**ORIGINAL RESEARCH**

# Psychiatric Evaluation of Psychosocial and Behavioral Risk Factors Contributing to Obesity Among College Students

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Received: 11 July, 2022 Accepted: 14 August, 2022 Published: 10 September, 2022

## ABSTRACT

**Introduction:** The transitional phase of college life introduces unique stressors—including academic pressure, social adaptation, disrupted routines, and autonomy over lifestyle choices—which often culminate in maladaptive coping strategies such as emotional eating, binge-eating, and sedentary behaviors. We done the Psychiatric Evaluation of Psychosocial and Behavioral Risk Factors Contributing to Obesity Among College Students. **Materials and Methods:** The difference among both genders was non- significant (P > 0.05). Thus, the prevalence of overweight subjects was 16% and obese was 7.4%. Graph Ishows that out of 140 males, 60 were from rural and 80 were from urban population. Out of 175 females, 77 were from rural and 98 were from urban population. The difference was non - significant (P> 0.05). **Results:** Obesity is increasing in today's life style. There is urgent demand of adopting healthy food habits, lifestyles, and a physically active daily routine, among the adults to minimize dangers of the risks of developing chronic degenerative diseases. **Conclusion:** Obesity is increasing in today's life style. There is urgent demand of adopting healthy healthy food habits, lifestyles, and a physically active daily routine, among the adults to minimize dangers of the risks of developing chronicdegenerative diseases.

**Keywords**: Stress, Risk factors, Obesity



## INTRODUCTION

Obesity has emerged as a significant public health concern globally, with its prevalence rising sharply among young adults, particularly college students. While dietary habits and physical inactivity are commonly recognized contributors, emerging evidence underscores the vital role of psychological, behavioral, and environmental factors in the development and maintenance of obesity. The transitional phase of college life introduces unique stressors—including academic pressure, social adaptation, disrupted routines, and autonomy over lifestyle choices—which often culminate in maladaptive coping strategies such as emotional eating, binge-eating, and sedentary behaviors.

From a psychiatric standpoint, obesity is closely linked with mental health disorders, especially depression, anxiety, body image disturbances, and low self-esteem. Furthermore, conditions such as binge-eating disorder and night eating syndrome have shown a bidirectional relationship with obesity. The role of stress, sleep disturbances, reward processing, and impulsivity also contribute to disordered eating behaviors, which are often overlooked in conventional public health approaches.

As the pandemic of overweight and obesity around the globe continues to rise, many developing countries face a double burden of over nutrition and under nutrition. This in turn increases risk of developing high blood pressure, type II diabetes, heart disease, gallbladder disease and cancer of the breast, prostate and colon etc.[1] Therefore there is need to take this issue seriously. Lack of physical activity, intake of high- calorie and low-cost foods are the precipitating factors. Environmental and behavioral changes, modernization, and urbanization are among

other initiating factors.[2]

India has controlled the problem of severe under nutrition to a substantial extent among young children but now facing a rising epidemic of overweight and obesity among children and adults. World Health Organization (WHO) in its recent report revealed that there are over 300 million obese adults and 1.1 billion overweight people worldwide.[3] Obesity is associated with more than 30 medical conditions and scientific evidence has established a strong relationship with at least 15 of those conditions. A study conducted by RAND organization, concluded that obesity is more damaging to health than smoking, high levels of alcohol drinking and poverty.[4]

In a previous review,[5] the following factors were identified to be associated with overweight and obesity among university students or (young) adults: (1) socio-demographic factors (mainly male gender, older age and higher socioeconomic status; (2) Social factors: lack of social support, capital and lack of religiousness; (3) Dietary behaviour: intakes of fiber, consumption of red meat, skip breakfast more often, high number of meals, snacking behaviour; and (4) Health risk behaviour: Physical inactivity, frequent alcohol use, and smoking; (5) Mental health and childhood abuse: poor mental health (depression, anxiety) and childhood physical abuse, sexual and verbal abuse.

The purpose of this study was to assess the prevalence of overweight/obesity and its associated factors among university students in 22 low and middle income and emerging economy countries.

The characteristics of PCOS include increased secretion of androgen level (hyperandrogenesim) and gonadotropin releasing hormone (GnRH) that leads to menstrual irregularity, hirsutism and infertility.[6] It can be diagnosed at all the phases of life that girls having 8-9 year of age through post- menopausal females. Amenorrhea is the most common problem of PCOS in young girls.[7] obesity is also common features in women with PCOS and Family history of obesity, diabetes mellitus, thyroid disease, PCOS is strongly supports a genetic susceptibility to this disorder at present lifestyle, food habits, environmental exposures to toxins and stress have also contributed to the development of PCOS.

This community-based programme aims to evaluate the psychosocial and behavioral risk factors associated with obesity among college students through a psychiatric lens. By exploring the influence of mood, stress, personality traits, sleep patterns, substance use, and socio-cultural pressures, the study seeks to generate a comprehensive understanding of obesity as a multifactorial disorder with significant mental health implications. The findings are expected to support the development of targeted mental health interventions and integrated health promotion strategies tailored for the college population.

## MATERIALS & METHODS

A predesigned questionnaire was used to collect the information such as name, age, gender, ethnic origin and their present weight (Kg) and height (m). Weight and height of all subjects were measured using standardized weighing machine and a height measuring scale. All subjects were subjected to BMI and was calculated by dividing a person's body weight by their height (weight [kg] / height $[m]^2$). A following criteria was used- BMI of 30 - obese, a BMI of 25.0 - 29.9 - Pre-obese and a BMI 23 to 24.9 - overweight/pre-obese. Community programs were arranged by the investigators utilizing the students to spread the information about the health effects of overweight and obesity along with the prevention strategies.

## RESULTS

Table 1 shows that out of 300 subjects, males were 140 and females were 160. The difference was non - significant (P –0.1).

**Table 1 Distribution of subjects**

| | **Total - 330** | |
|---|---|---|
| **Male** | **Female** | **P value** |
| 155 | 175 | 0.1 |

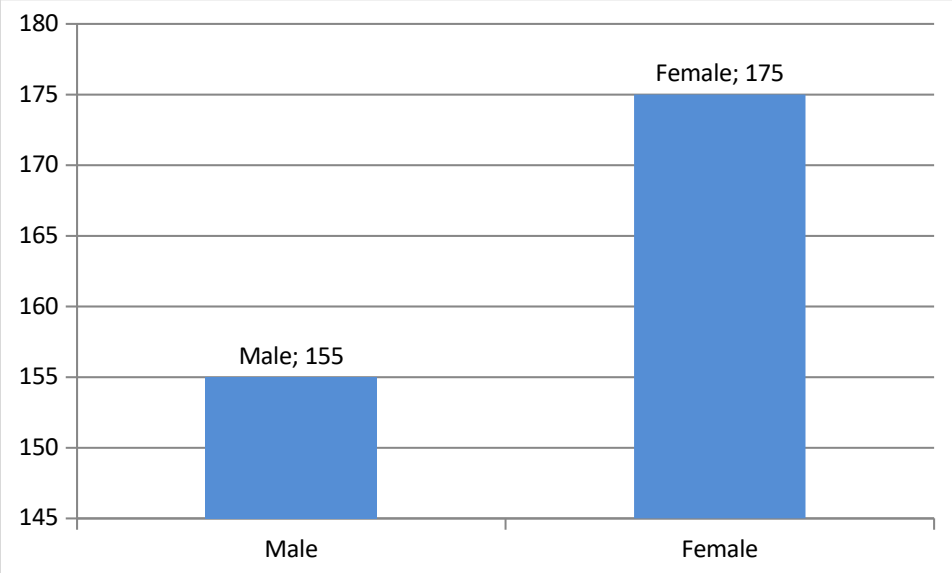


**Fig 1 Gender wise distributioin**

Table 2 shows BMI of subjects. Subjects were underweight (males- 24, females- 27), normal weight (males- 71, females- 80), over weight (males- 23, females- 25), pre- obese (males- 26, females- 28) and obese (males- 11, females- 15). The difference among both genders was non- significant (P > 0.05). Thus, the prevalence of overweight subjects was 16% and obese was 7.4%. Graph Ishows that out of 140 males, 60 were from rural and 80 were from urban population. Out of 175 females, 77 were from rural and 98 were from urban population. The difference was non - significant (P> 0.05).

**Table 2 BMI of subjects**

| Classification | BMI (Kg/m$^2$) | Total | Male | Female |
|---|---|---|---|---|
| **Underweight** | **<19.1** | 51 | 24 | 27 |
| **Normal weight** | **19.4- 23.3** | 151 | 71 | 80 |
| **Over weight** | **24- 25.1** | 48 | 23 | 25 |
| **Pre- obese** | **26- 30.1** | 54 | 26 | 28 |
| **Obese** | **>31** | 26 | 11 | 15 |
| **Total** | | 330 | 155 | 175 |

## DISCUSSION

The present study was conducted to estimate the risk factors leading to obesity among study population. In this study, we evaluated the BMI of college students. In our study, males were 140 and females were 160. The prevalence of overweight subjects was 14% and obese was 6.6%. Another population-based cross-sectional study conducted in Malaysia showed that the overall national prevalence of obesity among Malaysians aged 15 years old and above was 11.7%.[8]

We found that subjects were underweight (males- 21, females- 24), normal weight (males- 68, females- 77), over weight (males- 20, females- 22), pre- obese (males- 23, females- 25) and obese (males- 8, females- 12). Our results are in agreement with Boo et al.[9] They found that most of the subjects were overweight.

We found that 60 males and 70 females were from rural population. Similarly, 80 males and 90 females were from urban population. The increased urbanization, lack of physical exercise, eating junk food led obesity. Gupta found similar results.[10]

We also correlated the ethnicity with obesity and found that in our study, maximum number of obese subjects were Indians as compared to Chinese. Chhabra P[8] found same results in his study.

We found that among women, high prevalence of organised religious activity was associated with overweight/obesity. As in this study, recent research reported a higher BMI in women who were affiliated with a Christian religion.[11] Although weight loss programmes were run in some churches,[12] weight management has rarely been addressed by religious lectures or in group discussions in developing countries.[13] This presents an opportunity for religious-based prevention programmes for youth at risk for obesity especially in urban areas. In this study an unexpected finding was that making a conscious effort to avoid fat and cholesterol and trying to eat fiber were associated with overweight/obesity. Other studies have also found this association between intake of fiber and obesity.[14] It is possible that in this study where intention (assessed by conscious effort) to avoid fats and cholesterol which was self-reported, this did not correspond to the actual eating pattern. On the other hand, students who were overweight or

obese might have already adopted healthier eating behaviour in order to lose weight and be more accepted by their peers. Since the study design was cross-sectional, causality between dietary variables and overweight/obesity could not be established.

The finding in this study that lack of physical activity and tobacco use were associated with overweight/obesity has also been found in a number of previous studies. In this study, male students had a higher mean frequency of physical activity than female students, and physical inactivity was related to overweight/obesity among males but not among females. Other researchers did not find a link between physical inactivity and overweight/obesity either for male or female students despite showing that the men are more like likely to engage in physical exercise in their free time.[15] Others studies indicate that the relationship between BMI and physical activity occurs only among men.[16] Despite these differences the link between obesity and a sedentary lifestyle has been established.

## CONCLUSION

Obesity is increasing in today's life style. There is urgent demand of adopting healthy healthy food habits, lifestyles, and a physically active daily routine, among the adults to minimize dangers of the risks of developing chronicdegenerative diseases.

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