



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.2630773>Available online at: <http://www.iajps.com>

Research Article

**OBESITY AND FEMALES: A CROSS-SECTIONAL RESEARCH
TO ASSESS THE ONSET OF OBESITY AMONG FEMALES
WITH ASSOCIATED FACTORS**¹Dr. Mehak Yusuf, ²Dr. Numrah Nawaz, ³Dr. Kainat Shoukat
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Article Received: February 2019

Accepted: March 2019

Published: April 2019

Abstract:**Background:** Females are mostly observed with obesity. Various chronic disorders result due to obesity.**Objective:** The objective of this research was to determine the incidence of obesity and factors associated with it among selected women.**Patients and Methods:** This illustrated research study was organized at Sir Ganga Ram Hospital, Lahore (September 2017 to August 2018). The people enrolled in this study were 400. The Selection was made with an error margin of five percent and at a confidence interval of 95%. The incidence of obesity observed among women was 35% to 40%. Simple irregular sampling technique was employed for sample selection. The age of selected women was between 15 to 64 years. Information was assembled by means of a questionnaire by conducting interviews. SPSS was used for data assessment.**Results:** The connection between workout ($P < 0.001$) and BMI was remarkable. The results showed 48% of female obese out of 400. The age group that was more vulnerable to overweight was 26 – 35 years.**Conclusion:** There is a requirement to make the people aware related to healthy standard particularly the significance of the physical activity, intake of calorie and healthy diet in order to avoid obesity.**Keywords:** Obesity, Sample, Women, Factors, Association and Physical Activity.**Corresponding author:****Dr. Mehak Yusuf,**

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Please cite this article in press Mehak Yusuf et al., *Obesity And Females: A Cross-Sectional Research To Assess The Onset Of Obesity Among Females With Associated Factors.*, Indo Am. J. P. Sci, 2019; 06(04).

INTRODUCTION:

In various regions of the world, one of the main health issues being faced is obesity. It is avoided by many people [1]. In many countries of the world, obesity is found in every age group particularly the females [2]. The burden of both communicable and non-communicable disorders is faced by Pakistan, being a developing nation. Obesity is a disease that enhances the incidence of diabetes mellitus and heart-related disorders [3]. BMI is measured as Kg/m² by WHO. BMI above 25 is regarded as overweight and BMI above 30 is as obesity. The particular definition of Indo-Asia is BMI above 23 as overweight and BMI above 27 as obesity [4]. Worldwide, the number of people who are obese are above one billion (BMI > 25), based on this definition. Furthermore, the number of people who died due to obesity are more than 2.5 million [5]. When the calories burnt are less than the calories consumed, they are stored as fat and this condition is referred to as overweight. The factors that contribute to obesity in both adults and young are social and economic aspects, physical working, variation in diet and sedentary lifestyles. Some medicines are also responsible for the high prevalence of overweight [6, 7]. The objective of this research was to determine the incidence of Obesity and factors associated with it among females.

PATIENTS AND METHODS:

This illustrated research study was organized at Sir Ganga Ram Hospital, Lahore (September 2017 to August 2018). The people enrolled in this study were 400. The Selection was made with an error margin of five percent and at a confidence interval of 95%. The incidence of obesity observed among women was 35% to 40% in a population of 68,231. Simple irregular sampling technique was employed for sample selection. The age of selected women was between 15 to 64 years. On the other hand, females found with

chronic debilitating disorders such as carcinoma, stroke, renal failure, tuberculosis and hepatic failure, the females on steroid therapy and pregnant women were not selected for the study. All the participants were interviewed and information was collected on the Performa. The socioeconomic status, BMI and physical activity of all the participants were recorded. Furthermore, for recording height, and weight measuring tape and weighing machine was used respectively. Based on the monthly income of the family, all the participants were grouped as a low, middle and upper class if income is <25,000, 25,000 – 50,000 and > 50,000 respectively. Eating habits, meals per day, the extent of taking meat, soft drink, chocolate, fried food, fruit, sweets, intake of all the selected people were noticed. Sugar, baked items and chocolates are avoided in order to prevent storage of calories as fat. Extra meals considered when baked items and burgers in between three regular meals (breakfast, lunch and dinner). It was grouped as often, one extra meal per day more than three days in a week. Occasionally; one extra meal per day, three days in a week. Daily, use daily one extra meal per day. Walk and exercise were used for determining physical activity. Exercise, 20 minutes or more workout daily and five times a week. Walk at least for thirty minutes in a day and five times a week. Information was assembled by means of a questionnaire by conducting interviews. SPSS was used for data assessment.

RESULTS:

The connection between workout ($P < 0.001$) and BMI was remarkable. The results showed 48% of female obese out of 400. The age group that was more vulnerable to overweight was 26 – 35 years. Detailed research outcomes about BMI, Socioeconomic status, intake and exercise pattern are given below.

Table – I: BMI Distribution

BMI	Number	Percentage
Above 25	208	52
25 - 29.9	128	32
≥ 30	64	16
Total	400	100

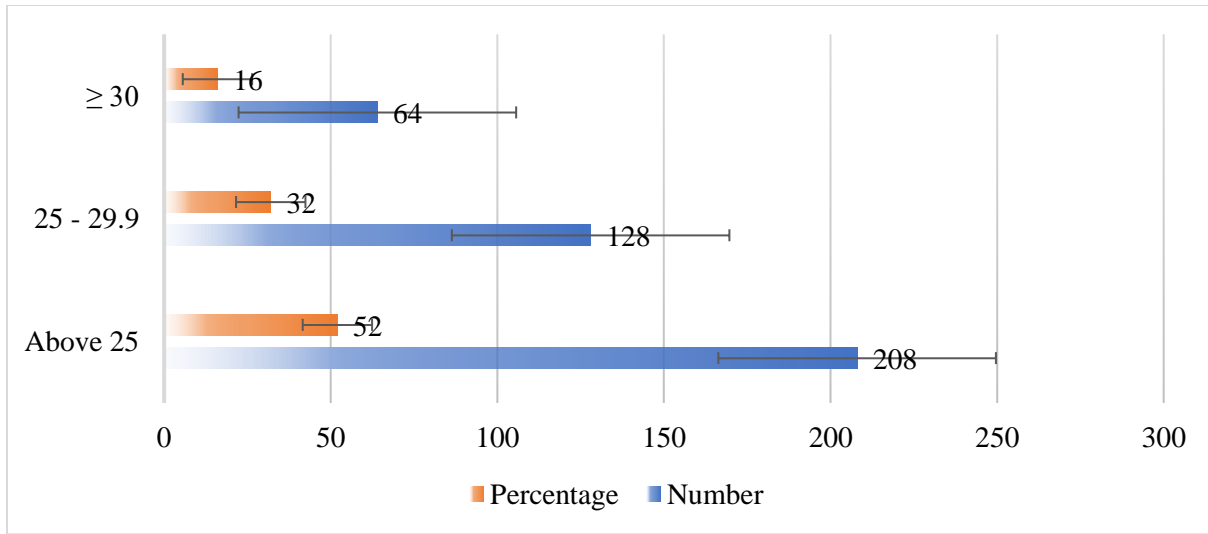


Table – II: Stratification of Economic Status

Economic Status	Under 25		Above 25		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Low	64	30.8	32	16.6	96	24
Middle	56	26.9	80	41.7	136	34
Upper	88	42.3	80	41.7	168	42
Total	208	100	192	100	400	100

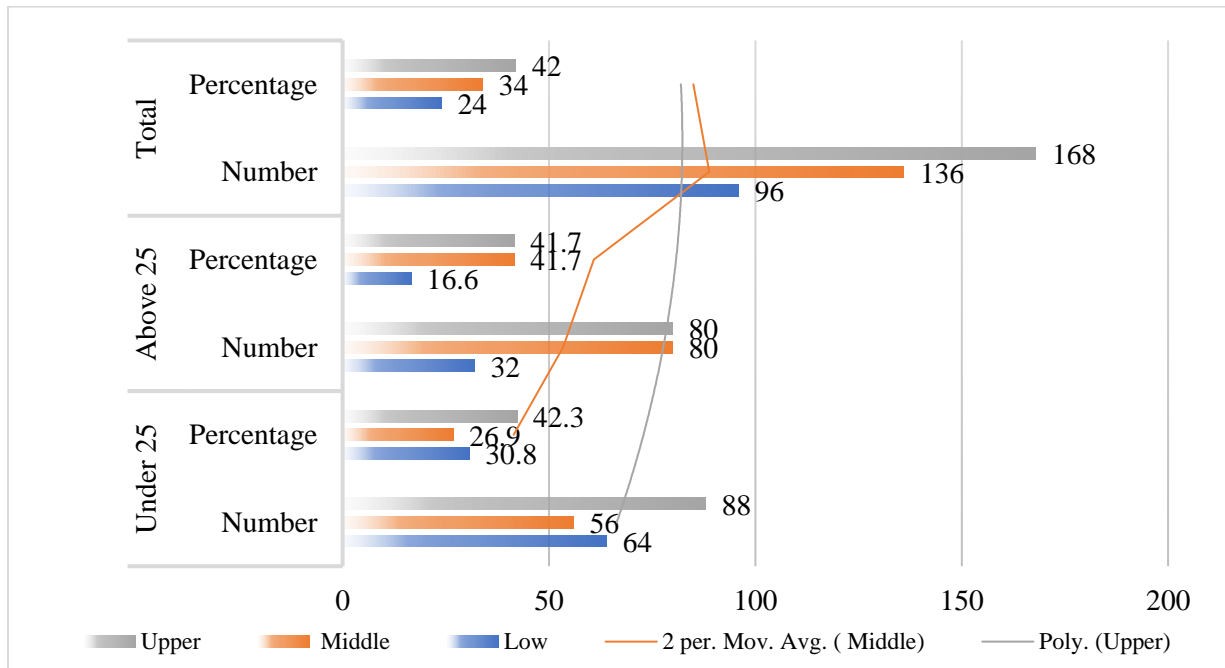


Table – III: Regular Intake of Items

Items	BMI (≥ 25)						BMI (< 25)					
	Daily		Often		Occasionally		Daily		Often		Occasionally	
	No	%	No	%	No	%	No	%	No	%	No	%
Meat	104	54	56	29	32	17	24	11.5	64	30.7	120	57.6
Fruit	72	37.5	24	12.5	96	50	120	57.6	32	15.3	56	26.9
Soft Drinks	132	68.7	24	12.5	36	18.7	24	11.5	16	7.6	168	80.7
Fried Food	136	70.9	48	25	8	4.1	24	11.5	32	15.3	152	73
Baked Food	136	70.9	42	21.8	14	7.2	24	11.5	30	14.4	154	74
Sweets & Chocolates	168	87.9	24	12.5	0	0	8	3.8	24	11.5	176	84.6
Salad	44	22.9	16	8.3	132	68.7	160	69	34	16.3	14	6.7

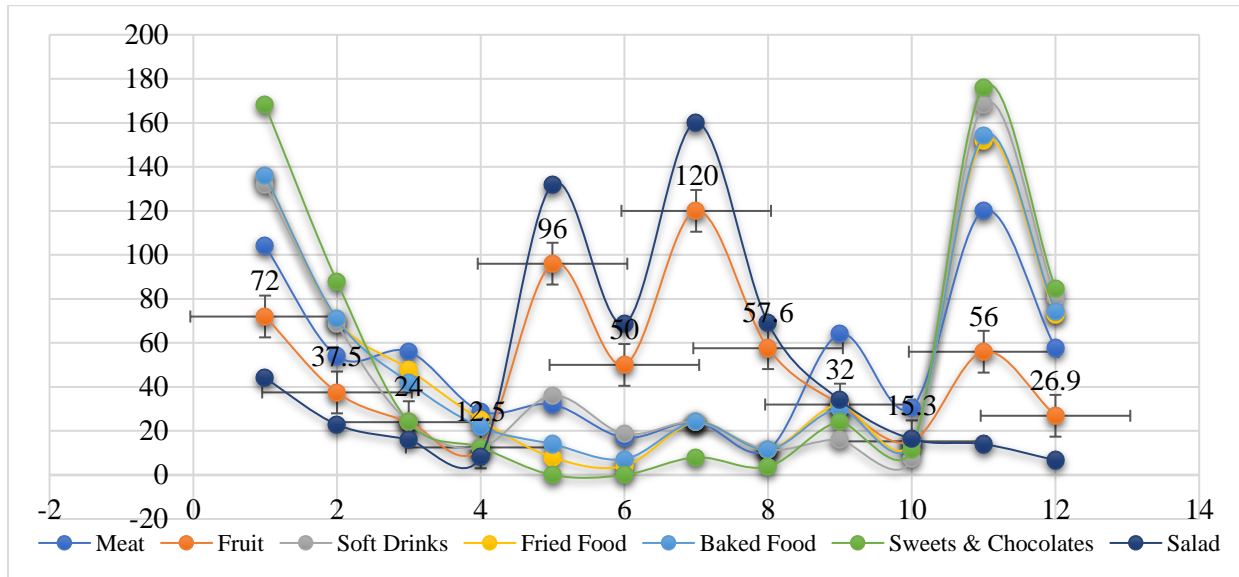


Table – IV: Walk/ Exercise with Respect to BMI

Walk/Exercise		Yes	No
Walk	BMI (< 25)	53.8	46.2
	BMI (> 25)	8.3	91.7
Exercise	BMI (< 25)	34.6	65.4
	BMI (> 25)	4	95.8

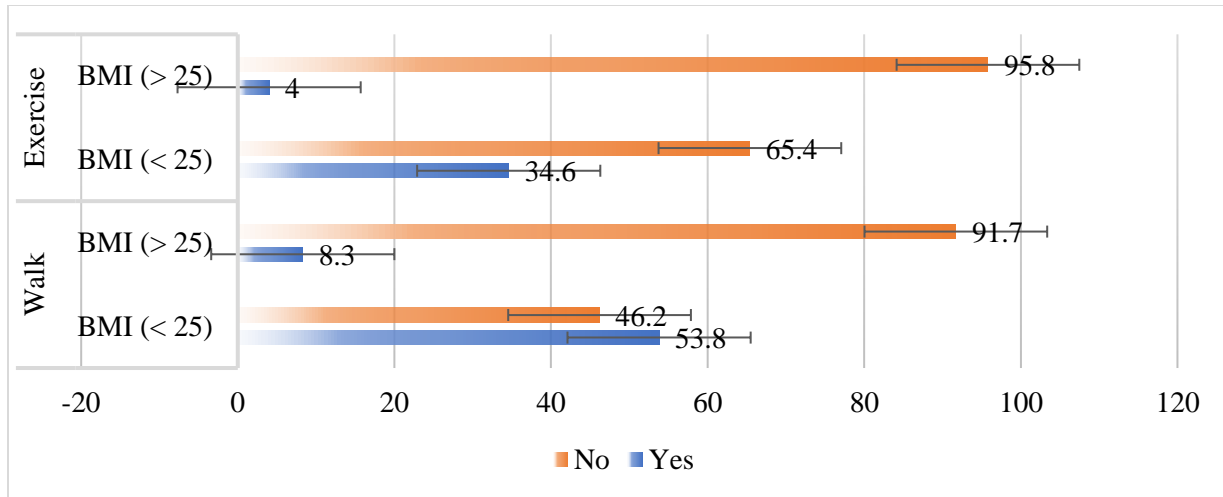
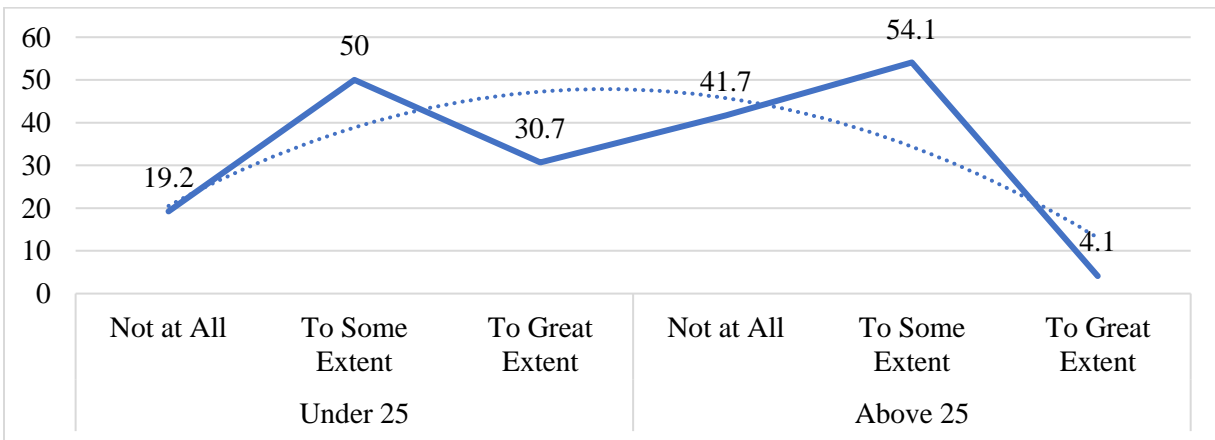


Table – V: BMI Grouping

BMI Group		Percentage
Under 25	Not at All	19.2
	To Some Extent	50
	To Great Extent	30.7
Above 25	Not at All	41.7
	To Some Extent	54.1
	To Great Extent	4.1



DISCUSSION:

According to DT Nanan, urban females of 25 – 44 years of age, the incidence of obesity (BMI > 25) was 37% while in 45 – 64 years females, this incidence was 40% [9]. However, the incident of obesity i.e. 48% was more in our study. Tazeen H Jafar et al. organized another study. He observed that in the common population of Pakistan, the incidence of obesity was

25%. As compared to our study, this incidence is less [10]. Gity Sotoudeh et al. conducted a study, in which he found that the percentage of females found between obesity and socioeconomic status. It is opposite to the results found in the study [10]. In a study by Grace A Shayo, similar outcomes were observed. He found that as compared to a female with middle and low socioeconomic status, upper-class females were

overweight mostly [5]. In a study by Mobada CE et al. the opposite outcome can be explained. He observed that in the developing countries, the association between socioeconomic status and obesity is conflicting and debatable [12]. No physical activity was found in 90% of obese women. Similar results were found in another study [13]. The association between obese, physical activity and the walk was significant in our study ($P < 0.001$). Similar to another study, most of the obese females took three meals per day. It concluded that as compared to females who took 4 – 5 meals per day, more females were obese and greater body mass indices were shown by females who took 2 – 3 meals per day [14]. The study of Kyle J Smith et al. showed that the incidence of moderate obesity in men was 31% which is associated with the intake of food twice a week or more [15].

CONCLUSION:

It is concluded that physical activity and the routine walk is necessary for maintaining a healthy life. Moreover, junk food, baked and fried items should also be avoided. Majority of the females are overweight as indicated by the results of our study. For the avoidance of various non-communicable disorder, people should make aware of the importance of physical exercise and calorie conscious. So, there is a requirement of health knowledge and awareness, so that the weight can be controlled within the normal range.

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