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A STUDY TO ASSESS THE PREVALENCE RATE OF MALNUTRITION AMONG UNDER GRADUATE FEMALE STUDENT OF CHARUSAT UNIVERSITY IN GUJARAT

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ABSTRACT

Food is the prime necessity of life. As today's adolescence girls are future mothers. If their health is not good, it will affect the health and growth of their foetus / child. Malnutrition is a great deal of physical and emotional suffering. On Global Hunger Index, India ranks 66th out of 68 countries. In the index, all Indian states are at 'serious' level of hunger. 12 states fall in 'alarming' category. To keep in view this thought researchers have done this study and finding out the prevalence rate of malnutrition in undergraduate students of Charotar University of science & technology, change. Their study found that 32% of the female undergraduate students found malnourished or over nourished.

INTRODUCTION

Food is the prime necessity of life [1]. Nutrition is essential for life. Malnutrition is a great deal of physical and emotional suffering. It is widely accepted that for practical purposes, anthropometry is most useful tools for assessing nutritional status. There are many anthropometry indicators in use such as height, weight, body mass index [2,3]. The human being consumes variety of nutrients to grow, keep healthy and remain active [4]. Acute inadequate nutrition leading to rapid weight loss and failure to gain weight normally [5]. Malnutrition means ingesting too much or too little of an nutrient can interfere with health and wellbeing. There is a beneficial range of intact for any nutrient intake below or above that range is incompatible with optimal health [6]. Malnutrition consists under nutrition, over nutrition & protein energy malnutrition. Under nutrition does exist as a result of poverty, illness, neglect, poor dietary planning or environmental hazards. Malnourished females are prone to get infections and more likely to have mental and development problems. Protein energy malnutrition is also known as protein calorie malnutrition.PEM can occur in a variety of situation, children are at the highest risk for developing protein energy malnutrition because of their elevated during growth and development [6].

OBJECTIVES OF THE STUDY

To assess the prevalence rate of malnutrition among undergraduate female students of CHARUSAT.

MATERIAL & METHODS

In The present study was aimed at assessing the prevalence rate of malnutrition among undergraduate female students.

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Research Approach: Descriptive approach was used to assess the prevalence rate of malnutrition among undergraduate female students of CHARUSAT.

Research Design: The research design which is used to achieve objectives of this study is non-experimental descriptive study design to assess the prevalence rate of malnutrition among undergraduate female students.

Settings of the Study: Charotar University of science & Technology (CHARUSAT).

Population of the Study: Undergraduate female students of CHARUSAT.

Sample Size: In this study the sample size was 60; undergraduate female students who fulfill the inclusion criteria.

Sampling Technique: In this study, Non-probability convenience sampling technique was used to select the sample. The investigator has selected the under graduate female students as samples from CHARUSAT.

Ethical clearance: the researchers took prior permission from head of the institutions to conduct the study and proper consent took from each participants regarding there willing to participate in the study.

Criteria for Sample Selection
The criterion for sample selection is mainly depicted under the inclusion criteria.
Inclusion criteria**:** This study includes under graduate female students who;
- Age group of between 17 to 23 years.
- Studying in the CHARUSAT University, Changa.
- Are willing to participate in this study.
Exclusion criteria: This study excludes under graduate female students;
- Who are not coming in age group of 17 to 23 years.
- Who are not willing to participate in this study.

RESULTS
        Raw data was collected and data finding entered in a master sheet for the statistical analysis. It was interpreted using descriptive and inferential statistics. The data finding have been organized and presented under following sections:
Section I: Findings related to demographic variables.
Section II: Findings related to prevalence rate of Body mass Index.

Section-I. Finding Related To Demographic Variables
Table 1. Frequency & Percentage Distribution Of Selected Demographic Variable

Demogrphic Variable	Frequency	Percentage
1.Age of students		
17- 18 years	22	36.66%
18- 19 years	37	61.66%
20-21 years	01	1.66%
22- 23 years	00	00%
2.Monthly income of family(In Rupees)		
<10,000		
10,000- 20,000	02	3.33%
20,000- 50,000	14	23.33%
>50,000	23	38.33%
	21	35.00%
3. Dietary pattern		
Vegetarian	51	85.00%
mixed	09	15.00%
4. Number of meals per day		
1 snacks & 2 meals	30	50.00%
2 snacks & 2 meals	25	41.66%
1 snacks & 3 meals	01	1.66%
2 snacks & 3meals	04	6.66%

5. Occupation of father		
Farmer	02	3.33%
Businessman	34	56.66%
Medical personnel	04	6.66%
Others	20	33.33%
6. Where are you living?		
Urban	33	55.00%
Rural	07	11.66%
Hostel	19	31.66%
Paying guest	01	1.66%

Section-II. Finding Related To Prevalence Rate of Body Mass Index

Table 2. Distribution of Undergraduate Female Student's Age According to Body Mass Index

Sr No.	Age	Normal	Underweight	Overweight	Obesity
1	17-18 years	20%	3.33%	8.33%	1.66%
2	18-19years	45%	5%	13.33%	1.66%
3	20-21years	0 %	1.66%	0 %	0 %
4	22-23years	0 %	0 %	0 %	2%

Table 3. Distribution of Undergraduate Female Student's Family Income According to Body Mass Index

Sr No.	Monthly Income of Family	Normal	Underweight	Overweight	Obesity
1	< 10,000	-	1.66%	-	1.66%
2	10,000-20,000	15%	-	10%	-
3	20,000-50,000	25%	5%	8.33%	-
4	>50,000	25%	3.33%	3.33%	1.66%

Table 4. Distribution of Undergraduate Female Student's dietary pattern According to Body Mass Index

Sr No.	Dietary Pattern	Normal	Underweight	Overweight	Obesity
1	Vegetarian	55%	10%	16.66%	3.33%
2	Mixed	10%	-	5%	-

Table 5. Distribution of Undergraduate Female Student's number of meals per day According to Body Mass Index

Sr No.	Number of Meals Per Day	Normal	Underweight	Overweight	Obesity
1	1 SNACK & 2 MEALS	40%	3.33%	5%	1.66%
2	2 SNACKS & 2 MEALS	20%	5%	15%	1.66%
3	1 SNACK & 3 MEALS	1.66%	-	-	-
4	2 SNACKS & 3 MEALS	3.33%	1.66%	1.66%	-

Table 6. Distribution of Undergraduate Female Student's Father's occupation According to Body Mass Index

Sr No.	Occupation of Father	Normal	Underweight	Overweight	Obesity
1	Farmer	-	1.66%	1.66%	-
2	Businessmen	41.66%	5%	8.33%	1.66%
3	Medical Personnel	6.66%	-	-	-
4	Others	16.66%	3.33%	11.66%	1.66%

Table 7. Distribution of Undergraduate Female Student's Residency According to Body Mass Index

Sr No.	Residency	Normal	Underweight	Overweight	Obesity
1	Urban	33.33%	6.66%	11.66%	3.33%
2	Rural	5%	-	-	-
3	Hostel	26.66%	3.33%	8.33%	-
4	Paying Guest	-	-	1.66%	-

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Table 8. Distribution of total female Students according Body mass index rate

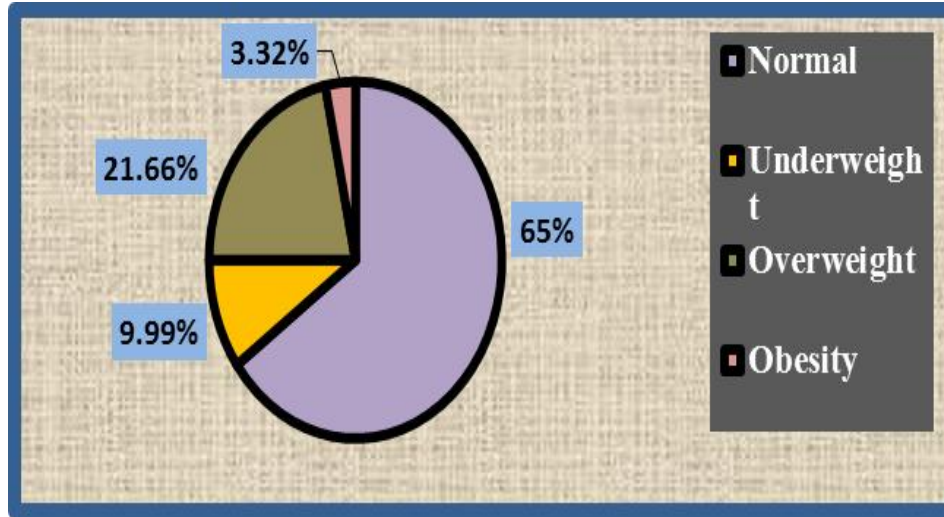| Sr .No	Normal	Underweight	Overweight	Obesity
Total	65%	9.99%	21.66%	3.32%

Graph 1. Pie chart shows the result of total Body Mass Index (BMI) rate in under graduate female students of CHARUSAT

Table 2 reveals that, Body mass index rate in 17-18 years of age female students; 20%, 3.33%, 8.33%, 1.66% followed by normal, underweight, overweight & obesity. Body mass index in 18-19 years of age female students; 45%, 5%, 13.33%, 1.66% followed by normal, underweight, overweight &obesity. Body mass index rate in 20-21 years of age female students; 00%, 1.66%, 00%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in 22-23 years of age female students; 00%, 00%, 00%, 00% followed by normal, underweight, overweight &obesity.

Table 3 reveals that, Body mass index rate in <10,000 monthly family income of students; 00%, 1.66%, 00%, 1.66% followed by normal, underweight, overweight &obesity. Body mass index rate in 10,000-20,000 monthly family income of students; 15%, 00%, 10%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in 20,000-30,000 monthly family income of students; 25%, 5%, 8.33%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in >50,000 monthly family income of students; 25%, 3.33%, 3.33%, 1.66% followed by normal, underweight, overweight &obesity.

Table 4 reveals that, Body mass index rate in vegetarian students; 55%, 10%, 16.66%, 3.33% followed by normal, underweight, overweight &obesity. Body mass index rate in mixed dietary pattern students; 10%, 00%, 5%, 00% followed by normal, underweight, overweight &obesity.

Table 5 reveals that, Body mass index rate in students who take 1 snack & 2 meals; 40%, 3.33%, 5%, 1.66% followed by normal, underweight, overweight &obesity. Body mass index in students who have 2 snacks & 2 meals; 20%, 5%, 15%, 1.66% followed by normal, underweight, overweight &obesity. Body mass index rate in students who take 1 snacks & 3 meal; 1.66%, 00%, 00%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in students who take 2 snacks & 3 meal; 3.33%, 1.66%, 1.66%, 00% followed by normal, underweight, overweight &obesity.

Table 6 reveals that, Body mass index rate in students whose father are Farmer; 00%, 1.66%, 1.66%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in students whose father are Businessmen; 41.66%, 5%, 8.33%, 1.66% followed by normal, underweight, overweight &obesity. Body mass index rate in students whose father are Medical personnel; 6.66%, 00%, 00%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in students whose father's occupation are other than these; 16.66%, 3.33%, 11.66%, 1.66% followed by normal, underweight, overweight &obesity.

Table 7 reveals that, Body mass index rate in students who are living in urban area; 33.33%, 6.66%, 11.66%, 3.33% followed by normal, underweight, overweight &obesity. Body mass index rate in students who are living in rural area; 5%, 00%, 00%, 00% followed by normal, underweight, overweight &obesity.

Research Article

19

Dhruva Patel. *et al.* / *American Journal of Advances in Nursing Research.* 2016; 3(1): 15-19.

Body mass index rate in students who are living in hostel; 26.66%, 3.33%, 8.33%, 00% followed by normal, underweight, overweight &obesity. Body mass index rate in students who are living as a paying guest; 00%, 00%, 1.66%, 00% followed by normal, underweight, overweight & obesity.

Table 8 reveals that, Body mass index rate is; 65%, 9.99%, 21.66%, 3.32% followed by normal, underweight, overweight &obesity.

DISCUSSION

Total body mass index rate in undergraduate female are as normal (65%), underweight (9.99%), overweight (21.66%) and obese (3.32%).

CONCLUSION

This descriptive study was undertaken by group of nursing students of Manikaka Topawala Institute of Nursing under guidance of Mr. Anil Sharma Assistant Professor, MTIN-CHARUSAT. Students did survey in university and took this project to complete as a research project. They took 60 samples from undergraduate female students of CHARUSAT University and assessed the prevalence rate of Malnutrition. The result shown that 9.99% students are observed at underweight, 21.66% are overweight and 3.30% are obsessed in this list.

RECOMMENDATIONS

The study can be replicated in various settings and various comparative among age groups, gender etc. etc.

CONFLICT OF INTEREST

There were no conflicts of interest reported.

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