NUTRITIONAL STATUS OF UNDERGRADUATE HEALTH CARE STUDENTS IN UTTAR PRADESH

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ABSTRACT

A descriptive study to assess the nutritional status of undergraduate health care student as per the recommended dietary allowances (RDA) of ICMR at selected University of Uttar Pradesh". The aim of the study was to assess the nutritional status of undergraduate health care students of UPUMS, Saifai, Etawah. The research design adopted for this study was a descriptive research design. Nonprobability purposive sampling technique was utilized for the selection of the subjects. The sample consist of 60 undergraduate health care students of UPUMS, Saifai, Etawah. Study used descriptive research design and Nonprobability purposive sampling technique was utilized for the selection of the subjects. The instrument used for the data collection was a semi- structured interview schedule and 24 hr. diet recall method. Majority of students 43 (71.6%) were aged b/w 18-23 years of which 30 (50%) were boys and 30 (50%) were girls. Most of them were Hindus (97%) and 60% OBC category. 57.6 % students having 4-6 family members, 45% had family monthly income Rs. >15,000 per month, (80%) belonged to nuclear family, 63.3% are rural., consumed a lacto- vegetarian diet and 26.6 % followed a non-vegetarian along with a vegetarian diet, 71.6% student spend Rs<1,000/ month on food, 83.6% had no history of any illness, some of them done housework as physical activity. Study result concluded that majority of students are not taking their as per not recommended dietary allowance of calories and proteins as per recommended dietary allowances (RDA).

Keywords: Nutrition, Condition, Undergraduate, Health Care, RDA, Nutritional status.

INTRODUCTION

A nutritionist will tell you that nutrition is derived from the Latin term nutrire, which means to "feed" or "nourish." Dietary supplementation was initially used in the 18th century. In the context of human nutrition, the word "nutrient" or "food component" refers to a range of dietary components that are essential for human nutrition. These components include proteins, vitamins, and minerals. Nutrition is defined as the study of food and how it affects one's physical and psychological well-being, as opposed to nutrition. It is primarily concerned with the function of nutrients in the growth, development, and maintenance of the human body's tissues and organs. According to the National Institutes of Health, nutritional health is defined as the capacity to "maintain a nutritional state that enables us to grow properly and enjoy good health." Attempting to live a healthy lifestyle and

eating a well-balanced diet should be a goal for everyone. As well as providing the energy required for our bodies to stay warm and move, food provides the fuel that allows our systems to perform chemical processes such as food digestion while also helping us to protect ourselves against, resist, and battle disease. Additionally, eating helps in the healing of our bodies after an illness. Due to the fact that nutritional status is essential for human survival and is a significant predictor of health, it is vital to investigate this subject from a number of different perspectives.[1]

Individuals' food preferences & nutritional status are affected by the knowledge, attitude, and practices that are prevalent in society. It is a well-known truth that food and nutrition play a vital role in the promotion of health and the avoidance of sickness and disease. For the preservation of physical and mental health, it is essential to consume a diet that is nutrient-

dense and nutritionally balanced. It is possible to prevent dietary and lifestyle-related diseases in children and adults by establishing healthy eating habits and a pleasant lifestyle pattern in them as youngsters and ensuring that they are maintained throughout adulthood. A well-balanced diet consists of a sufficient number and variety of meals that are both healthy and free of potentially harmful substances, as well as an appropriate amount and variety of snacks. When a vitamin or a combination of nutrients is insufficient, the body is unable to perform its functions properly. It is a well-established fact that the choice about what to eat and when to consume it is very personal and is influenced by a number of factors that influence an individual's nutritional needs. [2]

Children and adolescents are the country's future leaders, and among them are health-care professionals who will lay the groundwork for the country's overall health status in the coming years. For proper development, children and adolescents need certain nutritional requirements, and research has shown that they fall short of the recommended food intake for their age group when it comes to food consumption. When providing health care to an individual or a community, the health of the individual or group is very important. In today's society, college students and other young people are growing on their own terms. In terms of their eating habits, health attitudes, and health-related behavioural choices, they bear full responsibility. Several studies have shown that the transition to adolescence, during which adolescents have a greater need for self-expression and are exposed to increasing pressure, has a significant effect on their food choices. [3, 4]

OBJECTIVES OF THE STUDY

- To assess the nutritional status of undergraduate health care students of UPUMS, Saifai

- To compare the nutritional status of undergraduate health care students with recommended dietary allowance (RDA) of ICMR.

- To find out the association between nutritional status of undergraduate health care students and selected socio-demographical variables.

RESEARCH HYPOTHESIS

H1- There will be a significant association between nutritional status of undergraduate health care students and socio-demographic variables at 0.05 level of significance.

RESEARCH METHODOLOGY

In research methodology, we are referring to controlled studies that are concerned with the methods of collecting, arranging, and analyzing information. It is the purpose of this chapter to discuss the methodology that was used in the research. The aim of this research is to evaluate the nutritional condition of undergraduate health care students at selected universities in Uttar Pradesh in accordance with the International Commission on Medical Research's recommended dietary allowances (RDA).

Research Design

"Research design is the researcher's overall plan for answering the research questions or testing the research hypothesis." In this study descriptive research design was used.

Sample technique and Sample Size

No probability type of purposive sampling technique was utilized for the selection of the subjects. A sample of 60 students of undergraduate health care programme was selected for the studies which are fulfilling the inclusive criteria.

Data Collection Tool and Technique

The researcher has prepared the interview schedule and 24-hour diet recall method to assess the nutritional status of under graduate health care student.

Description of the Tool

Data collection will be consisting of two parts

TOOL	TECHNIQUE
PART A: Consists of socio demographic variables	Interview schedule
PART B: Consists of food intake table	Interview schedule

Pilot Study

"A pilot study is a small-scale trial run done in preparation for major study." People are selected for the pilot studies, which are in similar in characteristics to the sample that will be used for the actual study. The pilot study was conducted in Sugar Singh Memorial B.T.C. Training Centre, Saifai, Etawah from 21th December to 30th December with the sample size of 10 students. Prior to study, the formal permission obtained by the Principal of Sugar Singh Memorial B.T.C.

Training Centre, Saifai, Etawah. Before starting the pilot study, the instrument was corrected by faculty in the field of nursing, nutrition and community medicine. The research design is a descriptive study. The selection of the sample was by purposive sampling technique. During the pilot study some of the students faced problem in understanding some question which was simplified after making necessary changes with the suggestions of the guide before starting the main study. [9]

DATA ANALYSIS

Table 1: Frequency and Percentage Distribution of Samples Characters of Student

Demographic Variable	Frequency	Percentage
1.AGE		
1.1 18-23 yr	43	71.6
1.2 24-29 yr	16	26.6
1.3 30-35 yr	1	1.6
2.GENDER		
2.1 Male	30	50
2.2 Female	30	50
3.COURSE PURSUING		
3.1 Nursing	30	50
3.2 Paramedical	30	50
4.YEAR OF STUDY		
4.1 First	15	25
4.2 Second	32	53.3
4.3 Third	13	21.6
5.RELIGION		
5.1 Hindu	57	95
5.2 Muslim	3	5
6.CATEGORY		
6.1 General	6	10
6.2 OBC	40	66.6
6.3 SC	13	21.6
6.4 ST	1	1.6
7.EDUCATION OF FATHER		
7.1 Illiterate	2	3.3
7.2 Secondary	15	25
7.3 Higher secondary	19	31.6
7.4 Graduation and above	24	40
8.EDUCATION OF MOTHER		
8.1Illiterate	15	25
8.2 Primary	9	15
8.3 Secondary	19	31.6
8.4 Higher secondary	7	11.6
8.6 Graduation and above	10	16.6
9.FATHER EMPLOYEMENT STATUS		
9.1 Government employee	21	35

9.2 Private employee/self-employ.	39	65
10. MOTHER EMPLOYMENT STATUS		
10.1 Unemployed	54	90
10.2 Government employee	4	6.6
10.3 Private employee/self-employee	2	3.3
11. NUMBER OF FAMILY MEMBER		
11.1 <3	8	13.3
11.2 4-6	34	56.6
11.4 7-9	14	23.3
11.5 >10	4	6.6
12.TYPE OF FAMILY STRUCTURE		
12.1 Nuclear	48	80
12.2 Joint	12	20
13.FAMILY MONTHLY INCOME		
13.1 <Rs.5000	13	21.6
13.2 Rs.5000-Rs.10,000	12	20
13.3 Rs.10,000-Rs.15,000	9	15
13.4 >15,000	27	45
14.RESIDENCE (PAST 1 MONTH)		
14.1 Rural	38	63.3
14.2 Urban	22	36.6
15.PERSONAL HABITS		
15.1 No	60	100
If yes specify		
16.NUTRITIONAL PATTERN OF STUDENT		
16.1 Vegetarian	7	11.6
16.2 Ova-vegetarian	15	25
16.3 Lacto-vegetarian	22	36.6
16.4 Non-vegetarian	16	26.6
17.AMOUNT SPEND ON FOOD MONTH BY STUDENT		
17.1 <Rs.1000	43	71.6
17.2 Rs.1001-Rs.2,000	7	11.6
17.3 Rs.2001-Rs.3000	4	6.6
17.4 Rs.>3000	6	10
18.HISTORY OF ANY ILLNESS		
18.1 Yes	10	16.6
18.2 No	50	83.6
19.DO YOU DONE ANY PHYSICAL ACTIVITY		
19.1 Yes	29	48.3
19.2 No	31	51.6
20. IF YES, HOW MANY HOUR SPEND ON ACTIVITY		
20.1 <1 hr	9	15
20.2 1-2hr	20	33
21. WHICH TYPE OF ACTIVITY		
21.1 Walking/ Jogging	5	17.2
21.2 Running	7	24.13
21.3 Exercise	5	17.2
21.4 House Work	12	41.37

Table-1.

Frequency and percentage distribution showing that in the present study majority of students 43 (71.6%) were aged b/w 18-23 years of which 30 (50%) were boys and 30 (50%) were girls. Most of them were Hindus (97%) and 60% OBC category. Regarding father's education, a majority had graduation level of education (40 %) and 31.6% had high secondary level. Regarding their mother's education level, 31.6% had secondary education and 25% were illiterate. Most of the mothers were not working (90%).57.6 % students having 4-6 family members, 45% had family monthly income Rs. >15,000 per month, (80%) belonged to nuclear family, 63.3% are rural. All had denied personal habits (smoking, alcohol, tobacco chewing, etc,), consumed a lacto- vegetarian diet and 26.6 % followed a non-vegetarian along with a vegetarian diet, 71.6% student spend Rs<1,000/ month on food, 83.6% had no history of any illness, some of them done housework as physical activity.

Table 2: Comparison of Nutritional Status of Student with the Recommended Daily Allowance (RDA) of ICMR Calorie

LOW INTAKE	ADEQUATE INTAKE	HIGH INTAKE
19	30	11

Table 2 showing 30 students have adequate calorie intake and remaining 19 are low and 11 are high calorie intake respectively.

Table-3: Comparison of Nutritional Status of Student with The Recommended Daily Allowance (RDA) Of ICMR Protein

LOW INTAKE	ADEQUATE INTAKE	HIGH INTAKE
16	19	25

Table 3 showing 25 students have high protein intake and remaining 19 are adequate and 16 are high calorie intake respectively.

DISCUSSION

The result of study shows that majority of students (43 students, or 71.6 percent) were between the ages of 18 and 23 years, with 30 students (50 percent) being males and 30 students (50 percent) being girls. The vast majority of them were Hindus (97 percent), with 60 percent belonging to the OBC group. 71.6 percent of students had a lacto-vegetarian diet and 26.6 percent maintained a non-vegetarian diet in addition to a vegetarian diet, 83.6 percent had no history of sickness, and some of

them were HIV positive. During the current research, we discovered that the vast majority of students did not consume enough calories or protein to satisfy the recommended dietary requirement[11,13]

The monthly income of the family is statistically significant relationship was found between protein consumption and ICMR RDA [12], when the variables of residence, sickness history, and kind of activity were taken into account.

Gender, year of study, number of family members, and other information, nutritional patterns of students, the amount of money spent on food each month, and the history of sickness all indicated that there was a statistically significant relationship between calorie consumption and the ICMR recommended daily allowance.[14,15,16]

Vaijayanthi Kanabur and Dr. R. P. Lalitha Reddy conducted a study on nutritional status of female young adults energy intake and malnutrition among 100 healthy female college students. Students were selected for the study by purposive sampling. Interviewer administered structured questionnaire was used to obtain general information. A 24-hour dietary recall method was used to collect the data regarding the energy intake. The age of the students ranged from 20-22 years. Majority of the subjects were Hindus, belonged to nuclear families. The results of the study show that 38 per cent of the subjects' energy intake was less than the recommended values.[10]

Another study Shishir Kumar and AshaKumari conducted a Nutritional survey of the students showed that out of 200 students, on whom most of the students (91.0%) were non-vegetarian except 8.2% female and 9.04% male students as vegetarians. As against 2400 kcal of energy for sedentary adult males and 1920 kcal for sedentary adult females (like medical student) The findings of shoed that the energy consumption of forty five percent of students was found to be less than normal as per RDA. Study concludes that the nutritional status of the students of this college was not excellent.[4]

CONCLUSION

From the data analysis and findings of the present study, it is concluded that majority of the students with less than or more than recommended dietary allowance of calories and proteins and there are some

demographic variables statistically significant at p<0.05 level.

Conflicts of Interest Disclosure: None.

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