Evaluation of eating attitudes and healthy life behavior of nutrition vs. Non-nutrition college students

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Abstract

College students are frequently regarded as having a higher risk of developing eating problems. Students frequently exhibit disordered eating patterns, which may have an impact on their performance and health an individual’s health status as an adult depends on their early-life habits. The present study assessed the prevalence of eating disorders and also evaluated the healthy life behaviors of students of nutrition and non-nutrition backgrounds, which aimed to provide information about their lifestyles, seek the prevalence of eating disorders, and determine whether it’s different with their education. Tools used were EAT-40, HPLP-II scales and anthropometric parameters. The study was conducted with 100 postgraduate students, and a descriptive cross-sectional research design was followed. The study showed that the prevalence of eating disorders was low in students related to nutrition when compared to other majors. The HPLP-II scale scores of nutrition-related students were comparatively higher in each and every subscale, including health responsibility, physical activity, nutrition, self-actualization, interpersonal relations, and stress management, when compared to non-nutrition students.

Keywords: College students; Prevalence; Eating disorders; Behavior; Nutrition

1. Introduction

The food is a basic human need and a prerequisite for healthy life, and a proper diet is essential for growth, development and maintenance. University students are a large part of the population, and their food choices are influenced by various factors such as social, cultural, peer bunch impact, religion, money, adequacy of finance and other inanity(1). A healthcare professional should identify prevalence of eating habit in society that is likely to have effect on health and create awareness of healthy life in society, and students should understand the significance of good health and display the behavior to intensify the inspiration for individual in community to induce a healthy behavior [2, 3]. It is important to determine healthy life behavior in order to control risk factor of possible health problem. This study aimed to assess the prevalence of eating disorder among post graduate student of Nutrition and Human Resource Management and to compare and contrast the level of involvement in health promoting behavior between students.

2. Material and methods

The present study follows a descriptive cross-sectional research design with a quantitative research method. The study was conducted among 100 female post-graduation students from the department of nutrition and human resource management by using the purposive sampling technique. A standardized, self-administered questionnaire was used to collect data and analyze it through SPSS software. For assessing eating disorders, the EAT-40 test was used, and to
analyze the health-promoting behavior among students, the Health Promoting Life Style Profile II (HPLP-II) was used and compared. The objectives of the study are: 1. to determine the comparison between nutrition and non-nutrition students by using anthropometric measurement and the Eating Attitude Test [EAT-40] for the assessment of eating disorders. 2. To compare and contrast the levels of involvement in health-promoting behaviors of students from both nutrition and non-nutrition backgrounds. Anthropometric parameters such as weight, height and body mass index was analyzed

Eating Attitude Test [EAT-40]-. EAT-40: Eating Attitude Test. The scale, which was built with 40 items to assess anorexia nervosa symptoms, bears dates on its construction. The 6-point EAT-40 scale has a lot of possibilities, is easy to use, and can be stored. The test consists of 40 questions with six possible answers: always, frequently, infrequently, and never. The findings of each item were averaged to determine the scale's overall score (4.5).

The HPLP-II instrument offered a holistic assessment of people's psycho-social well-being and habits that promote health. It has received a great deal of attention in the field of health promotion and research, and it has been said to be valid and reliable for use with a range of demographics, including adolescents and young adults. Health Responsibility: This subscale, which includes nine items and is focused on an individual's health issues, is one of six that make up the 52 questions that make up the overall scale. b. Physical Activity: This sub-scale contained 8 items related to physical activity and leisure time. c. Food and Nutrition (6, 7).

3. Results and discussion

3.1. Anthropometric measurements of students

Table 1 Height and Weight of the Students

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall N = 100 n (%)</th>
<th>Nutrition N = 50 n (%)</th>
<th>Non-nutrition N = 50 n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (cm)a</td>
<td>159.1 (7.1)</td>
<td>158.1 (6.9)</td>
<td>160.2 (7.2)</td>
</tr>
<tr>
<td>Weight (kg)b</td>
<td>59.9 (50.4 – 67.0)</td>
<td>55 (50.0 - 64.5)</td>
<td>61.6 (55.0 – 68.0)</td>
</tr>
</tbody>
</table>

The above Table: 1 shows the distribution of height and weight of the 100 collected samples. The mean height for Nutrition students is 158.1[6.9], whereas for Non-Nutrition students is 160.2[7.2]. With Overall mean for height variable is 159.1[7.1] regarding median of weight of Nutrition students was 55 kg and for Non-Nutrition students was 61.6 kg. With Overall median for weight variable was 59.9 kg whereas, the inter quarters range is (50.4 – 67.0).
Figure 1 depicts the BMI of the 100 collected samples, with the majority of nutrition students (66%), and non-nutrition students (44%), having normal BMI (18.5–24.9 kg/m2). 10% of nutrition students and 4% of non-nutrition students were underweight (18.4 kg/m2). And regarding the overweight (25–29.9 kg/m2) and obese (30 kg/m2) classifications of BMI in nutrition, they were 16% and 8%, whereas for non-nutrition students, they were 38% and 14%, respectively.

3.2. Comparison of eating disorder score in the nutrition v/s non-nutrition students

Table 2 Eating disorder Score of students

<table>
<thead>
<tr>
<th>Eating disorder</th>
<th>Total</th>
<th>Study Discipline</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nutrition N = 50</td>
<td>Non-Nutrition N=50</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>Yes (≥ 30)</td>
<td>21 (21)</td>
<td>5 (10)</td>
<td>16 (32)</td>
</tr>
<tr>
<td>No (&lt;30)</td>
<td>79 (79)</td>
<td>45 (90)</td>
<td>34 (68)</td>
</tr>
</tbody>
</table>

*Statistically significant at 5% level of significance (Chi-square test)

The above Table:2 illustrates the distribution of EAT-40 Scores of the study population. A Scores ≤ 30 indicates the prevalence of eating disorder. In total study population 21% have eating disorder. Out of that Non-Nutrition major students' scores higher percentage of 32% when compared to nutrition students which scores 10%. Chi square test was used and the p-value was 0.007 which was statistically significant at 5% of level of significance. According to previous study conducted by R.J. Mehr, et al., 2005 found that pre medicine were significantly higher than the pre-nursing and dietetic majors. Hence, our present study was in accordance with previous studies (8,9).

3.3. Description of HPLP-II scores

Table 3 Health Promoting Lifestyle Profile of students

<table>
<thead>
<tr>
<th>Health Promoting Lifestyle Profile</th>
<th>Study Discipline</th>
<th>Median (IQR)</th>
<th>P value#</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-nutrition N=50</td>
<td>Nutrition N=50</td>
<td></td>
</tr>
<tr>
<td>Scores of health responsibility</td>
<td>18 (14-20)</td>
<td>21 (18-25)</td>
<td>0.001</td>
</tr>
<tr>
<td>Scores of physical activity</td>
<td>17 (13-19)</td>
<td>20 (15-23)</td>
<td>0.026</td>
</tr>
<tr>
<td>Scores of Nutrition</td>
<td>20 (18-22)</td>
<td>24 (21-28)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Scores of self-actualization</td>
<td>23 (20-26)</td>
<td>29 (24-32)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Scores of Interpersonal support</td>
<td>25 (21-26)</td>
<td>28 (25-31)</td>
<td>0.003</td>
</tr>
<tr>
<td>Scores of stress management</td>
<td>20 (17-21)</td>
<td>23 (20-26)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Total HPLP scores</td>
<td>122 (108-135)</td>
<td>141 (127-161)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

#reported p value obtained from Mann-Whitney U test. All p-values are statistically significant

Table 3 illustrates the distribution of HPLP-II scores in the study population. The higher the score, the healthier the lifestyle. Regarding the median scores of the subscales of the HPLP-II, say "Health Responsibility," "Physical Activity," "Nutrition," "Self Actualization," "Interpersonal Supports," and "Stress Management," the scores were higher in nutrition students with 21, 20, 24, 29, 28, and 23 when compared to non-nutrition students with median scores of 18, 17, 20, 23, 25, and 20 individually.

The complete median scores and interquartile range of HPLP-II for nutrition students were 141 (127-161), whereas non-nutrition students scored 122 (108-135). The Mann-Whitney U test was used to report the P-value. The overall P-value was 0.01, and all the subscales' p-values were also statistically significant.

According to a previous study conducted by Savci, et al. (2011), the total score of healthy lifestyle behaviors and physical activity subscale scores of the School of Health students with physical activity were significant. Hence, our present study was in accordance with previous studies (9,10).
4. Conclusion
The current study's conclusions were to find out more about students' lifestyles, assess the prevalence of eating disorders, and ascertain whether it altered depending on their educational background. Scales HPLP-II and EAT-40 were utilized as tools. Eating disorders were found to be less common among nutrition students when compared to non-nutrition students, and healthy lifestyles were found to be more common in nutrition students when compared to non-nutrition students. Hence, the study suggests it is believed that an individual's mind-set is dependent upon their diet; hence, the concept of food and nutrition is extremely important for the development and wellbeing of an individual student, irrespective of their educational background.

Colleges in general should institute a special department for nutrition to help their students develop healthy eating habits, improve their food choices, and discontinue their unhealthy lifestyle choices like smoking, consuming alcohol, and skipping meals. Students should also increase their knowledge about nutrition so that it can be a tool for prevention and cure of various diseases. Nutrition would help them to make a healthy living by channeling their behavior towards health responsibility, physical activity, nutrition (food and diet), self-actualization, interpersonal relations, and stress management. Adherence to healthy nutrition principles is at the top of all these behaviors.

Health educators and nutritionists play an important role at the university level. In order to implement nutrition lectures among all college students, teaching health education is important to help enhance their knowledge about nutrition. Health education campaigns offer to promote healthy nutritional attitudes, knowledge, and behavior, including healthy eating habits, among college students. Diet and nutrition are an extremely vital aspect and should always be taken into consideration, no matter what kind of education an individual is engaged in.

Compliance with ethical standards
Disclosure of conflict of interest
The authors declare no conflict of interest

Statement of ethical approval
Ethical approval was obtained from the student’s affairs department of the Clinical Nutrition of MMM College of Health Sciences and from the department of Human Resource Management, D.G Vaishnav College, and Chennai.

Statement of informed consent
Informed consent was obtained from all individual respondents included in the study

References


