ORIGINAL ARTICLE

Psychological Problems Related to Obesity in Early Adulthood

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ABSTRACT

Objective: The study was aimed to investigate the relationship of psychological problems like depression, anxiety and low self-esteem among young adults suffering from obesity.

Study Design: Cross sectional analytical study design.

Place and Duration of Study: This study was carried out in Riphah Institute of Clinical and Professional Psychology, Riphah International University, Lahore, Pakistan and data was collected from two private and two government universities of Lahore during the year June 2017- June 2018.

Materials and Methods: Non probability purposive sample of 300 participants with age range 19 to 25 was incorporated in the present study. Depression was evaluated through the Hamilton Depression rating scale. Anxiety was measured in participants through the Hamilton anxiety rating scale and for self-esteem assessment Rosenberg self-esteem scale was applied. Urdu translated versions for all scales were used for present study. Both descriptive (frequencies, percentages bar graphs, mean and standard deviation) and inferential statistics (Pearson product moment correlation, Hierarchical regression analysis, Independent sample t test) were used for the data analyses.

Results: Descriptive analysis identified obesity of young adults with Body Mass Index ≥ 25 kgm^2. Results indicated that *106 (35.3 %)* young adults were suffering with very severe depression *40(13.3%)* with very severe anxiety and *166 (55.3 %)* with low self-esteem. Correlational analysis revealed significant positive relationship *0.480 **p< 0.01* between depression and anxiety. Regression analysis revealed that depression and anxiety were not significantly predicting the self-esteem. No significant gender differences was found regarding all study variables (p>.05).

Conclusion: Majority of young adults with obesity suffer with severe depression and very low self-esteem. There is a significant relationship between depression and anxiety among obese young adults. However both depression and anxiety are not the predictors of low self-esteem in this sample. Men and women score equally on depression, anxiety and self-esteem.

Key Words: *Anxiety, depression, Early Adulthood, Obesity, Self-esteem.*

Introduction

Obesity is a condition of inequality of calories that are ingested and calories that are expended which lead to unnecessary fat deposit. Obesity has serious consequences in the form of some medical and mental problems. Men as well as women face different outcomes of obesity however; researchers showed the women percentage is more than male in obesity.[1] Obesity has become a significant expanse of health psychology as there are lots of psychological problems which took place owing to obesity.[2,3] Obesity always brings supplementary health compromising situations that can further divided in to bio-psycho social conditions. For example biological conditions like hypertension, diabetes cardiovascular disorders, psychological issues like depression, anxiety, low self-esteem, and social like social stigma or isolation. Such factors enhance the adverse effects of obesity.[4] Numerous empirical evidences revealed many psychological and behavioural costs that people with obesity have to pay in the form of depression, anxiety, suicidal thoughts and wishes, body dissatisfaction and low self-esteem.[5]

Depression is more than just sadness. Individual who experience depression may suffer absence of

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pleasure and interest in daily activities, sleeplessness or increased in sleep, lack of energy, incapability to focus, significant weight loss, and spirits of meaningless or extreme culpability or recurrent opinions of demise or suicide. Depression is the very common mental disorder as most of the statistics revealed. Luckily, depression is curable. A mixture of therapy and antidepressant medication can support certify recovery.[6]

Anxiety is a sensation of uneasiness as well as discomfort. Sensation of nervousness from time to time is usual. Anxiety fragment of the body's usual response or to pressure can even be supportive at times, making you more attentive as well as prepared for actions. Nevertheless anxiety disorder varies from ordinary sensation of worry. Once sensation of fright or uneasiness develop, problematic to regulate or influence with everyday activities, it's entitled an anxiety disorder.[7] There are many factors related to anxiety in student's life e.g annoying to suitable in, remain moral marks, strategy for upcoming, and be gone from home frequently causes anxiety for a ratio of students.[8] Neuropsychiatric disorders, counting mood as well as anxiety disorders, description for about 14% of global encumbrance of illness and disturb over 450 million persons on international level.[9]

Self-esteem is generally conceptualized as the feeling that one is good sufficient and therefore, persons with high self-esteem do not fundamentally think they are better to others.[8] Self-esteem is thought to provide two basic functions, one is that self-esteem is intricate in the handover of detail among the separate and the social setting as well as it can suggest a caring utility that defenses persons from undesirable practices.[10]

The aim of the present research was to examine the psychological impacts of obesity in early adulthood. Previous researches revealed that, obese people are usually remaining dissatisfied about their body image which in return affects their dietary habits and ultimately self-esteem. Obese people have low self-esteem and feel dissatisfaction and discomfort as compare to non-obese people, as well as level of depression and anxiety expected to be high in obese people. People who are active are much better than sedentary people. Exercise relief stress which in return helps to improve self-esteem.

Previous empirical evidences based upon foreign literature. Present study will be a value able contribution in the field of social and health psychology with indigenous results. Present study focused on to determine whether depression and anxiety predict low self-esteem. It was planned to understand that how depression and anxiety can cause low self-esteem in obese adults. Depression and anxiety has several negative effects in everyday life of obese adults. So, it will be helpful for clinicians and health psychologists to manage these negative emotions. The study was aimed to investigate the relationship of psychological problems like depression, anxiety and low self-esteem among young adults suffering from obesity.

Materials and Methods

Cross sectional analytical study design was followed. Non probability purposive sample of 300 participants were included (50% men and 50% women) from two public and two private universities of Lahore during the period of June 2017- June 2018. Undergraduate and postgraduate participants with age range of 19 to 25 *(M =21.67, SD=1.94)* were included. Only those individuals were included for study whose weight was above the normal ranges. Suffering from any diagnosed psychological disorder was an exclusion criterion for the study. After approval of Board of Studies (BOS) of Riphah Institute of Clinical and Professional Psychology, Riphah International University, Lahore, Pakistan present research was carried out. All ethical standards of APA were followed during the study. The researcher recognized the enclosure and barring standards. The researcher ensured the members about the full privacy of collected data. The subjects were free to leave the study at any time they wished without any penalty or prejudice. They were fully informed about the aim of the study. Their approval was taken before administering the scales. The participants were given Demographic Information Sheet, Hamilton Depression Rating Scale, Hamilton Anxiety Rating Scale, Rosenberg self-esteem scale, individually. Total average time was 30 to 35 minutes for scale's administration. The data was normally distributed so parametric tests were chosen for the analyses. Pearson product moment correlational analysis was used for the assessment of relationship between variables as all the variables were

continuous in nature. Hierarchical regression analysis was employed for prediction and independent sample t test was used for gender difference examination. Data was analyzed through the SPSS version 21.

Results

Descriptive analysis revealed that *254*(84%) participants were living in a nuclear family system and *100%* with intact families. They were under grades *(50%)* and masters' *(50%)* students, all were unmarried (100%). Figure (1-3) show that *106 (35.3 %)* young adults with obesity were suffering from depression, *40(13.5%)* with severe depression, *65 (21.7%)* with moderate depression and *60(20%)* with mild depression, Likewise *40(13.35%)* young adults were suffering from very severe anxiety, 53(17%) with severe anxiety, *60(20%)* with moderate anxiety, 25(8.3%) with mild anxiety. In a similar manner *166 (55.3%)* young adults have low self-esteem.

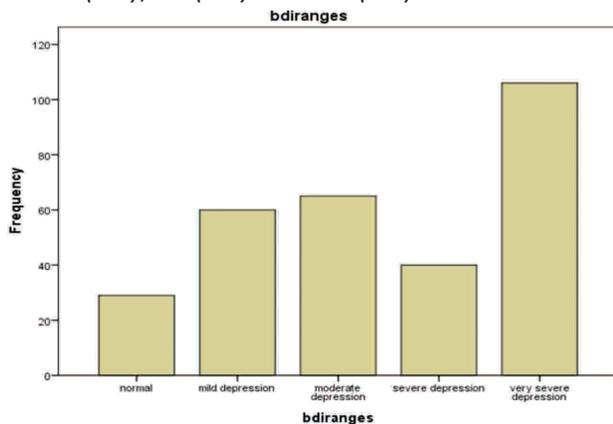All scales proved with significant internal reliability i.e BDI *(.88)*, BAI *(.88)* and RISB *(.74)*.

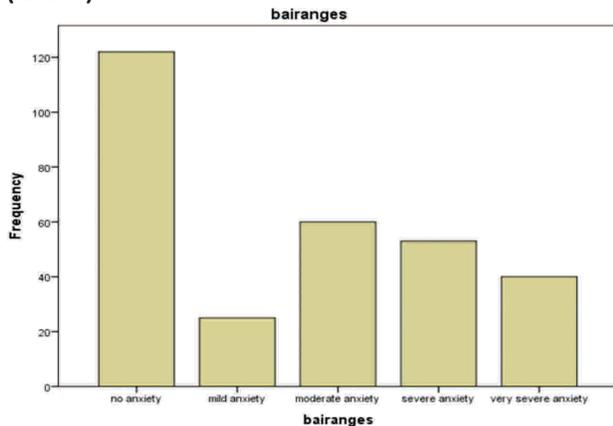**Fig 1: Level of Depression in Young Adults with Obesity (N=300).**

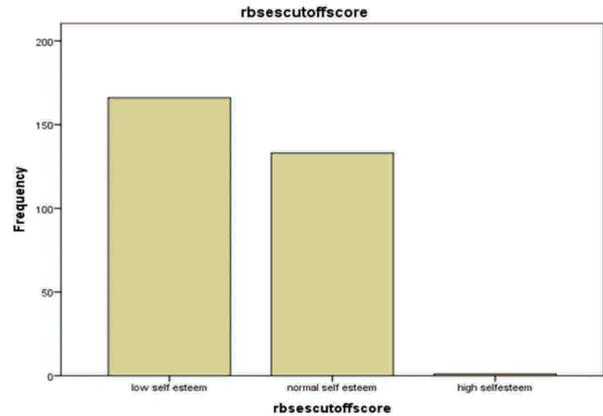**Fig 2: Level of Anxiety in Young Adults with Obesity (N=300)**

Fig 3: Level of Self-Esteem in Young Adults with Obesity

The results of correlation analysis (Table I) show that significant positive correlation *.480 **p< 0.01* between depression and anxiety.

Table I: Relationship between Depression Anxiety and Self-esteem (N=300)

Variables	Depression	Anxitey	Self -Esteem
1. Depression	-	.480**	-.060
2. Anxiety	-	-	.110
3. Self- Esteem	-	-	-

Note: HRSD= The Hamilton Rating Scale for depression, Anxiety=The Hamilton Rating Scale for Anxiety, Self-esteem= Rosenberg Self-Esteem Scale **p< 0.01.

For prediction a hierarchical regression analysis (Table II) was performed to identify predictors of self-esteem that were depression and anxiety. In the step 1 age, gender and family system non-significantly predicted self-esteem, *R2= -.001, F= (.905).* In the step II depression did not significantly predict self-esteem, *R2=.002, F= (.879).* In step III anxiety did not significantly predict self-esteem, *R2= .004, F= (1.21).*

Table II: Hierarchical Regression Analysis Predicting Self-esteem for Depression, Anxiety (N=300)

Predictors	△R2	β
Step 1	-.001	
Age		-.051
Gender		.079
Family System		-.032
Step II	-.002	
Depression		.05
Step III	.004	
Self Esteem		.105
Total R²	.00	

Note. R2= Adjusted R Square, β= Beta., outcome variable=self esteem

Independent "sample t test" was implied to

examine gender differences and results of t test (Table III) show that there is no significant difference *P> 0.05* in depression, anxiety and self-esteem.

Table III: Gender wise Difference regarding Depression, Anxiety and Self-esteem (N=300)

Variables	Men	Women				95%	CI	
	M(SD)	M(SD)	df	t	p	LL	UL	cohen's,
Depression	18.74(9.07)	20.19(10.87)	298	-1.25	.21	-3.71	.82	-1.44
Anxiety	17.19(11.42)	18.52(11.99)	298	-.98	.32	-.3.98	1.33	-1.32
Self-esteem	14.71(3.77)	15.28(3.82)	298	-1.30	.19	-1.43	.29	-.57

Note: CI= Confidence Interval, LL=Lower Limit, UP= Upper Limit,

Discussion

The present study aimed to investigate the relationship between depression, anxiety and self-esteem in obese young adults. Prediction and gender differences were also examined for all study variables.

There is a positive relationship between depression and anxiety in obese adult. The existence of a strong relationship between anxiety and depressive symptoms in individuals with obesity has an extra significance than the association between body plump and these equal indications rewis[10]. Results from earlier studies have been assorted, through some supporting positive relations for depression and anxiety with obesity.[11] Obesity also accompany weight stigma which ultimately leads the person towards pessimistic attitude, poor psychological outcomes like depression and anxiety[5]. In a meta-analysis[4] more than fifteen empirical studies concluded that weight stigma was significantly related to the symptoms of clinical depression. Rosenberger, Henderson, Bell, and Grilo[12] studied that if obesity and teasing from fellows starts from early childhood then it would be more strongly related to depression in adulthood. There is an inverse but non-significant relationship found between self-esteem and depression which could be inferred like this that self-esteem might be deliberated in place of a self-justifying issue particularly in this thought-provoking period of lifecycle.[13] The young individuals through adequate self-esteem have improved control properties and

are secure alongside the meanings of taxing life actions, similarly youngsters with little self-esteem are more susceptible to strain.[14] There is a high probability that people with inadequate self-esteem suffered with some psychological issues like anxiety and depression during their adult time period as compared to those with adequate self-esteem. Self-esteem deficiency also shows a significant role in increased anxiety. Further studies also established an inverse relationship between positive self-esteem and undesirable emotional consequences.[15] Meta-analysis of the studies also revealed that weight stigma is significantly associated with reduced self-esteem with teasing history during childhood.

Depression and anxiety played no role in predicting the self-esteem in present study participants. The results of the current study could fluctuate from previous studies that found low self-esteem potentially forecasts depression in adolescents and in early adulthood.[16, 17] The assumptions of the present research which is based upon the previous literature should be tested for a large population in order to get the significant results and enhance both internal and external validity.

T-test analysis revealed that there is no significant gender difference in depression, anxiety and self-esteem. Some previous studies presented that no differences in depressive signs were observed between male and female students.[18] The results also supported by the previous researches that indicated people with anxiety disorder did not show significant gender differences in the lifetime rates.[19, 20] The outcomes are convergent with the outcomes of some of the previous studies on gender differences in anxiety.[21]

The results can be inferred that men and women young adults with obesity were equally depress, anxious and with low self-esteem. Biological difference created no difference in psychological issues related to obesity. Researches also supported this idea that both men and women with obesity have low self-esteem.[22]

Conclusion

To sum up, young adults with obesity suffer with severe depression and a very low self-esteem. There is a positive relationship between depression and anxiety. Conversely depression and anxiety are not the predictors of self-esteem in this sample. No

gender differences reveal for depression, anxiety and self-esteem in young adults with obesity.

Implications

Obesity is related to many psychological problems e.g depression, anxiety and low self-esteem. Young adults should be vigilant for their caloric count, healthy life style and exercise so that they could be refrain from emotional and self-esteem problems. The results of the present study have clear implications with health psychology. As not only obesity as a medical issue should be address but its psychological impacts are even more alarming this could get in to the way of treatment plan of obese individuals. The physical and mental health go hand in hand so giving importance to one and ignore the other will not give better results on the part of the health of the community. Further researchers could explore more antecedents and consequences of obesity and enhance the already existing knowledge.

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