



Frequency of obesity among lady doctors of Multan medical & dental college & hospital.

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Significance:

The most prevalent type of malnutrition is the obesity, which occurs in both developed and developing countries. It has replaced the most traditional public health concerns including under nutrition. The article titled frequency of obesity among Lady doctors of Multan medical and dental college and Hospital Multan is going to explore the alarming rate of obesity among Lady doctors of our society. These women should be able to find a better solution for their such an increased weight gain otherwise how they can be able to manage the other females of our society.

Abstract

Objective: To determine the frequency of obesity among lady doctors of Multan medical & dental college & hospital Multan and associated factors with it.

Methodology: A cross-sectional descriptive study was carried out in Multan medical & dental college and hospital from January 1, 2020, to March 30, 2020, after obtaining approval from the institutional review board. A closed-ended questionnaire was used to collect data from 159 lady doctors aged 22–60 years, including both married and unmarried females using a simple random sampling technique.

Results: Obesity was seen more frequently in married lady doctors. 64 (83.1%) as compared to 13 (16.88%) unmarried lady doctors, and the highest frequency of obesity was seen in the 50–60 years age group, that is, 22 (88%) obese as compared to 3 (12%) non-obese. The results were statistically significant ($P = 0.000$).

Conclusions: There is an alarming rate of obesity among married lady doctors and in the upper age group, that is, 50–60 years.

Introduction

Obesity is the abnormal growth of adipose tissue due to an increase in fat cell size (hypertrophic obesity) or an excess of fat cell number (hyperplastic obesity).¹ Worldwide the burden of obesity and overweight has doubled since 1980. This pandemic is more prevalent among women than among men.² Overweight and obesity among females arise at an alarming rate, especially in low- and middle-income countries.³ Pakistan ranked 9th among most obese nations of the world.⁴ According to WHO, 26% of female are obese. This alarming rate is higher among the urban population. A study conducted in

the northern areas of Pakistan suggested that the prevalence of obesity in females was 14.1%.⁵ According to WHO person is said to be obese if his BMI is ≥ 30 . Obesity is a multifactorial condition. It takes into account genetic, environmental, and psychological factors.⁶ However, the increased prevalence of obesity is mainly due to the high intake of a caloric rich diet and reduced physical activity.⁷ Obesity is clearly linked to increased mortality and morbidity. It leads to emergence of hypertension, diabetes mellitus, CHD, and many others.⁸ In context of obesity we cannot ignore the psychological issues related to obesity.⁹

Objectives: The objective of the study is to determine the rising prevalence of obesity among females doctors and assessing the factors that contribute to such prevalence.

Methodology: A cross-sectional descriptive study was carried out in Multan medical & dental college and hospital from January 1, 2020, to March 30, 2020, after obtaining approval from the institutional review board. A closed-ended questionnaire was used to collect data from 159 lady doctors aged 22–60 years, including both married and unmarried females using a simple random sampling technique. A list of lady doctors was obtained from the administration block. Lady doctors with chronic diseases, such as Cushing syndrome, hypothyroidism, and polycystic ovaries, were excluded from the study. Pregnant lady doctors were excluded from this study. After obtaining written informed consent, the sample size was determined using the lottery method (simple random sampling). The height and weight of the selected lady doctors were used to calculate the BMI. Data were analyzed using SPSS version 20. The mean and standard deviation were calculated for age and BMI. The frequency and percentage were calculated for marital status and obesity. Stratification was performed according to age and marital status. A post-stratification chi-square test was applied, with $P \leq 0.05$, as significant.

Results: The total study population was 159 patients, with a mean age of 34.59 and $SD \pm 10.017$. Mean BMI was 24.82 with $SD. \pm 4.49$. The maximum number of doctors was in age group < 30 years (42.1%). Most of the doctors were married (64.8%). Based on BMI, obesity was present in 48.4 % of patients. Moreover, the rate was higher among married doctors (83.1%). Obesity was the highest in the upper age group, that is, 50–60 years (88%). The results of the chi-square test were statistically significant ($p = 0.000$).

Frequency Distribution of Obesity. Figure No. 1

Obesity	Frequency	Percent
Yes	77	48.4
No	82	51.6
Total	159	100

Frequency distribution of obesity among married and unmarried lady doctors. Figure No.2

Obesity	Marital status		Total	P value
	Married	Unmarried		
Yes	64	13	77	0.000
No	39	43	82	
Total	103	56	159	

Frequency distribution of obesity among different age groups. Figure No. 3

Obesity	Age				Total	P value
	<30 yrs	30- 39 yrs	40-49 yrs	50-60 yrs		
Yes	17	27	11	22	77	0.000
No	50	21	8	3	82	
Total	67	48	19	25	159	

Discussion: Obesity is perhaps the fastest expanding illness worldwide, affected approximately 1.7 billion population globally. The main factors for this epidemic are the extreme intake of energy-dense food and unhealthy life style.¹⁰ From a clinical point of view, excessive obesity may lead to multiple physical limitations and is prone to many disabilities and diseases. Obesity occurs when the fat cell content is more than 30% in case of females. The primary objective of this study was to determine the prevalence of obesity among lady doctors. We found 48.4% of lady doctors as obese that was more as compared to that seen in general population that is 23.3%.¹¹ Another study conducted in general population in Punjab showed that prevalence of obesity was 29.6%.¹² A study conducted in Saudi Arabia showed the prevalence of obesity as 30.6% in female medical

students¹³. In Pakistan, one in every four individuals is obese.¹⁴ In our study, obesity was higher among married females which can be compared with a study conducted in Kenya,⁷ which also showed a high prevalence of obesity in married females. In our study, obesity was the least commonly observed in patients aged group less than 30 years. This age group included the majority of unmarried females. In this age group, the rate of obesity gradually increased, indicating a relationship between obesity, marital status, and age. The reason for this may be that female doctors are unable to pursue their outdoor physical exercise due to restrictions from our society and with a double burden of responsibilities, that is, at home and at hospital. In addition, there are multiple facilitators that can predispose individuals to obesity, such as the widespread availability of low-cost caloric dense food

and greater genetic susceptibility to obesity.¹⁵ Evidence shows that food marketing also plays a massive role in the consumption of fast food and soft drinks, which leads to overweight and obesity.¹⁶ A study conducted in Pakistan also showed that age is the main factor that predicts obesity in Pakistani females, especially during the reproductive years.¹⁷ According to it older females were more prone to obesity than younger females. We can assume that sedentary lifestyle could be the main cause of obesity.¹⁸ Other studies have also shown an association between physical activity and obesity.¹⁹ So the phenomenon of obesity development is quite blurred. This may be the result of a combined relationship between individual biology and the environment. This study showed increasing trends in obesity among doctors who require health promotion and preventive strategies to suppress this problem. There is a need to develop cost-effective interventions involving doctors and hospital administration to prevent this problem. There are a few limitations that need to be addressed while elucidating the results. The baseline figure regarding the weight status of doctors is usually not taken at the time of job initiation; otherwise, it could have helped us to conclude that they gained weight before or after getting a job.

Conclusion: Although a large proportion of female doctors have normal weight, the alarming rate of obesity among doctors in older age groups requires urgent strategies to solve this problem. We should focus on approaches that provide solutions in which healthcare providers deliver evidence-based, cost-effective interventions.

Conflict of interest: Authors do not have any conflict of interest to declare.

Disclosure: None

Human/Animal Rights: No human or animal rights were violated during this study.

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