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Research Article

**PREVALANCE OF OBESITY AMONG MEDICAL STUDENTS**Maheen Asim<sup>1</sup>, Quratulain Asma<sup>2</sup>, Maira Aslam<sup>3</sup><sup>1</sup>Rawalpindi Medical College, <sup>2</sup>DHQ Teaching Hospital Dera Ghazi Khan, <sup>3</sup>Rawalpindi Medical University.**Article Received:** October 2019    **Accepted:** November 2019    **Published:** December 2019**Abstract:**

*Background: Overweighing and obesity are increasing day by day. It is highly prevalent in young generation especially students facing stressful academics. Objective: To determine the prevalence of overweighing and obesity among medical college students. Material and Methods: One hundred and twenty seven students from different colleges were included in this study. A simple questionnaire was served after taking the informed consent. Data was collected and analyzed in SPSS 23. Results: Out of 127, thirty-six students (28.35%) were overweighing and obese. Conclusion: There is a high prevalence of obesity and overweighing among medical college students.*

**Keywords:** Obesity, Medical students, Pakistan.**Corresponding author:****Maheen Asim,**  
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**INTRODUCTION:**

Fat deposition up to a certain limit in the body is normal and a must for an individual. Obesity is defined as irregular and abnormal deposition of fat in one's body. This abnormal fat deposition may be due to many reasons including lack of exercise, inactive lifestyle, non-health livings, and high-caloric diets. According to studies, almost 1.1 billion individuals in this world as overweight and around three hundred million are suffering from certain levels of obesity. According to the standard classification, individuals having a body mass index (BMI) of 25 to 29.99 are considered as pre-obese, 30 to 34.99 are considered as obese class-I, 35.00 to 39.99 are considered as obese class II and  $\geq 40$  are considered as obese class III. According to the studies, if this abnormal deposition of fat is not controlled timely, it may lead to certain complications and impair one's life. Some of the complications include CVS disorders, certain carcinomas, diabetes, and hypertension and stroke. These complications may be associated with each other [1, 2].

According to facts and figures, obesity is increasing day by day. In Pakistan, it is also increasing gradually due to certain reasons i.e. lack of physical activity and trends of eating junk food. These problems happened due to expanding urbanization and adopting a western lifestyle. Students are also prone to this morbid condition. According to studies, obesity is increasing day by day among medical students, In Malaysia prevalence of obesity among medical students was found to around 5.2%. Studies by Kushner et al. and the World Health Organization also support these facts [3-5].

The purpose of this study was to determine the frequency of over-weighting and obesity among medical students. This study will help us understand the certain reasons for this situation and plan certain techniques in order to control this growing problem among this young generation.

**MATERIAL AND METHODS:**

This cross-sectional study was conducted in different medical colleges. 127 medical students of either gender were included in this study. A predefined questionnaire was served after taking informed consent. Simple questions regarding their height, weight, body mass index, eating and lifestyle habits were asked. All the data was collected and analyzed in SPSS Ver. 23.0. Qualitative (categorical) variables were presented as numbers and percentages. The quantitative variables were expressed as mean and standard deviation.

**RESULTS:**

The mean age of the students was  $23.47 \pm 2.34$  years. The minimum age was 21 years and the maximum age was 25 years. There were 74 male (58.27%) and 53 female (41.73%) students in this study. The mean age of male patients was  $24.04 \pm 1.89$  years and mean age of female patients was  $23.96 \pm 2.49$  years. Total of 23 students (18.11%) including 17 male and 6 female students were overweight and eight students (6.30%) were class-I obese (Table-I). The mean age of the students who were overweighting or obese was  $22.67 \pm 2.12$  years.

Body Mass Index	Female	Male	Total	%age
Underweight	5	1	6	4.72
Normal weight	38	47	85	66.93
Overweight	6	17	23	18.11
Class I	2	6	8	6.30
Class II	1	2	3	2.36
Class III	1	1	2	1.57
Total	53	74	127	100.00

Table-I: Distribution of male and female students according to their BMIs.

Among the different reasons of overweighting and obesity were improper eating habits (38.89%), sedentary lifestyle (41.67%), family history (13.89%) and certain chronic diseases (5.56%).

Variable	Female	Male	Total	%age
Improper Eating Habits	5	9	14	38.89
Sedentary life style	3	12	15	41.67
Family History	1	4	5	13.89
Diseases	1	1	2	5.56
Total	10	26	36	100.00

Table II: Certain causes of overweighting and obesity among students

### DISCUSSION:

In this study, the mean age of the students who were overweighting or obese was  $22.67 \pm 2.12$  years. Total of 36 students (28.35%) was overweight and obese. This high prevalence among medical students at this young age raises a lot of concerns. Medical college students are true professionals and they know the risks and complications associated with overweighting and obesity. We tried to rule out the causes of this alarming issue. Fourteen students (38.89%) told that they have improper eating habits i.e. they eat junk and high-calorie diet. The reason might be the un-satisfactory food which is provided in the hostels and most of the students don't want to eat this food. Another reason that contributed high figures was a sedentary lifestyle (41.67%). Medical students face a lot of pressure and stress during their studies. So they give most of their time to their academics resulting in lesser physical activity and workout. This along with an improper diet contribute to 80% of the causes of over-weighting and obesity. Some students had a positive family history and some were suffering from chronic diseases or using some pharmacological therapy that contributed towards obesity.

According to a study by Chhabra et al. Prevalence of obesity among medical students was around 13.7%. These results are very similar to our study in Pakistan. Gopalakrishnan et al., in Malaysian study documented similar kind of results i.e. 39.5% of the students were overweighting and obese. Different studies by Kushner et al., Bertsias et al., and Gupta S et al., conducted in Chicago, Greece, and India also document the similar kind of results [2, 4, 6-8]. We conducted this study on a smaller number of students. This kind of study with extensive follow-up should be conducted for better results.

### CONCLUSION:

There is a high prevalence of obesity and overweighting among medical college students. So, there is a need to formulate certain policies in order to control this and educate the students to adopt a better lifestyle.

### ROLE OF AUTHORS:

Maheen Asim: Writting of the paper

Quratulain Asma: Data Collection and Analysis

Maira Aslam: Editing and Proofreading

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