

A study on prevalence of eating disorder among college going adolescent girls and impart nutrition education

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ABSTRACT:

Objective: The purpose of this study is to determine the prevalence of eating disorder among adolescent girls. This research focused on prevalence of eating disorder and identify body dissatisfaction and emotional eating attitudes of girls with eating disorder through questionnaires.

Methods: The data for this study was obtained from respondents in S.D.N.B Vaishnav College for women, Chrompet. By random sampling method 300 adolescent girls between ages of 16 – 19 were partook in obtaining responses on eating disorders. The adolescents with eating disorder (n=27) were asked to fill out the 'body shape dissatisfaction' questionnaire to measure body image concern and 'emotional eating behaviours' questionnaire to determine variations in food consumption in response to emotional states and situations. Nutrition education in the form of one to one counselling is offered to the subjects with eating disorder.

Result: The present research indicates that the adolescent girls in the age group of 18-19 age group have a high prevalence of eating disorder (77.8%). The high prevalence of eating disorder was seen in middle income group (44.7%) also, the presence of eating disorder was high in urban area as well as high in overweight adolescents. There is no correlation between emotional appetite and EDE - Q subscales respectively. There is no correlation between restraint eating score and BMI. There is a significant correlation between BMI and eating concern score, shape concern.

Conclusion: The results of this study indicate that the prevalence rate of eating disorder (9%) among adolescent girls is low. Subjects with overweight are more affected by eating disorder. Body dissatisfaction is seen in subjects with eating disorder. Among eating disorder subjects, there is no emotional appetite seen concern score and weight concern score.

KEYWORDS: EATING DISORDER EXAMINATION QUESTIONNAIRE (EDE – Q), EATING DISORDER, BODY DISSATISFACTION, EMOTIONAL EATING ATTITUDES.

INTRODUCTION

Adolescence is an intermediate phase of life which is the transitional step from childhood to adulthood. There are peculiar changes occurring during this period and trends for adults are created (World Health Organization, 2013). The term 'adolescence' derives from the Latin word 'adolescence,' which means rising into adulthood. (Neville, 2016). Eating disorders are more common in women than in men such as anorexia nervosa and bulimia nervosa. Women are more likely to be influenced by body checking behaviors like weighing than men. The current study focuses on teenagers between the ages of 16 and 19. Obesity and eating disorders in adolescents are both common. Some teenagers in an attempt to lose weight may develop an eating disorder but most adolescents who develop an eating disorder did not have obesity previously, habits of trying to check for fit or involve in body avoidance behaviors on particular clothing (Ruth et al., 2009).

Anorexia Nervosa

Numerous individuals with anorexia nervosa see themselves as overweight, actually they are obviously underweight. They are increasingly worried with weight gain and intake of food.

Bulimia Nervosa

Individuals with bulimia nervosa defined as excessive intake of food, promote regurgitation or misuse of purgatives, diuretics against themselves.

Binge Eating

Binge eating is typically consuming large amounts of food in one sitting and eating behaviour are going to be out of control. Obese people with binge-eating disorders are at increased risk of developing cardiovascular disease and hypertension (Arumugam et al., 2015).

OBJECTIVES OF THE STUDY:

- To study the demographic profile of the adolescent girls
- To assess the presence and nature of disordered eating attitudes and behaviours among adolescent girls.
- To determine anthropometric measurements, body image concerns, emotional eating attitudes and dietary habits among adolescent with disordered eating.
- To provide nutritional counselling to the adolescents with eating disorder.

MATERIALS AND METHODS

This research was performed as a descriptive research among adolescent population during November 2019 to March 2020. The adolescents aged between 16 – 19 were partook as our study participants. Data was collected from respondents in S.D.N.B Vaishnav College for women, Chrompet. By using random probability sampling method 300 adolescent girls were involved for obtaining responses on their eating disorder pattern through eating disorder examination questionnaire (EDE – Q) and then

the adolescents with eating disorder are asked to fill the ‘body shape dissatisfaction’ and ‘emotional eating behaviours’ through questionnaires. We assured that confidentiality are going to be maintained throughout the study. Informed consent was obtained. Nutrition education

is given to the subjects with eating disorder through one-one counselling. This study entitled “A Study on Prevalence of Eating Disorder among College Going Adolescent Girls and Impact Nutrition Education” has been approved by the Independent Human Ethical Committee (IHEC) dated: 04/09/2019 (Protocol No. SDNBVC/HSC/IHEC/2019/07), Chromepet, Chennai – 44.

RESULTS

Socio – demographic profiles of the adolescent girls

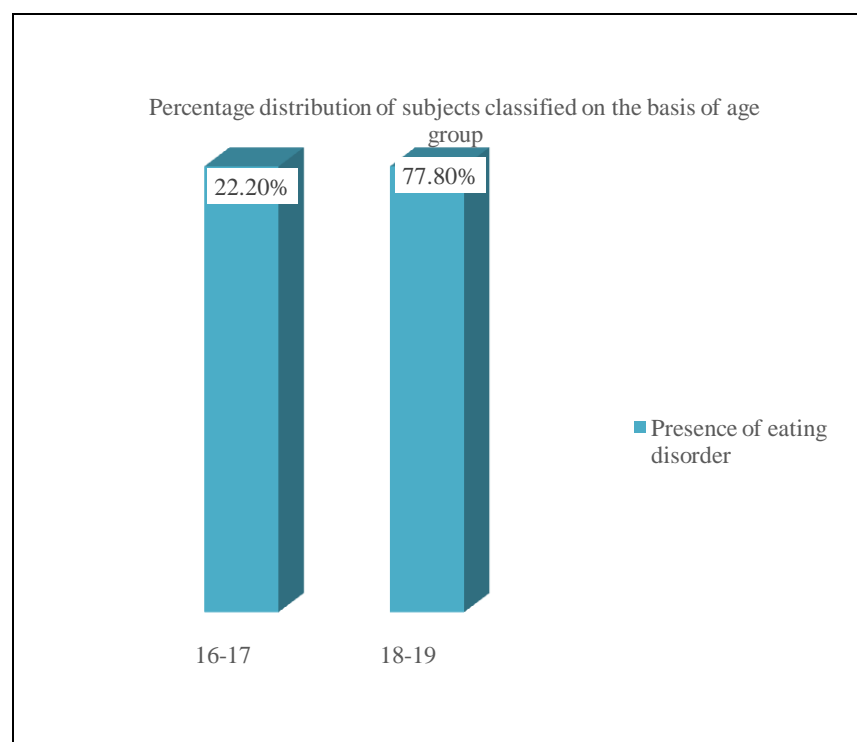


FIGURE 1: PERCENTAGE DISTRIBUTION OF SUBJECTS CLASSIFIED ON THE BASIS OF AGE GROUP

From the figure 1, it is revealed that the presence of eating disorder was high in the age of 18 -19 i.e., 77.8%. The study done by Nivedita (2018) stated that in India adolescents aged between 15-25 years the prevalence of eating disorder is 26.06% whereas the present

study shows that the presence of eating disorder was high in the age of 18 -19(77.8%) and in the age of 16-17 years, it was 22.2%.

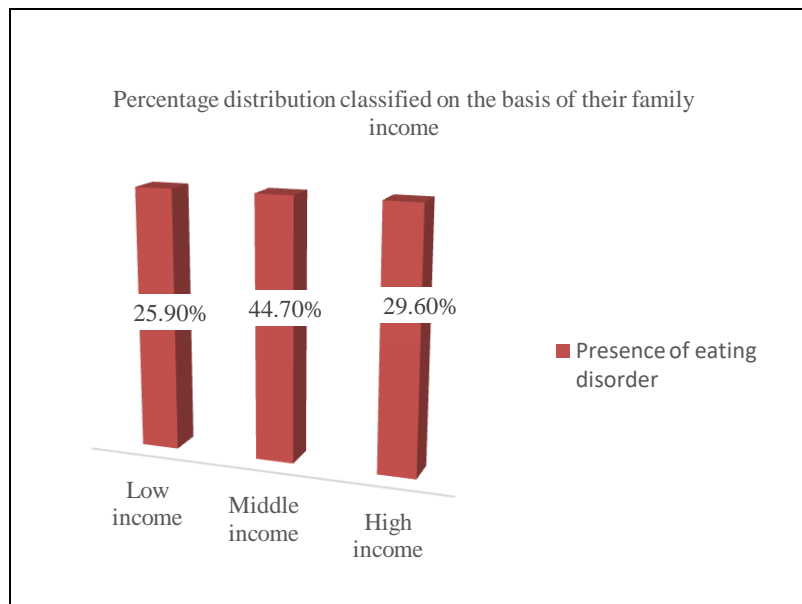


FIGURE 2: PERCENTAGE DISTRIBUTION PERCENTAGE DISTRIBUTION CLASSIFIED ON THE BASIS OF THEIR FAMILY INCOME

From the figure 2, it revealed a high presence of eating disorder seen in middle income group(44.7%). The study done by Jones et al., 2017 stated that the eating disorders are distributed equally across levels of socioeconomic status.

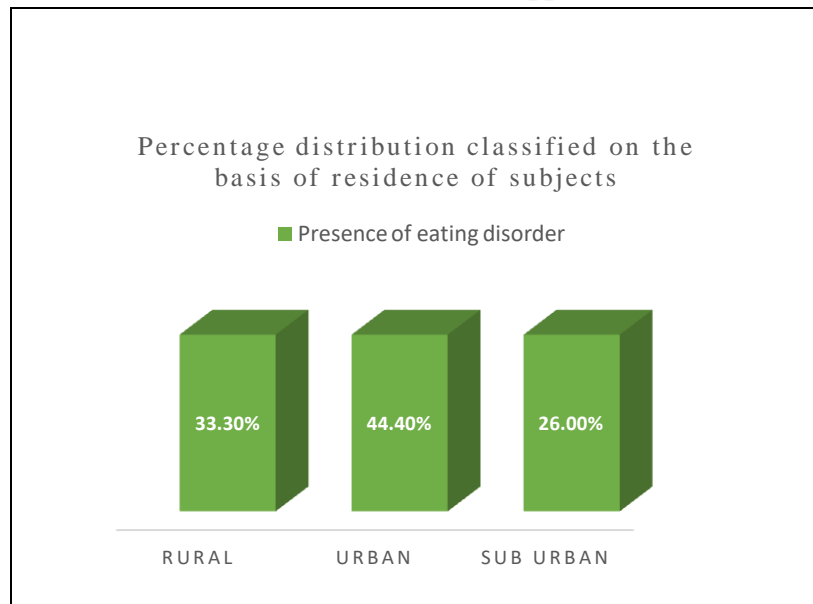


FIGURE 3: PERCENTAGE DISTRIBUTION CLASSIFIED ON THE BASIS OF RESIDENCE OF SUBJECTS

From the figure 3, it showed that the presence of disorder was high in urban area among adolescent girls. The study done by Vanson et al., 2006 states urban life is a risk factor for eating disorder among adolescent girls.

Anthropometric measurements of the subjects with eating disorder

Subjects with eating disorder was seen high in overweight (5%) category. In the present study waist hip ratio of adolescent girls with eating disorder was low.

Dietary habits of the subjects with eating disorder

Consumption of energy intake by subjects with eating disorder was low when compared with RDA, Consumption of protein intake is additionally low in comparison with RDA. When compared with RDA, consumption of fat intake by subjects with eating disorder was higher.

Eating disorder examination

- The study done by Arumugam et al., 2018 found that 63% was absent with eating disorder and eating disorder was present in 37% of study population in Poonamallee. In another study done by Galmichae et al., 2019 were 2.2%. In another study done by Thapa et al., 2015 was 29% in females, whereas in the present study, the presence of eating disorder was 9% which is low when compared to previous studies.

Body dissatisfaction and emotional eating attitudes of the subjects with eating disorder

Body dissatisfaction

It had been observed that, majority (59%) of the subjects were slightly worried about body shape.

Emotional eating attitudes of the subjects with eating disorder

- There is no emotional appetite seen among subjects with eating disorder in this present study.

Nutrition Education

Nutrition education program on eating disorder is conducted to promote healthy eating habits and positive lifestyle practice among adolescents.

It focuses on two components

- a) One to one counselling - Counselling allows individuals to explore their beliefs, behaviours and feelings, work through challenging or influential memories, identify aspects of their lives that they would like to change, better understand themselves and others, set personal goals, and work toward desired change (Kabir, 2017). Through nutrition education the adolescent girls were educated about the importance of healthy eating emphasizing the balanced diet, breaking the myths on physical appearance. Also importance of physical fitness is also conveyed to the subject in one-one counselling.
- b) Pamphlet distribution - The pamphlet contains Real food guide which is a comprehensive and user-friendly guide that used to educate about components of a balanced and healthy diet. The REAL Food Guide consists of four layers and each layer used to address gaps in nutrition education and intervention for individuals with eating disorders(Susan, 2018)

CORRELATION ANALYSIS

Association between EDE- Q subscale scores and total emotional appetite score

There is no correlation between EDE- Q subscale scores and total emotional appetite score respectively.

Association between EDE- Q subscale scores and BMI

There is no correlation between restraint eating score and BMI. There is a significant correlation between BMI and eating concern score, shape concern score and weight concern score.

CONCLUSION

Eating disorders comprise one among the foremost common chronic illnesses to affect adolescents. Body dissatisfaction is considered to be one among the risk factors for the development of eating disorders in women. Our findings highlight that the presence of eating disorder was 9% among 300 adolescent girls. Subjects with overweight (5%) are more affected with eating disorder ($n = 27$). In subjects with eating disorders, body dissatisfaction was seen. It is found that for subjects with eating disorder there is no emotional appetite

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