ORIGINAL ARTICLE

Frequency of Overweight and Obesity in Women

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ABSTRACT

Objectives: To find out the frequency of overweight and obesity in women.
Study design: Cross sectional study.
Setting: Department of Medicine, Nawaz Sharif Social Security Hospital Lahore.
Subjects and methods: 200 women were included in this study. Information of patients like height and weight were measured to calculate body mass index under standard condition of every subject's.
Results: The mean weight of patients was 63.38±14.86. Most of the patients had 1.50-1.60 meter of height. The body mass index of 88 (44%) patients was normal. Most of the patients were 16–25 body mass indexes with their mean±SD 25.94±5.74. Only 63 (31.50%) patients were overweight ($p<0.001$) while 49 (24.50%) patients were obese with ($p <0.001$).
Conclusion: Overweight and obesity are central to the metabolic syndrome and obese women are particularly susceptible to diabetes and hypertension. As development increases, the burden of overweight shifts to include poor as well as wealthy women.
Key words: Obesity, overweight, women

INTRODUCTION

Obesity is a significant health problem among adult women in the United States[1]. It is a chronic condition that predisposes patients to multiple serious health disorders and premature deaths. Body Mass Index is the most widely accepted measure of obesity in adults[2].

Obesity has been the problem in effluent societies of developing and developed world. Hence the diseases, which are common manifestation of obesity, are prevalent in obese persons. To get rid of those diseases it is necessary to avert obesity[3].

In various wealthy countries, overweight body mass index (BMI) >25kg/m^2 is now reaching epidemic levels in low income countries as well. In the United States, 62% of women aged 20-74 years are overweight[4].

In a study the obesity is becoming a public health problem worldwide especially in recent years. For instance, globally, there are more than 1 billion overweight adults, at least 300 million of whom are obese. The obesity is increasing worldwide although the proportion varies from country to country and between geographical areas within a country. Changes in lifestyle, dietary habits, physical activity and the social and cultural environment are associated with the occurrence of obesity[5].

The prevalence of excess weight (overweight and obesity) among United Kingdom (UK) adults in 1996 was 59% in men and 49% in women, while two-thirds of adults in the United States (US) in the year 2000 were overweight and 30.5% were obese[6].

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MATERIAL & METHODS

This cross sectional study was conducted at Nawaz Sharif Social Security Hospital/University College of Medicine, The University of Lahore. In this study two hundred patients were included during a period of 6 months w.e.f. 01-01-2009 to 30-06-2009.

Data collection procedure: Two hundred patients were recruited for the study those who fulfill the criteria from medical outpatient, and inpatient departments. An informed consent was taken from each individual included in the study. The information of every subject's was recorded like height and weight to calculate the body mass index on structured questionnaire. Height was measured by making her stand, heels together without shoes. Height was measured to nearest 0.5cm. Weight was measured by using seca scale to the nearest 0.1kg without shoes and wearing ordinary clothes.

Data analysis: All the data was entered in SPSS version 15 computer software and analyzed. Frequency tables were generated for the presence and absence of overweight, obesity in patients. Chi-square test was applied for significance of overweight and obesity patients.

RESULTS

The mean weight of patients was 63.38±14.86 weight range from 35-110kg. Most of the patients were 96

(48%) from 61-85kg of weight. Eighty eight (44%) had 35-60kg weight and remaining 16 patients (8%) weight range from 86-110kg (Table 1). Height of patients was with range 1.5 to 1.70 meter. Out of 200 patients 57 (28.50%) were from 1.5-1.50 meter and 112 (56%) were from 1.51-1.60 meter and remaining 31 (15.50%) patients had 1.61-1.70 meter of height. Most of the patients had 1.51-1.60 meter of height (Table 2). Table 3 shows the body mass index (BMI) of patients. Out of 200 patients 88 (44%) were normal. Most of the patients were 16–25 BMI. Sixty three (31.50%) patients were overweight from 26–30 body mass index. Forty nine (24.50%) patients were obese from >30 body mass index and mean±SD was 25.94±5.74. Table 4 shows the presentation of overweight patients. Out of 200 patients 137 (68.50%) were normal. Only 63 (31.50%) patients were overweight which is statistically highly significant (p <0.001). Table 5 shows the obesity of patients, out of 200 patients 49 (24.50%) were obese. One hundred fifty one (75.50%) patients were normal with p <0.001 which is statistically highly significant.

Table 1: Frequency of Weight (kg) of Patients (n=200)

Weight (kg)	**n=**	**%age**
35 – 60	88	44.0
61 – 85	96	48.0
86 – 110	16	8.0
Total	**200**	**100.0**

Mean±SD = 63.38±14.86

Table 2: Frequency of Height (m) of patients

Height (m)	**n=**	**%age**
1.5 – 1.50	57	28.50
1.51 – 1.60	112	56.0
1.61 – 1.70	31	15.50

Mean±SD = 1.53±0.62

Table 3: Frequency of Body Mass Index (BMI)

BMI	**n=**	**%age**
16 – 25 (Normal)	88	44.0
26 – 30 (Overweight)	63	31.50
>30 (Obesity)	49	24.50

Mean±SD = 25.94±5.74

Table 4: Frequency of Overweight Patients

Overweight	**n=**	**%age**	**P value**
Yes	63	31.50	Chi-square= 28.88 P = <0.001
No	137	68.50	

Table 5: Frequency of Obesity

Obesity	**n=**	**%age**	**P value**
Yes	49	24.50	Chi-square = 52.02 P = <0.001
No	151	75.50	

DISCUSSION

This cross-sectional study was carried out the prevalence and factors associated with overweight and obesity among 200 hundred women.

The present study shows that 88 (44%) patients had 35-60kg of weight. Ninety six (48%) patients have 61-85kg weight while 16 (8%) patients had 86-110kg weight while 31.50% patients had overweight. A study done by Coitinho[7] the greater weight retention among obese women was 1.21kg. The prevalence of overweight was 39%, while for obesity it was 37%. These findings are more or less comparable to the findings of a national study carried out in Jordan by Abbas.[8] He found that the prevalence of overweight among women was 32.9% and the prevalence of obesity was 37.6% which is nearly equal to our figure. This may be attributed to the comparable eating habits in the neighbouring countries, or to the comparable genetic constitution of both communities.

The high prevalence of overweight and obesity that we found is alarming as only 24% of the women were of normal weight. Obesity is also of grave concern in other parts of the world including the United States of America. A survey done in the United States that included 16884 adults during the period 1988–94 showed that the prevalence of obesity among women was 55%[9]. Another study reported by Mokdad an increase in the prevalence of obesity from 12% in 1991 to 17.9% in 1998[10]. In Brazil it has been reported that over half of women aged 50–69 years old from north-east and south-east regions of Brazil are overweight or obese.[11] A study done Eichholzer in Switzerland showed no significant problem, with a reported prevalence of overweight of 26% and obesity of 5%[12].

A study carried out by Wang in China in the mid-1990s involving 42751 participants found the prevalence of overweight and obesity among females was 21.71%, although much higher rates were found in Beijing and Shandong, and the authors concluded that overweight and obesity were becoming more prevalent.[13] The present study showed that 63 (31.50%) patients were overweight and 49 (24.50%) patients were obese which is comparable with above mentioned studies.

CONCLUSION

It is concluded that larger randomized controlled trials are needed to show whether counseling can improve dietary and physical activity habits in postpartum women and also to confirm the results concerning the effect of counseling on reducing postpartum weight retention Overweight and obesity are central to the metabolic syndrome and are important risk factor for type 2 diabetes mellitus (DM). Obese women are particularly susceptible to diabetes and hypertension. In the least-developed countries, programmes to prevent parity-related overweight should target wealthy women, whereas such programmes should be provided to all women in more developed countries. Older women, higher rates of obesity were associated with increasing number of children that was independent of socioeconomic status.

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