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Research Article

PREVALENCE OF OBESITY AMONG MEDICAL STUDENTS¹Hafiz Kaleemullah, ²Hamid Salman, ³Kamran Khan¹King Edward Medical University Lahore, ²Lady Reading Hospital Peshawar, ³Sardar Begum Dental College and Hospital Peshawar.**Article Received:** October 2019 **Accepted:** November 2019 **Published:** December 2019**Abstract:**

Obesity is a global issue among the general population. It is also increasing day by day among the medical students. Objective: To see the prevalence of obesity among the medical students of different medical colleges.

***Material and Methods:** 156 medical students from different medical colleges were included in this study. A predesigned questionnaire was served. Data was collected and analyzed in SPSS 23.*

***Results:** Out of 156 students, questionnaire of 123 were received. Mean age of the students was 23.14 ± 2.09 years. Nine students (7.32%) were underweight, 80 (65.04%) were of normal weight, 20 (16.26%) were overweight, 10 (8.13%) were the obese class I and 4 (3.25%) were obese class II.*

***Conclusion:** According to this study, the ratio of over-weighting and obesity is higher among the medical students so there is a need to modify the lifestyle and eating habits.*

Keywords: Obesity, Medical students, Pakistan

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INTRODUCTION:

Obesity is an abnormal fatty deposition in the body due to certain reasons i.e. improper eating habits, for example, high-calorie diet, non-healthy or sedentary lifestyle and lack of exercise. Obesity if not controlled can impair one's health leading to certain diseases and complications e.g. hypertension, cardiovascular diseases, stroke, diabetes and certain carcinomas for example breast or colon [1]. People with a body mass index of 25 to 29.99 are pre-obese, 30 to 34.99 are obese class-I, 35.00 to 39.99 are obese class II and ≥ 40 are obese class III [2].

According to studies, around 1.1 billion people who are overweight and 300 million people who are obese are present worldwide². In Pakistan, obesity is also increasing day by day and is usually found in males and females of middle ages. According to a study, it is increasing due to urbanization, increased economic development leading to changing lifestyle including eating junk food and lesser physical activity [3].

Among medical students, obesity is also increasing throughout the world. According to a study in Malaysia, around 15.9% of students were found to be pre-obese and 5.2% were in obese class-I [1]. Reasons for this increasing obesity rates were the same as found in the general population. Studies from other countries of the world also support this reason [4,5].

This study was conducted in order to see the prevalence and frequency of obesity and overweighting

among the students studying in various medical colleges. This study will help us in understanding the reasons for obesity and planning some modalities to control this growing problem.

MATERIAL AND METHODS:

This questionnaire based cross-sectional study was conducted among medical students of different medical colleges. One hundred and fifty six medical students were the part of this study. An informed consent was taken from the students and a predesigned questionnaire was served. Questions about height, weight, BMI, lifestyle, eating habits, and physical activity were asked. Data collected was analyzed using SPSS 23. Categorical variables were presented as numbers and percentages. Quantitative variables were presented as mean and standard deviation.

RESULTS:

Out of 156 students, questionnaire of 123 were received. The response rate was 78.84%. There were 56 females (45.52%) and 67 males (54.47%). Mean age of the students was 23.14 ± 2.09 years. Mean age of the female students was 22.97 ± 2.01 years and mean age of the male students was 24.01 ± 0.98 years. Nine students (7.32%) were underweight, 80 (65.04%) were of normal weight, 20 (16.26%) were overweight, 10 (8.13%) were the obese class I and 4 (3.25%) were obese class II. Male and female students according to BMI and certain reasons among overweight and obese were distributed. (Table-I)

Condition	Female	Male	Total
Underweight	5	4	9
Normal weight	39	41	80
Overweight	8	12	20
Class I	3	7	10
Class II	1	3	4
Class III	0	0	0
Total	56	67	123

Table-I: Distribution of students according to BMI

Certain reasons for the students having increased weight and obesity were junk food (29.73%), decreased physical activity (28.54%), positive family history (5.41%) and chronic diseases (8.11%).

DISCUSSION:

In this study, 34 students (27.64%) were overweight and obese. Some of the reasons were eating junk food i.e. high-calorie diet and lesser physical activity. There

was a history of obesity in families among some students. This picture depicts that a large number of students who are overweight and obese eat improper food and have lower physical activity. This study complies with the results of other studies who aim to see the prevalence of obesity in the general population. In a Malaysian study among medical students, similar results were found and around 35.9% of the students were overweight and obese². In a study by Chhabra et

al. around 13.7% were obese and overweight⁶. Similar kind of studies has also been conducted in Greece, India, and Chicago [4,7,8].

This high number of obesity may lead to certain diseases among the students such as cardiovascular studies, hypertension, and diabetes. That may hinder their learning abilities and have a negative impact on becoming a better clinician.

LIMITATIONS:

A small number of students were included in this study. This kind of study should be conducted on a larger scale in order to produce better results.

CONCLUSION:

According to this study, the ratio of over-weighting and obesity is higher among the medical students so there is a need to modify the lifestyle and eating habits.

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