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Original Research Article

Knowledge and Attitude of Obesity Risks among University Students

Sulaiman Shah[1*], Muhammad Hussain[2], Muhammad Afzal[3], Prof. Dr. Syed Amir Gilani[4]

[1]Lahore School of Nursing, The University of Lahore, Lahore, Pakistan

[2]The University of Lahore, Lahore, Pakistan

[3]Lahore School of Nursing, The University of Lahore, Lahore, Pakistan

[4]Faculty of Allied Health Sciences, The University of Lahore, Lahore, Pakistan

***Corresponding Author's Email: sulaiman.shah991@gmail.com**

Abstract

Obesity is the abnormal weight gain or extra fat in the body. Obesity means overweight or obese persons. Obesity can be measured through Body Mass index. If a person has BMI more than 30, that person is called obese. Almost four hundred million people in the world are obese. The objective of this study is to assess the awareness of the university students regarding risk of obesity and to evaluate the attitude of students toward obesity. This is a cross-sectional descriptive research study undergraduate university students will be selected for in study population. Results and data analysis was taken up through systematic and logical techniques (SPSS) after the accomplishment of the data collection process. The knowledge of the participants regarding risk factors of obesity is somehow better. The items with higher results of correct answers were 'Obesity increases the risk of getting bowel cancer' (68 percent, 102) with the mean 1.32. There was little correlation between the age of the student and the body mass index (BMI) with their experience of obesity risks and attitudes towards the obese. The study showed that students' knowledge of obese risk factors was adequate, although their outlook towards obese people was deemed negative along with a high prevalence of overweight and obesity among university students. There is also a need to improve students' awareness of the dangers of obesity.

Keywords: Attitude, Knowledge, Obesity

INTRODUCTION

Almost four hundred million people in the world are obese (Ali and Zaki2017). Obesity is the fifth primary cause of death around the world and about 3 million young adults die due to obesity and overweight. Globally 65% population are obese or overweight. Many of the factors of obesity include genetic conditions, unhealthy diet, physical inactivity, psychological and behavioral factors. Many of the diseases can cause obesity such as thyroid problems, type 2 diabetes mellitus, and colon cancer (Ellulu, Abed et al., 2016).

Obesity can underestimate a person's personality and also have many social impacts in the mental health of the obese person. Society can never understand the pain of the obese persons and they are neglected in society and made to face many problems, like failure in academic performance, low self-esteem and poor job chances (Wilborn, Beckham et al., 2015). Nowadays, obesity can be increased in middle age persons and young adults due to their poor lifestyle habits. University students are more affected with obesity due to their unhealthy eating habits and very less physical activity. Obesity can increase in young adults and they complain of many other health problems due to obesity. Obesity can cause many respiratory difficulties, skin problems, musculo-skeletal problems and cardiovascular problems. Obesity has many psychological and behavioral problems such as low self-confidence, depression and loneliness. Obesity can cause high mortality and morbidity of many

diseases throughout the world (Dehghan, Akhtar-Danesh et al., 2017). Hypertension is the main risk of obesity. An obese person can also be hypertensive. Obesity can cause high cholesterol levels greater than 240mg/dl both in men and women. Increasing the weight of the person can cause an increase in the risk of diabetes. According to studies, obesity can increase the mortality of breast cancer in women and female reproductive health can also be affected due to obesity. Obesity can affect the female menstrual cycle. Obesity can also affect behaviors of a person especially women or young girls. Obesity can cause poor self-control in young girls. An obese person can be emotionally disturbed resulting to low self-esteem (Chaffee and Weston, 2016).

Purpose

This study helps to give awareness to the students about the risk of obesity and to evaluate the awareness and assertiveness of university students regarding obesity. This was also helpful to behaviour and lifestyle modification of students and to reduce the risk of obesity.

Significance

The main significance of the study is to increase the awareness of the students about the risk of obesity. This study was helpful to reduce the prevalence of the diseases related to obesity in young adults. The result of this study was helpful for other researchers in their further research work. It might increase the knowledge of university students regarding lifestyle modification and overcome obesity.

Literature

Obesity raises the risk of multiple illnesses, including coronary failure, type 2 diabetes, sleep complications with breathing, certain types of cancer, and osteoarthritis. A combination of extra caloric calories, lack of physical exercise, and hereditary susceptibility is most generally induced by obesity, but a few cases are mainly caused by chromosomes, endocrine abnormalities, drugs, or psychiatric disease.

The World Health Organization (WHO) describes body weight and obesity as unhealthy or unnecessary fat accumulation that poses a health risk (WHO, 2016a). The body mass index (BMI) of 25 kg/m^2 is commonly measured to be weighty, although chubbiness is considered to be a body mass index of 30 kg/m^2. It is well recognized that with high proportions in developing and increasing countries, obesity and overweight are an increasing problem in the world (Capodaglio and Liuzzi, 2016; WHO, 2016a, 2018b).

In 2015, all states in the United States reported obese incidences of more than 20 percent. 25 states reported obese rates of >30 per cent, and four of those 25 states (Alabama, Louisiana, Mississippi, and West Virginia) reported rates of >35 percent (Yang and Colditz, 2015). Adult fatness, followed by white Americans is the most common in non-Hispanic black Americans (Yang and Colditz, 2015). People are also overweight at an earlier age; birth partners between 1966 and 1975 and between 1976 and 1985 reached 20% prevalence of obesity by 20-29 years of age, while the group between 1956 and 1965 just exceeded the prevalence by 30-39 years of age (Lee et al., 2017). In contrast, the rate of infancy fatness among two-seventeen year-old in the United States improved from 14.6 percent in 1999-2000 to 17.4 percent in 2013-2014 (Skinner and Skelton, 2015). Due to the initial inception of comorbidities with severe hostile health consequences, childhood obesity is a growing problem for health and the elevated chance that teenagers with fatness are adults with obesity (50 percent risk vs. 10 percent risk for kids short of obesity Whitaker, Wright, Pepe, Seidel, & Dietz, 2016). In most European countries, overweight (BMI 25-29.9) is less frequent than in the United States, but there is a high frequency of weighty people in Germany, Finland and Britain. Obesity is also usually less collective in Europe than in the United States with about 10 percent to 20 percent of adult males and fifteen percent to twenty five percent of females. Obesity prevalence reached from ten percent to twenty four percent between males and from nine percent to 25 percent between females aged 35 to 64 years in 1988 to 1996 at Western European. Research Centers are contributing in the World Health Organization (WHO) MONICA survey. Obesity was extra cooperating in Eastern Europe, mainly amongst females. The prevalence of obesity in Poland and Russian study centers was about 40%. Amongst the original MONICA sample in 1979-1989 and the last study in 1989-1996, the increase in obesity was less pronounced in Europe than in the US research Centre in Stanford, California. The growth in the US research Centre was almost as high as the 50 percent rise stated between 1991 and 1998 for the overall US population. Martorellet (2000) have reported for females aged 15 to 49 years from nations of origin. These writers have prominent correlation between the uncultured domestic product and the occurrence of obesity in the poorest countries. Prevalence in South Asia was reported at 0.1 percent, 2.5 percent in Sub-Saharan Africa, 9.6 percent in Latin America and the Caribbean, 15.4 percent in Kazakhstan, Turkey and Uzbek, 17.2 percent in the Middle East and North Africa, and 20.7 percent in the Unified Countries.

Stevens et al (1998) observed that there were lower relative mortality risks associated with elevated BMI at grown up ages. This conclusion was centered on the

Table 1. Demographics

Age	n (%)
18-20	115 (76%)
21-23	31 (20%)
24 to 26	4 (2.7%)
Total	150 (100%)
Gender	
Male	69 (46%)
Female	81 (54%)
Marital status	
Single	144 (96%)
Married	6 (4.0%)
Educational year	
1st year	41 (27%)
2nd year	49 (32%)
3rd year	37 (24%)
4th year	23 (15%)
Department	
Medical	65 (43%)
Engineering	74 (49%)
Arts	7 (4.7%)
Languages	4 (2.7%)

BMI-death relationship analyses of around 62,000 men and 262,000 females who had not ever smoldered and who had been monitored between 1960 and 1972. The result was that in white people, the correlation among great BMI and enlarged death rates was more noticeable than in dark individuals and between non-smokers, it was stronger amongst smokers. From 1982 to 1996, their study focused on the investigation of more than 1 billion US men and women aged 30 and above 57 years old (Fruh 2017).

METHODS

Setting

This study was conducted in the University of Lahore, Lahore School of Nursing.

Study design

This is a cross-section analytical analysis designed to assess the knowledge and attitude of university students regarding risks of obesity.

Sample size

The population for this study was selected from the students of the University of Lahore. The target population was 150 participants.

Study Population

Undergraduate university students were selected for the study population.

Research tool

An approved questionnaire was used for this study to gather data and to answer the research questions.

Ethical Consideration

The study was accepted by the Ethical team of the Faculty of University of Lahore. An informed written agreement was taken from all members in the study. All participants were reassured of data confidentiality.

RESULTS

This section represents the outcomes of the study.

Socio-Demographics

In demographics, most of the participants are females

Table 2. Knowledge related to obesity

Sr no.	Statement	True n(%)	false n(%)
1	A person with a (beer-belly) shaped stomach has an increased risk of getting diabetes.	99(66%)	51(34%)
2	Obesity increases the risk of getting bowel cancer.	102 (68%)	48(32%)
3	An obese person who gets diabetes needs to lose 40% of their bodyweight for clear health benefits	100 (66%)	50(33%)
4	Obese people can expect to live as long as non-obese people.	96 (64%)	54(36%)
5	Obesity increases the risk of getting breast cancer after the menopause.	102 (68%)	48(32%)
6	There is no major health benefit if an obese person who gets diabetes loses weight	90 (60%)	60(40%)
7	Obesity does not increase the risk of developing high blood pressure.	122 (81%)	28(18%)
8	It is better for a person's health to have fat around the hips and thighs than around the stomach.	98 (65%)	52(34%)
9	Obesity increases the risk of getting a food allergy.	99 (66%)	51(34%)

Table 3. Attitude regarding risk of obesity:

Sr no.	Statement	Strongly Agree n%	Moderately Agree n%	Slightly Agree n%	Strongly Disagree n%	Moderately Disagree n%	Slightly Disagree n%
1	Obese people are as happy as non-obese people.	**32(21%)**	**20(13%)**	**30(20%)**	**4(26%)**	**25(16%)**	**3(2%)**
2	Most obese people feel that they are not as good as other people.	**6(4%)**	**29(19%)**	**23(15%)**	**52(34%)**	**32(21%)**	**8(5%)**
3	Most obese people are more self-conscious than other people.	**21(14%)**	**39(26%)**	**22(14%)**	**40(26%)**	**21(14%)**	**7(4%)**
4	Obese worker cannot be as successful as other worker.	**15(10%)**	**28(18%)**	**19(12%)**	**46(30%)**	**31(20%)**	**11(7%)**
5	Severely obese people are usually untidy	**8(5%)**	**34(22%)**	**15(10%)**	**53(35%)**	**32(21%)**	**8(5%)**
6	Obese people tend to have family problems.	**15(10%)**	**31(20%)**	**18(12%)**	**60(40%)**	**19(12%)**	**7(4%)**
7	Obese people are usually sociable.	**21(14%)**	**39(26%)**	**22(14%)**	**40(26%)**	**21(14%)**	**7(4%)**
8	Most obese people are not dissatisfied with themselves.	**32(21%)**	**20(13%)**	**30(20%)**	**40(26%)**	**25(16%)**	**3(2%)**
9	Obese people are just as self-confident as other people.	**8(5%)**	**38(25%)**	**20(13%)**	**51(34%)**	**33(22%)**	**3(2%)**
10	Most people feel uncomfortable when they associate with obese people.	**8(5%)**	**34(22%)**	**15(10%)**	**53(35%)**	**32(21%)**	**8(5%)**
11	Obese people are often less aggressive than non-obese people.	**10(11%)**	**20(22%)**	**10(10%)**	**20(36%)**	**30(18%)**	**10(2%)**
12	Most obese people have different personalities than non-obese people.	**11(7%)**	**36(24%)**	**17(13%)**	**46(30%)**	**27(18%)**	**13(8%)**
13	Very few obese people are ashamed of their weight	**8(5%)**	**34(22%)**	**15(10%)**	**53(35%)**	**32(21%)**	**8(5%)**
14	Obese people are more emotional than non- obese people	**21(14%)**	**39(26%)**	**22(14%)**	**40(26%)**	**21(14%)**	**7(4%)**
15	Obese people are just as healthy as non-obese	**8(5%)**	**34(22%)**	**15(10%)**	**53(35%)**	**32(21%)**	**8(5%)**

54% (81) and males 46% (69) respectively with mean (1.54). The mean of the age of the participants was 1.26. 96% (144) participants remained single and 4% (6) participants were married. Most of the participants are 2nd year undergraduate students 32% (49) and some other respectively. Table 1 and 2

Knowledge related to obesity risk factors

The knowledge of the participants regarding risk factors of obesity is somehow better. The items with higher results of correct answers were 'Obesity increases the risk of getting bowel cancer' (68%, 102) with the mean 1.32.(Table no 2).

Attitude regarding risks of obesity

The answers with a positive attitude were not correct. The attitude of participants regarding risk of obesity are negative as shown in the Tables no 3.

DISCUSSION

This is a cross-section analysis. This thesis is being conducted at the University of Lahore. Data was obtained through a questionnaire from a student at the University of Lahore. In this study (n=115) participants belong to the age group of 18-20 years, (n=31) to the age group of 21-23 years and (n=4) to the age of 24-26 years. Similarly (n=69) participants are male and (n=81) female participants in this sample. Students are segregated from themselves through the present sample year (n=41) participants are 1st year students, (n=49) are 2nd year students, (n=37) are 3rd year students and (n=23) are 4th year students. In addition (n=144) the participants are single and (n=6) the participants are married.

The questionnaire consists of two sections, the first section containing the student's attitude towards obesity by the University of Lahore and the second part containing students' awareness of obesity. Mean of all the questions have been answered. Participants (Male, Female) answer differently to both questions. There are a variety of questions in which female responses (strongly agreed, agreed) are more than male. Student specific questions cover a number of questions. The mean of this question is that a person with a (beer-belly) shaped stomach has an increased chance of contracting diabetes is 1.34. Another research conducted at Beirut Arab University in Tripoli Lebanon, which reveals that obesity is a disease in which excess stomach fat around the belly and abdominal has developed to the idea that it is predictable to have a detrimental effect on health. Central fatness was closely related to cardiovascular disease, Alzheimer's disease and other metabolic and vascular disorders. There was a major link to cardiovascular disease, diabetes, and dyslipidemia. Abdominal obesity was more closely linked than general obesity to the metabolic disorder associated with cardiovascular disease.

Obesity raises the risk of contracting intestinal cancer. The mean of the question is 1.32. Research has shown that 30 percent of Americans are seen as overweight. Insulin is the most known molecular mediator for obesity and cancer of the colon. Hyperinsulinemia is significant in the pathological process of bowel disease. Not all fatty tissues are equal. Visceral belly fat has been known as the critical heavy store for pathogenic hypotheses linked to fatness and colon disease. Males and females disagree as to how the association among fatness and cancer of the colon has been measured. Obesity raises a higher chances of bowel cancer for males of all centuries and for premenopausal females than for postmenopausal females. Daily basis activity decreases the chance of bowel cancer growth. We assume that an amalgamation of diaphragm circumference (WC) and body mass index (BMI) masses is advised for determining the obesity associated chance of rising bowel cancer. Radiography calculation of visceral stomach fat may ultimately verify to be the best way to assess a patient's obesity-related risk of progressing bowel disease.

An obese person who has diabetes has to lose 40 percent of their body weight for specific health benefits. The average of this issue is 1.33. Another research carried out by J. P. H. Wilding suggested that the correlation among weightiness and type 2 diabetes mellitus (T2DM) is very clear, with research showing that the greater number of clients with T2DM are weighty or obese and that obese individuals are at the greatest threat of increasing T2DM. Clients were classified as obese placed on the commonly utilized body mass index (BMI) above 30 kg/m^2, but equally elevated probability were noticed utilizing stomach obesity, clarify by a trunk perimeter of minimum 88 cm for females or 102 cm for males. For confident cultural ordinary people, wide weight loss of 4–5 kg and reduced mortality rates due to diabetes and CVD.

Following the recession, there was a recovery in citizen's weight, monitored by a 140 per cent rise in the prevalence of diabetes and a 49 percent enhancement in diabetes death rate.

Most obese people are more self-conscious than other people. The mean of this question is 3.15. Another research reveals that certain persons who are bulky have very high self-esteem. They should reflect on their successes and take self-respect in themselves. But some individuals who struggle with their weight often struggle with poor self-esteem, particularly when other individuals can be too unkind. If we have pessimistic thoughts and care about our physique, these feelings can overflow into other areas of life. Bad feelings can influence the confidence of an individual and make it difficult to achieve goals. For example, someone who feels "I can't do this" or "Why bother, I'll always be overweight" may have a difficult time losing weight. This is one reason why it is necessary to acknowledge some pessimistic feelings and to work hard to improve them.

Obese worker cannot be as good as any other worker. The average of this issue is 3.55. Another research concluded that there is growing evidence that obese and

overweight could be partially linked to unfavorable working situations. In individuals, the threat of obesity will rise in high-demand, and for those people who work long hours in a day. Additionally, obesity can alter the danger of shock-induced injury and certain professional musculo-skeletal syndromes.

Limitations

- This study was conducted in a short period of time.
- Sample size was small.
- Large sample size will improve the accuracy of the results.

CONCLUSION

There was little correlation between the age of the student and the body mass index (BMI) with their experience of obesity risks and attitudes towards the obese. The study showed that students' knowledge of obese risk factors was adequate, although their outlook towards obese people was deemed negative along with a high prevalence of overweight and obesity among university students. There is also a need to improve students' awareness of the dangers of obesity.

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