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Correlational Study on Food Habits and Its Health Impacts Among Nursing Students at SRM College of Nursing, Kattankulathur.

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ABSTRACT:

A correlational study on food habits and its health impacts among Nursing students at SRM College of Nursing, Kattankulathur. The objectives of the study were to assess the food habits of Nursing students in a selected college. To assess the health impacts of food habits among Nursing students. To correlate the health impacts and their food habits of Nursing students of selected college. To find out the association between food habits with their demographic variables. To find out the association between health impacts with their demographic variables. To determine the sample (N=150), The research approach used was quantitative research approach and the research design adopted was Correlational study design. The result revealed that majority of the Nursing students 99(66.0%) had poor food habits and 51 (34.0%) had good food habits and 148 (98.7%) had good health status, 2(1.3%) had poor health status. Correlation reveals that the mean score of food habit was 4.73 with standard deviation ± 1.80 and the mean score of health status was 0.09 with standard deviation ± 0.31 . The calculated Karl Pearson's Correlation value of $r = 0.412$ shows a positive correlation which was significant $p < 0.001$ and there is no statistically significant association between the level of food habits among Nursing students at $p > 0.05$ and there is statistically significant association between the level of health status with the demographic variables "Age $p = 0.013$ " and "Course of study $p = 0.021$ " at $p < 0.05$. While all other demographic variables such as gender, year of study, place of living, BMI were not having statistically significant association with level of health status among Nursing students.

Keywords: Health impacts, Food habits, Nursing students.

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1. Introduction

Nutrition is the science that interprets the interaction of nutrients and other substances in food, in relation to maintenance, growth, reproduction, health and disease of an organism. Nutritional status is the condition of the body in those respects influenced by the diet, the level of nutrients in the body and the ability of those levels to maintain normal metabolic integrity. Nutritional assessment is an in-depth evaluation of both the objective and subjective data related to an individual's food and nutrient intake, lifestyle, and medical history. It includes food intake, absorption, assimilation, biosynthesis, catabolism and excretion. ^[1]

For adults, general nutritional adequacy is assessed by measuring weight and height; the result is commonly expressed as the body mass index, the ratio of weight (kg) to height (meter sq.) Many industrialized countries now collect data on nutritional status of the adolescent population. ^[2]

Nearly half of the adolescent girls aged 15-21 in India are underweight, with a body mass index of less than 18.5. The Department of Nutrition for Health and Development, in collaboration with FAO (Food and Agriculture Organization), continually reviews new research and information from around the world on human nutrient requirement and recommended nutrient intake. This is a vast and never-ending task, given the large number of essential human nutrients. These nutrients include protein, energy, carbohydrates, fats and lipids, a range of vitamins, and a host of minerals and trace elements. ^[3]

Many countries rely on WHO (World Health Organization) and Food and Agricultural Organization (FAO) to establish and disseminate this information, which they adopt as part of their national dietary allowances. The establishment of human nutrition requirements is the common foundation for all countries to develop food-based dietary guidelines for their population. ^[4]

Adolescence (ages 11-21 yrs), the transition between childhood and adulthood, is one of the most dynamic periods of human development. Adolescence is characterized by dramatic physical, social, cognitive and emotional changes. These changes, along with adolescent growing independence, search for identity, concern with appearance, need for peer acceptance, and active lifestyle, can significantly affect their eating behaviors and nutritional status. Rapid physical growth creates an increase in demand for energy and nutrients. ^[5]

In the 21st century, people were facing issues such as obesity, stress, diabetes, heart related problems etc. These are nothing but lifestyle related problems and diseases. A health and disciplined routine with good food habits can help stay away from these health issues in today's time. College eating habits and lifestyles can add pounds of weight to students. Fast food consumption and breakfast skipping increased during the transition to adulthood, and both dietary behaviours are associated with increased weight gain from adolescence to adulthood. These behaviours may be appropriate targets for intervention during this important transition.

2. Methods And Materials

The research approach was quantitative research approach and the research design adopted was Correlational study design. The sample size was 150 Nursing students who fulfilled the inclusion criteria were chosen by using purposive sampling technique. Data collection was done at SRM College of Nursing, Kattankulathur. Approximately 20 minutes were spent to elicit data from the participants. On the first day demographic variables and food habits and its health impacts was assessed by using Structured Interview Questionnaire (SIQ). Confidentiality was maintained throughout the procedure. Data was analysed by using descriptive and inferential statistics.

3. Results

Table 1: Frequency and percentage distribution of demographic variables of nursing students.
n = 150

Demographic Variables	Frequency	Percentage
Age		
17 years	2	1.3
18 years	25	16.7
19 years	57	38.0
20 years	66	44.0
Gender		
Male	49	32.7
Female	101	67.3
Course of study		
B.Sc. (N)	136	90.7
DGNM	14	9.3
Year of study		
I Year	17	11.3
II Year	62	41.3
III Year	70	46.7
IV Year	1	0.7
Place of living		
Home with family	28	18.6
Paying guest	27	18.0
Private hostel	43	28.7
College hostel	52	34.7
BMI		
Underweight (<18.5)	29	19.3
Healthy (18.5 – 24.9)	105	70.0
Overweight (25 – 29.9)	15	10.0
Obese (30 -39.9)	1	0.7

Table 1 reveals that out of 150 Nursing students 66 (44%) were aged 20 years. With regard to gender 101 (67.3%) were female. Regarding course of study, 136 (90.7%) were B.Sc.(N) students. In relation to year of study 70 (46.7%) were III-year students. In respect to place of living 52(34.7%) were living in college hostel. With regard to BMI majority of the Nursing students 105 (70%) had healthy body weight.

Table 2: Frequency and percentage distribution of food habits among nursing students.
n = 150

Food habits	Frequency	Percentage
Poor food habit (≤ 5)	99	66.0
Good food habit (≥ 6)	51	34.0

Table 2 reveals that out of 150 Nursing students, 99 (66%) had poor food habits and 51 (34%) had good food habits

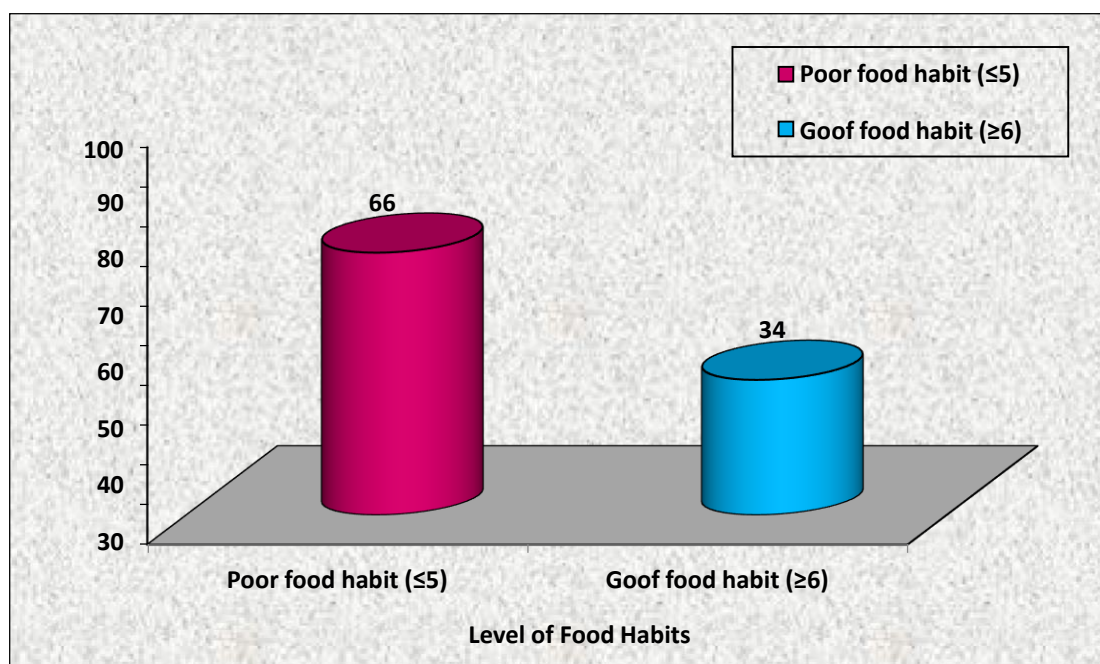


Fig 4.2.1 Food habits among Nursing students

Table 3: Frequency and percentage distribution of health impacts among nursing students
n = 150

Health Status	Frequency	Percentage
Good health status (<3)	148	98.7
Poor health status (≥ 3)	2	1.3

Table 3 shows that out of 150 Nursing students, 148(98.7%) had good health status and 2(1.3%) had poor health status

Table 4: Frequency and percentage distribution of level of food practice among nursing students.
n = 150

Food Practice	Frequency	Percentage
What did you eat your breakfast?		
At home	47	31.4
At university	38	25.3
At canteen or restaurant	53	35.3
Others	12	8.0
What do you usually eat for breakfast?		
Rich – based food	82	54.7
Fruits or vegetables	36	24.0
Bread or cereal	24	16.0
Others	8	5.3

Main reasons for skipping breakfast?		
Do not have time to eat or prepare food	98	65.3
Lazy to prepare food	37	24.7
Not enough money to buy food	4	2.7
Others	11	7.3
How many meals does your daily diet contains?		
1 meal	44	29.3
2 meals	41	27.3
3 meals	51	34.0
More than 3	14	9.3
How often do have snacks between meals?		
Never	41	27.3
Always	32	21.3
Sometimes	58	38.7
Rarely	19	12.7
Food Practice	Frequency	Percentage
How often do have any beverages in a day?		
Never	32	21.3
1 – 3 times	85	56.7
4 – 7 times	29	19.3
More than 7	4	2.7
How many cups of milk to you have in a day?		
Never	32	21.3
1 – 3 times	86	57.4
4 – 7 times	29	19.3
More than 7	3	2.0
How many sea meals does your diet contain in a week?		
Never	56	37.3
1 – 3 times	65	43.4
4 – 7 times	23	15.3
More than 7	6	4.0
How often do you have vegetables in a week?		

Never	23	15.3
1 – 3 times	66	44.0
4 – 7 times	40	26.7
More than 7	21	14.0
How often do you have meat in a week?		
Never	30	20.0
Everyday	44	29.3
3 times	43	28.7
Once	33	22.0
How often do you have fast food in a week?		
Never	36	24.0
1 – 3 times	68	45.3
4 – 7 times	30	20.0
More than 7	16	10.7
Food Practice	Frequency	Percentage
How often do you have soft drinks in a week?		
Never	26	17.3
1 – 3 times	81	54.0
4 – 7 times	29	19.4
More than 7	14	9.3
If you skip a meal, which meal it would be usually?		
Breakfast	67	44.7
Lunch	30	20.0
Supper	30	20.0
I don't skip a meal	23	15.3
How often do you over eat?		
Everyday	22	14.6
6 – 4 week	28	18.7
3 – 1 week	72	48.0
Never	28	18.7
How often do you eat out?		
Everyday	24	16.0

4 – 6 week	27	18.0
1 – 3 week	75	50.0
Never	24	16.0

Table 4 depicts that out of 150 Nursing students, 53 (35.3%) used to eat breakfast at canteen or restaurant, 82 (54.7%) usually eat rich – based food for breakfast, 98 (65.3%) donot have any time to eat or prepare food, 51 (34%) responded that their daily diet contains 3 meals, 58 (38.7%) sometimes used to have snacks between meals, 85 (56.7%) used to have beverages 1 – 3 times in a day, 86 (57.4%) used to have milk 1 – 3 times in a day, 65 (43.4%)responded that their diet contain seal meals 1 – 3 times in a week, 66 (44%) used to have vegetables 1 – 3 times in a week, 44 (29.3%) used to have meat every day in a week, 68 (45.3%)used to have fast food 1 – 3 times in a week, 81(54%) used to have soft drinks 1 – 3 times in aweek, 67 (44.7%) used to skip breakfast usually, 72 (48%) used to over eat 3 – 1 week and 75 (50%) eat out 1 – 3 weeks.

Table 5: Correlation between food habits and health impacts among Nursing students(Karl Pearson's coefficient of correlation)
n = 150

Variables	Mean	S.D	Karl Pearson's Correlation Value
Food habits	4.73	1.80	r = 0.412 p=0.0001, S***
Health status	0.09	0.31	

*-Significant at 5% level **-Significant at 1% level

Table 5 reveals that out of 150 nursing students, the mean score of food habit was 4.73 with standard deviation ± 1.80 and the mean score of health status was 0.09 with standard deviation ± 0.31 . The calculated Karl Pearson's Correlation value of $r = 0.412$ shows a positive correlation which was found to be statistically significant at $p < 0.001$.

Table 6: Association of level of food habits and health status among nursing students with their selected demographic variables
n = 150

Demographic Variables	Food habits	Health status
	Chi-Square & p-value	Chi-Square & p-value
Age	X ² =1.633 d.f=3 p=0.565 N.S	X ² =16.063 d.f=6 p=0.013 S*
17 years		
18 years		
19 years		
20 years		
Gender	X ² =0.243 d.f=1 p=0.622	X ² =0.946 d.f=2 p=0.684
Male		
Female		

	N.S	N.S
Course of study	$X^2=1.762$	$X^2=8.941$
B.Sc. (N)	d.f=1	d.f=2
DGNM	p=0.237	p=0.021
	N.S	S*
Year of study	$X^2=2.991$	$X^2=8.777$
I Year	d.f=3	d.f=6
II Year	p=0.380	p=0.077
III Year		
IV Year	N.S	N.S
Place of living	$X^2=2.684$	$X^2=7.331$
Home with family	d.f=3	d.f=6
Paying guest	p=0.462	p=0.218
Private hostel	N.S	N.S
College hostel		
BMI	$X^2=3.818$ d.f=3 p=0.280 N.S	$X^2=6.030$ d.f=6 p=0.271 N.S
Underweight (<18.5)		
Healthy (18.5 – 24.9)		
Overweight (25 – 29.9)		
Obese (30 -39.9)		

*-Significant at 5% level **-Significant at 1% level

Table 6 shows that out of 150 Nursing students, there is no statistically significant association between the level of food habits at $p > 0.05$ and there is statistically significant association between the level of health status with the demographic variables “Agep = 0.013” and “Course of study p = 0.021” at $p < 0.05$. While all other demographic variables such as gender, year of study, place of living, BMI were not having statistically significant association with level of health status among Nursing students.

4. Discussion

According to the study it reveals that majority of the Nursing students 99(66.0%) had poor food habits and 51 (34.0%) had good food habits and 148 (98.7%) had good health status,

2(1.3%) had poor health status. Correlation reveals that the mean score of food habit was 4.73 with standard deviation ± 1.80 and the mean score of health status was 0.09 with standard deviation ± 0.31 . The calculated Karl Pearson's Correlation value of $r = 0.412$ shows a positive correlation which was significant $p < 0.001$ and there is no statistically significant association between the level of food habits among Nursing students at $p > 0.05$ and there is statistically significant association between the level of health status with the demographic variables "Age $p = 0.013$ " and "Course of study $p = 0.021$ " at $p < 0.05$. While all other demographic variables such as gender, year of study, place of living, BMI were not having statistically significant association with level of health status among Nursing students.

5. Conclusion

The study focused to assess the food habits and its health impacts among Nursing students in SRM College of Nursing. The study concluded that majority of the Nursing students 99(66.0%) had poor food habits and 51 (34.0%) had good food habits and 148 (98.7%) had good health status, 2(1.3%) had poor health status. Hence, there is a need for healthy food habits to improve the level of health impacts.

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