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RESEARCH ARTICLE

Psycho-social problems of obesity among male students in Qassim university in Saudi Arabia.

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 Medical students in Qassim university.

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Abstract

Introduction: Studies have shown that overweight and obese persons face psycho-social problems. We conducted a cross-sectional study in Qassim university to explore the psycho-social problems faced by male obese students.

Objectives: To determine the types of psycho-social problems, and find their prevalence among Qassim University overweight and obese students.

Research Methods: A self-administered questionnaire was designed and pretested. The questionnaire consisted of questions regarding age, college, social background and social problems that they encounter. An open ended question was also included so that the study subject may identify some social problems that they encountered which the questionnaire may have failed to list. The participants of the study were selected by convenient sampling. The sample size was 65.

Results: In studied overweight and obese students sample, 58(89%) were unhappy about their weight and 52(80%) tried to follow weight reduction program. Fifty-six students (86.2%) considered overweight and obesity as a disease and 44(67.7%) had positive family history. Mood swing and social pressure were reported by 37(56.9%) and 30(46.2%); respectively. low self-esteem and effect on social life reported by 24(36.9%) and 13(20%); respectively. Reporting overeating due to anger, sadness and boredom was 9(13.8%), 11(16.9%) and 37(56.9%); respectively.

Conclusion and recommendations: Our study showed a substantial proportion of psycho-social problems among overweight and obese students. The finding of the study cannot be generalized to all Saudi adolescent, since the sample is small and not representative of all Saudi adolescent therefore we recommend that a larger study on the topic should be undertaken to estimate more accurately the magnitude of the problem.

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Introduction:-

Obesity is now considered as an epidemic by WHO (world health organization)^[1].
The definition of overweight and obesity is:

Overweight : excessive increase in adipose tissue or in muscle and skeletal tissue .
Obesity : an increase in body weight beyond the limitation of skeletal and physical requirement, as the result of an excessive accumulation of fat in the body.

Overweight and obesity is best measured by calculating body mass index (BMI).

This definition lead us to what is the BMI ?

$$\frac{\text{weight (Kg)}}{\text{Height (m}^2\text{)}} = \text{BMI}$$

Regarding to BMI the meaning of overweight and obesity will be:

25.0 to 29.9 =overweight.

30 to 39.9 = obese.

The risk factors associated with obesity and overweight are:

- Diet (high fat and carbohydrate with excessive calories).^[2]
- Sedentary lifestyle.^[3]
- Genetics.^[4]
- Illnesses (hypothyroidism, Cushing's syndrome, growth hormone deficiency).^[5]
- Infectious agent.^{[6][7]}
- Others causes of obesity like (insufficient sleep, decreased rates of smoking, increased use of medications that can cause weight gain, pregnancy at a later age).^[8]

The Prevalence of Overweight& Obesity in all age groups in KSA^[9]is:

14 % in men, and increasing level 30.7 %.

23.6 % in women, and increasing level 28.4 %.

In a study conducted by Wellman Friedberg in USAreports: "currently, the rates of both overweight and obesity in the US are 61% and 14% in adults and children, respectively. About 14% of children and adolescents are now seriously overweight."^[10]

There're a lot of medical problems associated with obesity, including:

Mortality:

Obesity reduces life expectancy by six to seven years.^[11]

Morbidity:

- diabetes mellitus type 2.
- hypertension.
- high blood cholesterol.
- high triglyceride levels.
- ischemic heart disease.^[12]

Beside Medical Problems, There're Also Psychological Problems Associated.

In astudy conducted by Wellman and Friedberg they report that:

"Emotional suffering may be among the most painful aspects of obesity. American society emphasizes physical appearance and often equates attractiveness with slimness, especially for women. Such messages may be devastating to overweight people. Many think that obese individuals are gluttonous, lazy, or both, even though this is not true. As a result, obese people often face prejudice or discrimination in the job market, at school, and in social situations. Feelings of rejection, shame, or depression are common."^[10]

Low Self-Esteem^[13]

Obese teens have significantly lower self-esteem than teens of normal weight. Low self-esteem often appears as loneliness, nervousness and sadness. Teens with low self-esteem may also engage in risky behavior such as

experimenting with drugs, alcohol or cigarettes. Obese teens who experience low self-esteem during childhood and adolescence often carry these feelings into adulthood.

Depression^[13]

Depression is a common psychological effect of teen obesity. An obese teen who is heavier than her peers may experience feelings of sadness or hopelessness. Signs of depression include changes in sleep patterns, withdrawal from family or friends and loss of interest in activities she previously enjoyed. MayoClinic.com reports that some teens try to hide depression and appear emotionally flat rather than sad.

Anxiety^[13]

Most children experience anxiety for various reasons throughout adolescence. Obese teens, however, may experience severe anxiety that often results in destructive behaviors or avoidance of friends and family. Overweight teens may also have social anxiety, the result of excessive bullying or teasing. Severe anxiety often interrupts the learning process and may lead to a decline in academic performance. Being an overweight teen can also affect an individual's anxiety level as an adult. Overweight teen girls may have a higher chance of developing anxiety disorders or depression in adulthood.

Poor Body Image^[13]

Obese teens often experience poor body image as a result of being overweight. This may keep your teen from playing sports or engaging in physical activity, spending time with friends or wearing form-fitting clothing. Poor body image is connected to a number of psychological problems, including depression, anxiety and low self-esteem. Teens with poor body image are also at risk of developing an eating disorder.

Eating Disorder^[13]

Obese adolescents are at risk of developing disorders such as bulimia, anorexia or compulsive overeating. An eating disorder is often the result of an overweight teen's effort to lose weight through risky and unhealthy behaviors.

A study from US has conclude the following "Obesity is associated with an approximately 25% increase in odds of mood and anxiety disorders and an approximately 25% decrease in odds of substance use disorders. Variation across demographic groups suggests that social or cultural factors may moderate or mediate the association between obesity and mood disorder."^[14]

The purpose of this study is to explore the psycho-social problems in obese student in four colleges of qassim university, by doing a Cross-Sectional study.

Research Objectives:-

Goal:

To get better understanding of the social and psychological problems that faced by Qassim university obese students.

Objectives:-

To determine the types of Psycho-social problems, and find the prevalence of it among Qassim University overweight and obese students.

Limitations of the study:

- 1-Since the selection of the study subjects was based on non-probability sampling technique, therefore it cannot be generalized to the entire obese population of students of Qassim university.
- 2-The study participants consent to participate in the study was voluntary, therefore there is a possibility of overestimation or underestimation of the result.
- 3-Only the male obese students were included in the study.

Research Methodology:-

Research setting: The study was conducted in Qassim University, Colleges of Medicine, Dentistry, Pharmacy and Applied Health Sciences.

Sampling and sample size:-

All male obese students who agree to participate in the study were inducted in the study. Therefore, the sampling method was "convenient sampling". The sample size was 65 male obese student.

Data collection method:-

For all obese students who agreed to participate in the study, BMI was calculated to confirm obesity. Those who do not fall in the category of obesity were excluded from the study. A self-administered questionnaire was designed and pretested. The questionnaire consisted of questions regarding age, weight, height, college, social background and the psych-social problems that they encounter. An open ended question was also given so that the study subject may identify other social problems that they encounter and were not listed in the questionnaire. The data were collected by the group members. Every 3-4 group members were assigned one college to collect the data.

Data entry and analysis:-

Before entering the data, the data were cleaned and edited. The data were entered and analyzed in SPSS program. Frequency tables were generated. Each variable frequency was analyzed and cross tabulation.

Expected problems and their solutions:-

The faculty members may not give the permission to conduct the study. This will be dealt by taking official permission from Deans' of respective Colleges. The students may not cooperate for fear of their names being identified. This will be assured by having the questionnaire as anonymous.

Results:-

Question	No n (%)	Yes n (%)
1. Are you satisfied with your current weight?	58(89.2)	7(10.8)
2. Have you tried to follow a program to reduce your weight?	13(20)	52(80)
3. Do you believe the obesity is a disease?	9(13.8)	56(86.2)
4. Dose any of your family members have obesity?	21(32.3)	44(67.7)
5. Do you feel mood swing?	28(43.1)	37(56.9)
6. Do you feel social pressure due to your weight?	35(53.8)	30(46.2)
7. Does your overweight prevent you from going to public places?	58(89.2)	7(10.8)
8. Does your overweight prevent you from doing sport activity?	41(63.1)	24(36.9)
9. Did you try any dangerous method to reduce your weight?	45(69.2)	20(30.8)
10. Did obesity reduce your self-esteem?	41(63.1)	24(36.9)
11. Did you face difficulty in reduce your diet?	29(44.6)	36(55.4)
12. Did you thought that the obesity will affect you in the future?	9(13.8)	56(86.2)
13. Did you take any drug to reduce your weight previously?	47(72.3)	18(27.7)
14. Did your weight affect your study?	53(81.5)	12(18.5)
15. Did your weight affect your social life?	52(80)	13(20)
16. Did your overweight affect your activity?	30(46.2)	35(53.8)
17. Did you eat as a result of anger?	56(86.2)	9(13.8)
18. Did you eat as a result of sadness?	54(83.1)	11(16.9)
19. Did you eat as a result of boredom?	28(43.1)	37(56.9)
20. Did you eat as a result of frustration?	40(61.5)	25(38.5)
21. Your life style? Lazy, Active, Neutral	11(16.9) 8(12.3) 47(70.8)	

In studied overweight and obese studentssample, 58(89%) were unhappy about their weight and 52(80%) tried to follow weight reduction program. Fifty-six students (86.2%) considered overweight and obesity as a disease and 44(67.7%) had positive family history. Mood swing and social pressure were reported by 37(56.9%) and 30(46.2%); respectively. low self-esteem and effect on social life reported by 24(36.9%) and 13(20%); respectively. Reporting overeating due to anger, sadness and boredom was 9(13.8%), 11(16.9%) and 37(56.9%); respectively.

Discussion:-

In our study 36(56.9%) feels mood swing and 56(86.2%) thinks their obesity will affect them in the future while a study done in USA, shows that 25% obese adults have mood and anxiety disorder^[14] Another study on psychosocial aspects of obesity suggest that in obese patients seeking treatment there is an increased prevalence (40-60%) of psychiatric morbidity, most commonly depression^[15], which is quite similar to the finding in our study.

Conclusion and recommendation:-

Our study showed a substantial proportion of psycho-social problems among overweight and obese students. The finding of the study cannot be generalized to all Saudi adolescent, since the sample is small and not representative of all Saudi adolescent therefore we recommend that a larger study on the topic should be undertaken to estimate more accurately the magnitude of the problem.

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