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A CO-RELATIONAL STUDY BETWEEN DIETARY HABIT AND NUTRITIONAL STATUS AMONG WOMEN IN BASISTHA URBAN COMMUNITY, GUWAHATI, ASSAM.

Nursing

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ABSTRACT

Background: - Poor eating habits such as insufficient intake or high intake both have adverse effects on health. These problems include obesity, high blood pressure, high cholesterol, heart disease and stroke, type-2 diabetes, osteoporosis. Therefore, it can be prevented by avoiding excessive and frequent eating of food rich in calories and by doing exercise daily.

Aim : to determine the co-relation between dietary habit and nutritional status among women.

Methods- A descriptive correlation design was adopted with 119 women within age group 18 to 45 years were selected by using convenience sampling technique. Subjects were interviewed using socio-demographic Performa, obesity assessment tool and semi-structured questionnaire on dietary habit. The collected data were analyzed by SPSS version 20. Descriptive and inferential statistics were used to analyse the data.

Results-The prevalence of obesity is 9.2% and overweight is 29.4%. The study also revealed that 48.7% of the women follow unhealthy dietary habit, while 28.6%of the women follow healthy dietary habit, 22.7% of the women need to improve their dietary habit to maintain normal BMI.

Conclusion- The study found that, Nutritional status of women can affects by dietary habit.

KEYWORDS

Co-relation, Dietary habit, nutritional status, Women.

INTRODUCTION:-

Dietary habits are actually the food choices preferred by persons in their daily life. They differ from person to persons in their daily life. They differ from person to person. A healthy dietary habit helps an individual to stay fit and well throughout his life.[1]

According to NFHS-4, 2015-16 women obesity is 20.7% i.e. a quantum jump from 12.6% NFHS-3, 2005-06. Moreover urban India has more obese women (23%) than men which is 20%. One-fifth of Indian women or 20.7% in the age group of 15-49 years are overweight. Health survey also shows that 31.3 percent or almost a third of urban women are obese, while 15 per cent of rural women are overweight.[2]

World Health Organization has estimated that worldwide obesity is nearly tripled between 1975 and 2016. In 2016, more than 1.9 billion adults were overweight and 650 million adults were obese. In urban India, more than 23% of women are either overweight or obese, which is higher than men. Overweight and obesity are the fifth leading risk of global deaths.[3] Obesity can be prevented by avoiding excessive and frequent eating of foods rich in calories, like fried foods, nuts, sweets etc and by taking mild to moderate exercise daily. The body weight should be maintained constant at the normal level by adjusting the calorie intake and proper exercise. Nutrition education to all age's people especially to women regarding the dangers of overeating will help to prevent the present widespread occurrence of obesity.[4] According to NFHS (2015-2016) in Assam 24.8% women are overweight and obese in urban and 10.5% women in rural area. It means urban women are more overweight and obese than rural. The prevalence of obese women in Assam was measured to be 13.2%.[5] Therefore, the present study attempts to shed light on overweight and obesity among women in urban Assam.

MATERIAL AND METHODS

RESEARCH APPORACH

A quantitative research approach was used for the present study.

RESEARCH DESIGN

This was a descriptive co-relational design

SETTING OF STUDY

The setting of the study was in Basistha urban community of Guwahati, Assam among women.

STUDY POPULATION

The population of the study includes women with age group 18-45 years of Basistha community, Guwahati, Assam

SAMPLE SIZE

Sample size was 119 by using this formula

$$N=z^2(p \times q)/d^2$$

SAMPLING TECHNIQUE

The present study the sample was selected through 'convenient sampling technique'.

DATA COLLECTION TOOL

Inclusion criteria:

Women who can read and write English and Assamese, educational qualification above primary education, sedentary lifestyle and who are available at the time of data collection.

Exclusion criteria:

Women who are pregnant and lactating mother, with diagnosed mental illness and medical condition such as -Thyroid diseases, diabetes mellitus, heart diseases, cholecystectomy, chronic kidney disease, steroid induce.

DESCRIPTION OF THE TOOL

Based on the literature, 3 tools are developed to fulfill the objectives. The tools are-

Section I: Demographic Performa: It consists of 8 items such as:-the age of the women, education of women, religion, marital status, type of family, occupation, family income and dietary pattern.

Section II: Obesity assessment tool: It consists of bio physiological measurement such as weight, height, BMI (weight in kilogram/square of height in meter), to determine the prevalence of obesity of women.

- According to World Health Organization BMI classification for Indian is as follows-
- Under weight = <18.5
- Normal range = 18.5- 24.9
- Overweight =25-29.9
- Obese =≥30

Section III: Dietary record in terms of calorie intake for 3 days

- A semi structured questionnaire to record the intake of calories for 3 days.
- Along with questionnaire participants were Provided a set of 200 ml cup, 200 ml bowl and 5 ml spoon to measure the quantity of food in solid and liquid form. The semi-structured dietary record questionnaire consists of -Serving size of each meal, quantity of foods, calories for each meal, total calories.
- Explained the women how to record in the questionnaire regarding food whatever they will be consumed by using 24 hours recall

method for 3 days
- After three days investigator went to collect the semi-structured questionnaire from the family
- Investigator find out the calorie of each items by referring the ICMR diet chart then calculate the total calorie of per day consumed by samples
- Investigator took average calorie intake from 3 days calorie intake of samples

DESCRIPTION OF DIETARY HABIT:-

According to ICMR revised RDA for Indians 2010, sedentary women need about 1900 Kcal per day for healthy weight management. After consultation with the nutritionist, the range of calorie intake for healthy dietary habit is established to be 1800-2000 Kcal by adding and subtracting100 from RDA of calorie intake. As per the total calorie intake, dietary practice is divided into 3 level such as dietary habit need to improve (<1800 Kcal), healthy dietary habit (1800-2000kcal) and unhealthy dietary habit (>2000 Kcal)

DATA COLLECTION PROCEDURE

All the instruments used for the present study were calibrated in physics laboratory. Pilot study was conducted from 24/12/2018 to 29/12/2018 to assess the feasibility of the study. 10 subjects were selected by using convenient sampling technique in Bakrapara, Basistha community, Guwahati, Assam Before conducting the study prior permission was taken from the Joint Director of Health Services Kamrup Metropolitan, Assam followed by Medical Officer, Basistha UPHC. The data was collected for a period of 4 weeks from 4/02/2019 to 02/03/2019. Signature was taken on the informed consent from the subjects. Once the consents were received from the women, data were collected by giving structured and semi-structured questionnaire. Bio-physiological measurement was taken to measure height and weight. The individual was asked to stand upright without shoes with her back against the wall, heels together and eyes directed forward and height was recorded to the nearest 0.1cm.Subjects were asked to wear light clothing, and weight was recorded to the nearest 0.1 kg. Body Mass Index (BMI) = Weight (kg) / Height (m^2) was used as an indicator of obesity. Socio- demographic information, obesity assessment tool (height, weight, BMI) and dietary record for 3 days were administered to assessing net energy intake among women and also to identify the dietary habit among women. Approximately 30-35 minutes were taken for each participant for collecting the information. The collected data were analyzed by SPSS version 20. Descriptive and inferential statistics were used to analyze the data.

RESULTS

Majority 42 (35%) of women were from the age group of 36-45 years,Most of the women were having education up to graduation level i.e.-40(34%),nearly all the subjects i.e. 117 (98%) were Hindu,Out of 119 women 100 (84%) of them were married,Majority108 (90%) of women were belonged to nuclear family,it was found that majority94 (79%) of women were home make,most of 60(50.4%) women were from family monthly income Rs.> 20001,majority 111 (93.3%) of women were non-vegetarian. The prevalence of obesity and overweight was 9.2% and 29.4% respectively among women, 48.7% of dietary habits were unhealthy, 28.6% of dietary habits were healthy and 22.7% of dietary habits needed to improve.

Table 1: Co-Relation between Dietary Habit and Nutritional status among Women N=119

Variable	Pearson r value	P Value	Remarks
Dietary record in terms energy intake **Day 1-3 (Kcal)**	.087	.389	NS
Degree of obesity **BMI**			

The data presented in table 1 shows that there is no significant co-relation between dietary habit and nutritional status among women as p-value (.389) is greater than0.05 level of significance. Hence the null hypothesis is accepted and research hypothesis is rejected. The data from the above table shows positive co-relation between dietary habit and nutritional status

TABLE 2: Association of Dietary Habit and Selected Demographic Variables N=119

Sl. No	Demographic variables	χ^2	df	P Value2 -tailed	Remarks
1.	**Age in years** a. 18-25 Years b. 26-35 years c. 36-45 years	5.347	4	.254	**NS**
2.	**Educational status** a. M.E. school b. High school c. Higher secondary d. Graduate e. Postgraduate	9.867	8	.274	**NS**
3	**Religion** a. Hindu b. Muslim c. Christian	4.457	4	.348	**NS**
4.	**Marital status of women.** a. Married b. Unmarried c. Widow	5.239	4	.264	**NS**
5.	**Type of family.** a. Joint family b. Nuclear family	8.829	2	.012	**S***
6.	**Occupation.** a. Home maker b. Government employee c. Private employee d. Student	9.053	6	.171	**NS**
7.	**Family monthly income.** a. Rs.>5000 b. Rs. 5001-10000 c. Rs. 10001-15000 d. Rs. 15001-20000 e. Rs. >20001	12.821	6	.046	**S***
8.	**Dietary pattern** a. Vegetarian b. Non-vegetarian	25.93	2	.273	**NS**

There is significant association of dietary habit with type of family and family monthly income. Therefore, the null hypothesis is rejected and research hypothesis is accepted with respect to type of family and family monthly income.

TABLE 3: Association of Dietary Habit and Selected Demographic Variables

Sl. No	Demographic variables	χ^2	df	p-Value 2-tailed	Remarks
1.	**Age in years** a. 18-25 Years b. 26-35 years c. 36-45 years	24.297	6	<.001	**S****
2.	**Educational status** a. M.E. school b. High school c. Higher secondary d. Graduate e. Postgraduate	7.260	12	.840	**NS**
3	**Religion** a. Hindu b. Muslim c. Christian	3.790	6	.705	**NS**
4.	**Marital status of women.** a. Married b. Unmarried c. Widow	3.015	6	.807	**NS**
5.	**Type of family.** a. Joint family b. Nuclear family	.230	3	.973	**NS**
6.	**Occupation.** a. Home maker b. Government mployee c. Private employee d. Student	4.285	9	.892	**NS**
7.	**Family monthly income.** a. Rs.>5000 b. Rs. 5001-10000 c. Rs. 10001-15000 d. Rs. 15001-20000	40.661	9	<.001	**S**

	e. Rs. >20000				
8.	**Dietary pattern** a. Vegetarian b. Non-vegetarian	11.998	3	.007	**S***

It is evident from above table, that the obtained p-value is smaller than 0.05 level of significance with type of family and family monthly income. Hence there is significant association of dietary habit with type of family and family monthly income. Therefore,the null hypothesis is rejected and research hypothesis is accepted with respect to type of family and family monthly income.

DISCUSSION

This study revealed the prevalence of obesity and overweight was 9.2% and 29.4% respectively among women. Present study findings are consistent with the study conducted by Brahmbhatt K R, Oza U N (2012) on prevalence of overweight and obesity among adolescents of Ahmadabad city, Gujarat. The prevalence of overweight and obesity were found to be 13.3% and 5.4% respectively.The present study found that there is significant association of dietary habit of women with typeof family and family monthly income. This indicated that, with the type of family and family monthly income women's dietary habit differs. The present study supported the study conducted by Mukherjee A et al (2018) with the objectives to assess the dietary diversity. between nutritional status and dietary habit, but had positive relationship between dietary habit and degree of obesity. The present study supported the study conducted by the M.N. Al-Muammar (2014) to determine the association between dietary habits and body mass index of adolescent females in intermediate schools in Riyadh, SaudiArabia.

CONCLUSION:

In the present study, the prevalence of obesity was found to be 9.2%, while 29.4% were overweight. It was also found that majority 48.7 % of them were following unhealthy dietary habit according to recommended dietary allowance. It was found that nutritional status was significantly influenced by age, family monthly income and dietary pattern. Type of family and monthly family income significantly influence the dietary habit followed by the women. Nutritional status is positively correlated with dietary habit. There may be other contributing factors for obesity. Frequent campaign regarding lifestyle modification and healthy dietary habit can reduce the burden of obesity among the women.

REFERENCES

1. Park K. Park's textbook of preventive and social medicine.24th ed. Jabalpur (India): M/s banarsidsbhanat; 2017. p 415-19
2. Ram F et al. National family health survey-4. Economic and political weekly [cited 2017]; 11(16):66-69. Available from- https://www.jstor.org>stable
3. World Health Organization. Obesity and overweight, 2018 Feb. Available from- https://www.who.int
4. Sawminathan M. Handbook of food and nutrition. 5th ed. Mysore road Bangalore: The Bangalore printing & publishing co. Ltd; 2006.p 209
5. Arokiasamy P, Jain K, Goli S, Pradhan J. Health equalities among urban children in India: A comparative assessment of empowered group and South Indian state. J BiosocSci [cited 2012]; 45:1-9 doi: 10.1017/S00219320120002