.6)	87(43.4)
Literate	146(73.2)	54(26.8)

Information about nutrition		
No	102(50.3)	98(49.7)
Yes	150(74.8)	50(25.2)

Discussion

Knowledge of women: This study has documented the level of knowledge of women on nutrition and associated factors. The incidence of dietary inadequacies as a result of dietary habits and patterns in women is higher. This study revealed that more than half (57.8%) of the respondents did not know the meaning of food. This study also pointed out that the nutritional knowledge of women about the importance of food as: (52.5%), (50.6%), (72.3%) and (71.8%) had the knowledge that food is important for body's energy and heat, proper functioning of the body, growth and development and fighting infection respectively. Most (74.0%) of the respondents did not know the main food groups or the balance diet were as (26.0%) of the respondent knew about the main food groups or the balance diet in the present study. This can be attributed to the fact that women lack better access to information about nutrition because they were housewives in the study area.

Although the knowledge about importance of food was high in this study, the knowledge about the common food source of protein, carbohydrates and most important minerals and vitamin was lower ((29.4%), (21%), (19.3%), (21.7%) and (11.9%) knowledge about common food sources of protein, carbohydrate, iron, vitamin A and **iodine** respectively. The low nutritional knowledge level of common food sources may be due to low nutritional awareness or nutrition information and low socio economic status of the participants in this study.

Educational level, monthly income and nutrition information were identified as important predictors of knowledge of women on nutrition among the study participants. Moreover, the most significant predicting factors for knowledge in this study were information about nutrition followed by women education level and family income.

Conclusion and Recommendation

Based on the findings of the present study, it can be concluded that women had low-level of nutritional knowledge in the studied area. There was significant positive relation between level of education, monthly income and nutrition information and nutrition knowledge. Hence, nutrition intervention such as nutrition education in different villages, health centers, and health posts is very essential. Women organizations should be given responsibility for the community particularly for women nutrition to increase the level of nutritional knowledge of women in the studied area.

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