THE ASSESSMENT OF KNOWLEDGE AND ATTITUDE TOWARDS OBESITY AND BARIATRIC SURGERY AMONG NURSES WORKING IN TERTIARY CARE HOSPITALS LAHORE

Misbah Ullah[1*], Humaira Saddique[2], Syeda Sidra Tasneem[3]

ABSTRACT

AIM: The aim of the study was to Assess Knowledge and Attitude towards Obesity and Bariatric Surgery of Nurses at Tertiary Care Hospitals Lahore. **Methodology:** A descriptive cross-sectional research study design was used. Study used purposive sampling technique. The study population was staff nurses and sample size were 150. **Result:** The study was descriptive cross- sectional so descriptive statistic was applied, Frequency distribution was calculated, data normality was checked. The study reported that the poor knowledge about obesity participants were 54(36%), those with moderate were 52(34.7%), and those with good knowledge were 44(29.3%). The negative attitude about obesity participant were 40 (26.7%), those with average attitude were 58(38.7%), and those with positive attitude were 52(34.7%). the participants with good knowledge and positive attitude toward bariatric surgery where 47(30.9%), the participant of moderate knowledge and average attitude value where 53(34.9%), and those who with poor knowledge and negative attitude value where 50(32.9%). **Conclusion:** The study concluded that the majority nurses having poor knowledge, and average attitude regarding obesity and bariatric surgery.

Key Words; Obesity, Bariatric Surgery, Knowledge, and Attitude.

[1]Student BSN(Generic), Department of Nursing, The Superior University, Lahore, Pakistan
[2]Assistant Professor, Department of Nursing, The Superior University, Lahore, Pakistan
[3]Director of Nursing, The Superior University, Lahore, Pakistan

Corresponding Author: Misbah Ullah,
[1]Student BSN(Generic), Department of Nursing, The Superior University, Lahore, Pakistan
Email: balokhan184@gmail.com

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INTRODUCTION

BACKGROUND

Obesity is also called corpulence or fatness, excessive accumulation of body fat, usually caused by the consumption of more calories than the body can use. The excess calories are then stored as fat, or adipose tissue. Obesity was traditionally defined as an increase in body weight that was greater than 20 percent of an individual's ideal body weight. (Greydanus et al., 2018).

According to the WHO. Overweight is defined as having a body mass index (BMI) of 25 kg/m2 or more, while obesity is defined as having a BMI of 30 kg/m2 or more (World Health Organization. 2020). Classifications for obesity include, (1) Class 1: BMI of 30 to 35, (2) Class 2: BMI of 35 to 40, (3) Class 3: BMI of 40 or greater. Class 3 obesity is occasionally referred to as "severe" obesity (Kivimäki et al., 2017).

In the twenty-first century, obesity has developed as one of the major global public health issues(Abarca-Gómez et al., 2017). The imbalance between energy intake and expenditure, which results in a positive energy balance, is what causes obesity, which is a significant risk factor for a number of illnesses(Torres-Carot, Suárez-González, & Lobato-Foulques, 2022). Among those 18 and older, 39% of women and 39% of men were overweight in 2016(Organization, 2017).

According to a WHO study, just 19% of males in Pakistan are obese, compared to about 26% of women who have the problem. A report revealed that the rate was 28% for men and 38% for women, a large difference between the males and females. In comparison to rural areas, obesity is more common in urban areas (56% of males and 67% of women). Even among young people, obesity is rapidly increasing. According to statistics from 2013, it was 10%, which is a remarkable number. Around 3.4 million people passed away from obesity-related causes in 2010(Siddiqui et al., 2018).

A Nurses are low degree of unfavorable views toward people who are obese, However, a lack of expertise in diagnosing adult and children obesity, as well as in the patients' treatment and confidence. The body mass index calculation method was unknown to one-third of nurses. Even though 55% of nurses said they lacked sufficient training, the other half of nurses believed it was part of their responsibility to care for obese patients. Despite having few unfavorable attitudes, nurses at hospital lacked knowledge and expertise in managing obesity(Bucher Della Torre, Courvoisier, Saldarriaga, Martin, & Farpour-Lambert, 2018).

Gastric bypass and other weight-loss surgeries known collectively as bariatric surgery involve making changes to your digestive system to help you lose weight(Hutch & Sandoval, 2017). When diet and exercise don't work or you have major health issues due of your weight, bariatric surgery may be necessary(Funk et al., 2022). Adults who have a BMI of 40 kg/m2 or above, or who have a BMI of 35 kg/m2 or higher with at least one variety of chronic diseases, and who have not responded to behavioral treatment (with or without medication), are advised to consider bariatric surgery as a third alternative (Wolfe, Kvach, & Eckel, 2016).

A worldwide epidemic of obesity has emerged. Although the surgical management of obesity is expanding quickly in Pakistan. it is still a relatively unexplored field among medical professionals. Nurses play a significant role in the multidisciplinary team because of their expertise, attitudes, and ability to support surgeons while providing patients with essential medical care (Fan et al., 2020).

As an important member of the multidisciplinary team, the knowledge and attitudes of the nurses provide crucial health care to the patients and support to surgeons. However, the role of nurses is often undermined/neglected in health education, promotion counseling, and postoperative follow-up. Some studies indicated that nurses have a negative attitude towards overweight or obese patients and possess a lack of knowledge about obesity(Fan et al., 2020).

The knowledge and attitudes towards obesity and bariatric surgery among nurses have been seldom studied. Therefore, we should pay more attention to the misunderstandings and gaps in the field of obesity and bariatric surgery among nurses. This study aimed to specially investigate the attitudes and knowledge of nurses regarding obesity and bariatric surgery and to analyze any differences between different nurses.

PROBLEM STATEMENT:

Obesity has affected 400 million person all over the world. Pakistan is a developing country and also facing double burden as a result of under nutrition and over nutrition, According to WHO around 26% women while just 19% of the men are obese in Pakistan with urban population more affected comparative to rural(Khan, Khan, & Siddique, 2022). So, the current study is needed to be conducted to identify the knowledge and attitude to just highlight the need of future study on this seldom highlighted topic the knowledge and attitude towards obesity and bariatric surgery among nurses.

RESEARCH QUESTIONS

1. What is the knowledge of nurses towards obesity and bariatric surgery?
2. What is the attitude of nurses toward obesity and bariatric surgery?

RESEARCH OBJECTIVES

1. To assess the knowledge of Nurses towards obesity and bariatric surgery.
2. To assess the attitude of nurses towards obesity and bariatric surgery.

Material and methodology

Descriptive cross sectional research study design was used. The study setting was including the staff nurses of tertiary care hospital Lahore. The study takes approximately nine months. The study target populations were male and female nurses of tertiary care hospital Lahore. The sample size was calculated by Slovin's formula. Convenient sampling technique used to gather information. The study used adopted version of questionnaire regarding knowledge and attitude towards obesity and bariatric surgery of nurses. Data was analyzed on SPSS (version 22). The staff nurses of the tertiary care hospital Lahore were included in this study. The head nurses and student nurses excluded from the study

Analysis

Demographic Variables

Table no 1 show that from total no of participants male were 14(9.3%) and female were 136(90.7%). those with the age group 21-25y were 56(37.3%), 26-30y were 57(38.0%). Similarly, with the age group 31-35y were 27(18.0%), 36-40y were 10(6.7%). those who height 4-4.9fts were 38(25.3%), 5-5.9fts were 109(72.7%). Similarly with the height group 6-6.9fts were 3(2%). those who education General nursing diploma were 86(57.3%), post RN were 43(28.7%). Similarly, and those who BSN(Generic) were 20(13.3%), total no of participants who participated in the study those who underweight were 9(6%), who normal weight was 130(86.7%). Similarly, overweight were 11(7.3%).

	Frequency	Percent
	Gender	
Male	14	9.3
Female	136	90.7
	Age	
21- 25years	56	37.3
26-30years	57	38.0
31-35years	27	18.0
	Height	
4-4.9fts	38	25.3
5-5.9fts	109	72.7
6-6.9fts	3	2.0
	Education	
General nursing diploma	86	57.3
Post RN	43	28.7
BSN(Generic)	20	13.3
	Self-estimation of weight	
Under weight	9	6.0
normal	130	86.7
overweight	11	7.3
Total	150	100.0

Table no 1, demographic characteristics

Table no. 2

Table no 2 shows that from the total no of participants who participated in the study and respond to the question that" body Mass Index is an important indicator for evaluating the level of obesity" those who tick the yes option were 118(78.7%), no option were 21(14%), Don't know option were 11(7.3%), "Know how to calculate Body Mass Index" those who tick the yes option were 90(60%), no option were 49(32%), and Don't know option were 11(7.3%), "Obesity is mainly related to genetic" those who tick the yes option were 41(27.3%), no option were 65(43.3%), and Don't know option were 44(29.3%), "Obesity is mainly related to diet and lifestyle" those who tick the yes option were 99(66%), no option were

36(24%), and Don't know option were 15(10%). "Obesity is associated with sleep and psychosocial" those who tick the yes option were 36(24%), no option were 54(36%), and Don't know option were 60(40%).

Questions	Yes n (%)	No n (%)	Don't know n (%)
Body Mass Index is an important indicator for evaluating the level of obesity	118 (78.7)	21 (14)	11(7.3)
Know how to calculate Body Mass Index	90 (60)	49 (32.7)	11(7.3)
Obesity is mainly related to genetic	41 (27.3)	65 (43.3)	44 (29.3)
Obesity is mainly related to diet and lifestyle	99 (66)	36 (24)	15 (10)
Obesity is associated with sleep and psychosocial	36 (24)	54 (36)	60 (40)

Table no 2, nurses' knowledge towards obesity

Table no. 3

Table no 3 shows that from the total no of participants who participated in the study and respond to the question that "I don't want to get fat" those who tick the yes option were 136(90.7%), no option were 9(6%), and Don't know option were 4(2.7%). "Think myself need to lose weight" those who tick the yes option were 70(46.7%), no option were 60(40%), and Don't know option were 20(13.3%). "I've lost weight myself" those who tick the yes option were 49(32.7%), no option were 83(55.3%), and Don't know option were 18(12%). "Have regular physical exercise habits" those who tick the yes option were 48(32%), no option were 95(63.3%), and Don't know option were 7(4.7%). "Know weight loss information from family or friends" those who tick the yes option were 46(30.7%), no option were 76(50.7%), and Don't know option were 28(18.7%). "If the doctor advised me to lose weight, I would do it" those who tick the yes option were 112(74.7%), no option were 31(20.7%), and Don't know option were 7(4.7%).

Questions	Yes n (%)	No n (%)	Don't know n (%)
I don't want to get fat	136(90.7)	9(6.0)	4(2.7)
Think myself need to lose weight	70(46.7)	60(40.0)	20(13.3)
I've lost weight myself	49(32.7)	83(55.3)	18(12.0)
Have regular physical exercise habits	48(32.0)	95(63.3)	7(4.7)
Know weight loss information from family or friends	46(30.7)	76(50.7)	28(18.7)
If the doctor advised me to lose weight, I would do it	112(74.7)	31(20.7)	7(4.7)

Table no 3, nurses' attitude towards weight loss

Table no. 4

Table no 2 shows that from the total no of participants who participated in the study and respond to the question that "I have heard of liposuction" those who tick the yes option were 48(32%), those who tick the no option were 78(52%), and those who tick the Don't know option were 24(16%). "I have heard of gastric bypass surgery" those who tick the yes option were 64(42.7%), no option was 59(39.3%), and don't know option were 27(18%). "I heard that diabetes can be controlled by bariatric surgery" those who tick the yes option were 62(41.3%), no option were 61(40.7%), and Don't know option were 27(18%). "I am worried about weight rebound after surgery" those who tick the yes option were 58(38.7%), no option were 48(32%), and Don't know option were 44(29.3%). "I'm afraid I can't eat and drink as freely after surgery as before" those who tick the yes option were 43(28.7%), no option were 59(39.3%), and Don't know option were 48(32%). "If I have obesity or metabolic disease, I would consider surgical treatment" those who tick the yes option were 46(30.7%), no option were 65(43.3%), and Don't know option were 39(26%).

Questions	Yes n (%)	No n (%)	Don't know n (%)
I have heard of liposuction	48(32.0)	78(52.0)	24(16.0)
I have heard of gastric bypass surgery	64(42.7)	59(39.3)	27(18.0)
I heard that diabetes can be controlled by bariatric surgery	62(41.3)	60(40.7)	27(18.0)
I am worried about weight rebound after surgery	58(38.7)	48(32.0)	44(29.3)

I'm afraid I can't eat and drink as freely after surgery as before	43(28.7)	59(39.3)	48(32.0)
If I have obesity or metabolic disease, I would consider surgical treatment	46(30.7)	65(43.3)	39(26.0)

Table no 4, nurses' knowledge and attitude towards bariatric surgery

DISCUSSION

The current study was aimed to Assess the Knowledge, and Attitude towards Obesity and Bariatric Surgery of Nurses at Tertiary Health Care Hospitals Lahore. The study was descriptive cross-Sectional and use the descriptive statistics, frequency distribution was applied data normality was checked, data reliability and validity were not checked because the data was nominal. The current study used adopted version of questionnaire. Participants who participated in the study 56(37.3%) was with the age group of 21-25, and those with the age group 26-30 were 57(38%), 31-35 age group were 27(18%), and 36-40 age group were 10(6.7%). Majority were female 136(90.7%) and the male were 14(9.3%). participants who height 4-4.9fts were 38(25.3%), and those who height 5-5.9fts were 109(72.7%), and with the height group 6-6.9fts were 3(2%). Similarly, those who had General nursing diploma were 86(57.3%), post RN were 43(28.7%). Similarly, those having BSN(Generic) degree were 20(13.3%). The study participants those who underweight were 9(6%), and those who normal weight was 130(86.7%). Similarly, those who overweight were 11(7.3%).

The respond of participant to the question that" Body Mass Index is an important indicator for evaluating the level of obesity" those who tick the yes option were 118(78.7%), those who tick the no option were 21(14%), and those who tick the Don't know option were 11(7.3%), this showed that majority participants have good knowledge. The nurses respond to the question that" Know how to calculate Body Mass Index" those who tick the yes option were 90(60%), those who tick the no option were 49(32%), and those who tick the Don't know option were 11(7.3%), this showed that majority participants have good knowledge. The answer of participant to the question that" Obesity is mainly related to genetic" those who tick the yes option were 41(27.3%), those who tick the no option were 65(43.3%), and those who tick the Don't know option were 44(29.3%), this showed that majority participants have poor knowledge. The respond to the question that "Obesity is mainly related to diet and lifestyle" those who tick the yes option were 99(66%), those who tick the no option were 36(24%), and those who tick the Don't know option were 15(10%). this showed that majority participants have good knowledge. The respond to the question that "Obesity is associated with sleep and psychosocial" those who tick the yes option were 36(24%), those who tick the no option were 54(36%), and those who tick the Don't know option were 60(40%), this showed that majority participants have poor knowledge. So, the knowledge percentile test shows that participant with good knowledge value where 44(29.3%), the participant of moderate knowledge value where 52(34.7%), and those who with poor knowledge where 54(36%). This study result is poor which consistent with the previous study conducted in China(Fan et al., 2020).

The respond to the question that "I don't want to get fat" those who tick the yes option were 136(90.7%), those who tick the no option were 9(6%), and those who tick the Don't know option were 4(2.7%), this showed that majority participants have positive attitude to weight loss. The respond to the question that "Think myself need to lose weight" those who tick the yes option were 70(46.7%), those who tick the no option were 60(40%), and those who tick the Don't know option were 20(13.3%), this showed that majority participants have positive attitude to weight loss. The respond to the question that "I've lost weight myself" those who tick the yes option were 49(32.7%), those who tick the no option were 83(55.3%), and those who tick the Don't know option were 18(12%), this showed that majority participants have negative attitude to weight loss.

The respond to the question that "Have regular physical exercise habits" those who tick the yes option were 48(32%), those who tick the no option were 95(63.3%), and those who tick the Don't know option were 7(4.7%), this showed that majority participants have negative attitude to this question. The respond to the question that "Know weight loss information from family or friends" those who tick the yes option were 46(30.7%), those who tick the no option were 76(50.7%), and those who tick the Don't know option were 28(18.7%), this showed that majority participants have negative attitude to the question. The respond to the question that "If the doctor advised me to lose weight, I would do it" those who tick the yes option were 112(74.7%), those who tick the no option were 31(20.7%), and those who tick the Don't know option were 7(4.7%), this showed that majority participants have negative attitude. The attitude percentile test shows that participant with positive attitude value where 52(34.7%), the participant of average

attitude where 58(38.7%), and those who with negative attitude where 40(26.7%). This study result is average attitude which consistent with the previous study conducted in China (Diao et al., 2022).

The respond to the question that "I have heard of liposuction" those who tick the yes option were 48(32%), those who tick the no option were 78(52%), and those who tick the Don't know option were 24(16%), this showed that majority participants have poor knowledge about bariatric surgery. The respond to the question that "I have heard of gastric bypass surgery" those who tick the yes option were 64(42.7%), those who tick the no option were 59(39.3%), and those who tick the Don't know option were 27(18%), this showed that majority participants have moderate knowledge about gastric bypass surgery. The respond to the question that "I heard that diabetes can be controlled by bariatric surgery" those who tick the yes option were 62(41.3%), those who tick the no option were 61(40.7%), and those who tick the Don't know option were 27(18%), this showed that majority participants have poor knowledge about bariatric surgery. The respond to the question that "I think surgical treatment of obesity is safe and reliable" those who tick the yes option were 27(18%), those who tick the no option were 70(46.7%), and those who tick the Don't know option were 53(35.3%). this showed that majority participants have negative attitude toward bariatric surgery. The respond to the question that "I am worried about weight rebound after surgery" those who tick the yes option were 58(38.7%), those who tick the no option were 48(32%), and those who tick the Don't know option were 44(29.3%). this showed that majority participants have negative attitude toward bariatric surgery. The respond to the question that "I'm afraid I can't eat and drink as freely after surgery as before" those who tick the yes option were 43(28.7%), those who tick the no option were 59(39.3%), and those who tick the Don't know option were 48(32%), this showed that majority participants have positive attitude toward bariatric surgery. The respond to the question that "If I have obesity or metabolic disease, I would consider surgical treatment" those who tick the yes option were 46(30.7%), those who tick the no option were 65(43.3%), and those who tick the Don't know option were 39(26%). this showed that majority participants have negative attitude toward bariatric surgery. The Knowledge and attitude toward bariatric surgery percentile test shows that participant with good knowledge and positive attitude value where 47(30.9%), the participant of moderate knowledge and average attitude value where 53(34.9%), and those who with poor knowledge and negative attitude value where 50(32.9%). This study result is moderate knowledge and average attitude which consistent with the previous study conducted in India (Mehrotra et al., 2018).

CONCLUSION

The current study concluded that the nurse's knowledge about obesity and bariatric surgery is poor. Whereas their attitude toward weight loss and bariatric surgery as average. This is the need of a time to consider the need of knowledge, refresher courses and enhancement of knowledge in this regard. The policy makers or hospital management should take stick actions regarding this issue. there is should be followed up program to ensure the improvement of knowledge and attitude.

RECOMMENDATION

- The current study examined that the knowledge of the nurses regarding obesity and bariatric surgery was poor, but attitude toward obesity and bariatric surgery was average. The future researcher can play an important part in increasing knowledge and attitude regarding obesity and bariatric surgery.
- The future researchers can conduct experimental study to improve the poor level of knowledge toward obesity and bariatric surgery.

5.4 LIMITATION

I. The current study used the cross-sectional study design which is the weakest study design.
II. The sample size was small.

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