

Obesity and Eating Habits of Undergraduate Female Nursing Students at Hail University, Saudi Arabia

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Abstract Background: Overweight and obesity are due to eating habits. Our study aimed to assess the prevalence of overweight and obesity in a sample of undergraduate nursing students at the University of Hail and to examine their eating habits. **Methods:** Cross sectional study design was used among female undergraduate nursing students. A valid and reliable questionnaire regarding food habits was used. SPSS version 23 was used for statistical analysis. **Results:** The prevalence of overweight and obesity based on body mass index presented, our study revealed that, there were underweight (29.9%), normal weight (23.4%), over weight (26.9%) and (19.8%) were obese. Regarding to eating habits, (46.7%) taking meals irregularly. In addition (14.7 %) taking breakfast rarely. Moreover, (35 %) eating meals except meals for two times. Also, (43.1%) taking snacks apart from regular meals daily. In addition to that, (18.3%) eating green, red or yellow colored vegetables rarely. According to the eating fruits, daily (25.4%), Three or four times per week (24.4%), Once or twice per week (32%) and (18.3%) rarely, (35.5%) eating fried food daily, (54.3%) eating food with family and friends, (34.5%) drinking soft drinks. **Conclusion:** We should focus on health education and stay away from ready-made foods and reduce fried food and focus on healthy eating in order to reduce overweight and obesity, as it is necessary to follow intervention strategies In order to improve eating habits.

Keywords: obesity, Hail University, KSA

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1. Introduction

Obesity is one of the conditions in which excess fatty tissue is present in the body, which exacerbates and increases health problems [1]. Obesity is defined as one of the conditions in which there is an abnormal accumulation of fat, in addition to the excessive accumulation in relation to adipose tissue, as this has a negative impact on health. Globally, there is an increase in the prevalence of obesity, as it is considered one of the serious epidemiological problems, and it is also considered one of the main causes of death worldwide [2]. Obesity promotes risk factor of type 2 diabetes [3] and cardiac diseases [4], also it increases the risk of death due to cancer of the oesophagus, rectum, liver, gallbladder, pancreas and kidney [5,6,7]. Overweight and obesity are due to eating habits, as the eating habits of young people are not affected by fast food, as it causes health risks in addition to the significant increase that leads to the spread of obesity, which is

considered one of the great global health challenges [8]. Individual factors, in addition to group factors, for example, social and environmental factors, are considered to be the influences of healthy eating. In Saudi Arabia, during the past decades, there has been a change in eating patterns for several reasons, including: the social situation, in addition to the economic situation. As these changes have a noticeable impact on the lifestyle of different age groups, especially children and youth [9]. In Saudi Arabia, there is a spread of obesity and overweight, especially among women, as this is based on data collected from seventeen thousand two hundred and thirty-two Saudis, where the ages are between thirty and seventy years [10]. In the Kingdom of Saudi Arabia, during the past decades, there has been a change in dietary habits in all age groups, as Saudis tend more towards maintaining health in addition to precautions against diseases. The percentage of reported obesity and its prevalence in Saudi Arabia has reached thirty-six percent, as according to researchers, The prevalence of obesity among Saudis is the bad eating habits of adults [10]. According to a cross-sectional study

of nursing students regarding weight gain, where ninety-five students from a private university participated in the study, the results of the study concluded that there is an increase in weight among nursing students by 52.6%, and they have high levels of stress by 36.8%. The study concluded that there is a correlation between weight gain and obesity with regard to male participants, in addition to an increase in blood pressure, a change in terms of waist circumference, lack of physical activity in addition to the consumption of unhealthy foods [11]. Based on our research in several published articles, we concluded that there are a limited number of studies conducted in Saudi Arabia with regard to obesity and dietary habits of students, where studies were conducted on health science students, medical students. Despite that, as far as we know, no recent studies have been published regarding the prevalence of obesity and dietary habits among undergraduate nursing college students. So our study aimed to assess the prevalence of overweight and obesity of undergraduate nursing students at the University of Hail and to examine their eating habits.

2. Methods

This is the cross sectional study design among undergraduate female nursing students at Hail University, Kingdom of Saudi Arabia.

The study applied on undergraduate students of the Faculty of Nursing at University of Hail from all levels who have a desire to participate in the study. It was implemented over a period of two months. 400 of female nursing students at the University of Hail were included in the study. According to Open Epi the sample size was 197 at confidence level 95%. For non response participants, we add 10% so the sample size was 207. We chose the samples randomly. A questionnaire was used consisting of a part of characteristics and demographic information such as age, gender, marital status, economic status, height, weight, body mass index, and the other part consists of questions related to habits related to lifestyle, including physical activity, hours of watching television, hours Sleep, eating habits such as drinking, smoking, questions about eating [2].

3. Data Analysis

SPSS version 23 was used for statistical analysis where descriptive statistics conducted, such as one-variable analysis of demographic characteristics, in order to display the results in numbers, percentages and tables. The prevalence of overweight and obesity based on body mass index and the relationship between the eating habits variables at p value < 0.05 considered statistically significant.

4. Ethical Considerations

Ethical approval was obtained from the scientific research ethics committee, University of Hail, and the informed consent of the students were obtained for

participation which is voluntary and they had the right to withdraw in any time.

5. Results

There were 197 female students participated in the study. Their age group were (18-20), (21-23) and more than 23 years: (38.6 %), (17.3 %) and (44.2 %) respectively. According to the material status, there were (55.8%) from our participants were single. And (49.2%) from our participants had moderate economic status.

The distribution of the Female Students according to BMI, 29.8 % were underweight, (23.4%) of them were normal, 26.9 % were overweight and 19.8 % were obese (Table 1).

Table 1. Distribution of the Female Students According to BMI

	N	%
<18.5 (Underweight)	59	29.9
18.5-24.9 (Normal Weight)	46	23.4
25-29.9 (Over Weight)	53	26.9
More or equal 30 (Obese)	39	19.8
Total	197	100.0

Also 46.7 % of participants taking meals irregularly. In addition to that (14.7%) of the participants were taking breakfast rarely. Moreover, 35% of participants were eating meals two times daily. Also, 43.1 % of them were taking snacks apart from regular meals daily. In addition to that, 18.3% of participants were eating green, red or yellow colored vegetables rarely. 25.4 % of the participants were eating fruits, daily or four times per week. 18.3 % of them were eating fruits once or twice per week and rarely. 35.5 % of participants were eating fried food daily.

6. Discussion

There were 197 female students participated in the study. The distribution of the Female Students according to BMI, 29.8 % were underweight, (23.4%) of them were normal, 26.9 % were overweight and 19.8 % were obese. Our study differed from a study conducted in Egypt, which concluded that obesity has spread among females by 46% [12]. One of the studies indicated that, according to reports issued by UNICEF Egypt and consistent with our study, which provided data related to overweight and obesity, as it showed that 33% of the participants suffer from overweight and obesity [2]. According to one of the studies conducted with regard to nursing students, the study agreed that there is a percentage of students suffering from overweight in addition to obesity in the following percentages, respectively: (29%) and (18.2%). Where the study concluded that there is a priority with regard to health education [13].

According to the eating habits of undergraduate nursing students at the University of Hail, Kingdom of Saudi Arabia. There were high percentage from our participants about (46.7%) taking meals irregularly. In addition to that (14.7%) from our participants taking breakfast rarely. Moreover, Thirty Five percent from our participants eating

meals except meals for two times and (10.2%) for four times. Also, (43.1%) taking snacks apart from regular meals daily. In addition to that, (18.3%) from our participants eating green, red or yellow colored vegetables rarely. According to the eating fruits, daily (25.4%), Three or four times per week (24.4%), Once or twice per week (32%) and (18.3%) rarely. (35.5%) from our participants eating fried food daily. (54.3%) from our participants eating food with family and friends (34.5%) from our participants drinking soft drinks. According to a study indicated that there is one study similar to our study showed that there is a percentage (63.3%) of Saudi students eat irregular meals,, in addition to finding that in Saudi Arabia there are (45.7) reported that they eat two meals a day, and that eating light meals was one of the habits of one third of the Saudi students. The study was similar to ours in that less than half of the students eat vegetables daily, and some of them eat vegetables three to four times a week, in addition to that 65.3% of the students, according to the study, eat fried foods daily or three to four times. per week. Sixty percent of the students reported eating fruits daily or 3/4 per week, there were 50% from the students eating with their family and friends and that's consistent with our study [2]. Our study shown that, that there were significant statistical relationship regarding lifestyle Practices Including Eating Habits, Meal Patterns, Fruits and Vegetables Intake, and Fried Food at P-value = 0.000.

7. Conclusion

Paying attention to the nurses' eating habits, focusing and addressing the issue of obesity and overweight is very important, and it must be focused on and increase the level of knowledge in healthy eating and the harmful effects of obesity and overweight, as nurses help in the future to transfer health information to the patient in terms of healthy eating and avoiding obesity and overweight.

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