

## PREVALENCE OF EATING DISORDER COGNITIONS AMONG INDIAN ADOLESCENT GIRLS

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### ABSTRACT

The rapid globalisation and race to excel in each and every field by the people around the globe has several negative influences on their mental and physical health. Eating disorder cognitions among adolescent girls is one of such concerns which need to be addressed since this particular group plays very vital role in the society and directly or indirectly affects a larger segment of the society. Eating disorders are common among adolescent girls in western countries. But from past few years it has been introducing in India too. In India the information regarding these disorders is very limited but it is increasing very rapidly day by day due to the effect of media and westernization. And because of its effect, adolescents are very keen to have a perfect body figure by adopting wrong eating habits and sometimes by starving themselves. This research paper aims to show the prevalence of eating disorder cognitions among Indian adolescent girls in the present scenario. It also delves into BMI classification and population distribution of samples and impact of various sub-scales of eating disorder on population distribution of samples.

**KEYWORDS:** Eating Disorder (ED), Restraint Category (RC), Eating Concern (EC), Shape Concern (SC), Weight Concern (WC)

### INTRODUCTION

Eating disorders (ED) are one of the most common psychiatric problems faced by females, characterized by chronicity and relapse along with disordered eating behaviour where the patient's attitude towards weight and shape, as well as their perception of body shape, are disturbed. (Quick VM, Byrd-Bredbenner C, Neumark-Sztainer D. 2013) They are ranked among the ten leading causes of disability among young women, (Mathers CD, Vos ET, Stevenson CE, Begg SJ, 2000) have the highest levels of treatment seeking, inpatient hospitalization, suicide attempts, and mortality of the most common psychiatric syndromes. (Nock MK, Green JG, Hwang I, McLaughlin KA, Sampson NA, Zaslavsky AM, Kessler RC, 2013)

Eating disorders are common among adolescent girls in western countries like United States, Japan, and Australia and in industrialized nations. (Emans, 2000). Globally many people suffered from this disorder. It is estimated that as many as 24 million individuals in the United States suffer from eating disorders (Renfrew Centre, 2003). Since the 1950's the development and growth of eating disorders has become a serious mental health issue plaguing American society (National Eating Disorder Association, 2013). But from past few years it has been introducing in India too. In India the information regarding these disorders is very limited but it is increasing very rapidly day by day due to the effect of media and westernization. As a result, adolescent girls are very crazy for having perfect body figure by hook or crook. There has been a recent spurt in the recognition of patients with anorexia nervosa (AN) in non-western countries, with one study reporting

the prevalence of women at risk of developing eating disorders to be 7.4% ( Ho TF et al., 2006). This suggests that the western concept of equating beauty with being slim is being accepted in some Asian countries such as India, Thailand (Jennings PS et al., 2006) Studies show that the number of EDs in India appears to be on the rise, and more patients are presenting to doctors and clinics with ED symptoms. Despite this, there is little published research on the eating pathology and presentation of females with EDs in India. (Makino M. et al., 2004, Malik SC et al., 1992)

While eating disorders (ED) can affect individuals from different age groups, the average age of onset takes place during adolescence. During the second half of the 20th century, the prevalence rates of ED have dramatically increased and have remained relatively stable over the last 20 years (Voderholzer et al., 2012). Results from different studies looking at the prevalence of ED indicate that between 1 and 4% of adolescents meet the DSM-IV-TR criteria for anorexia nervosa (AN) or bulimia nervosa (BN) and at least 5% meet the criteria for eating disorders not otherwise specified (EDNOS; Hoek, 2006; Allen et al., 2013). Adolescents seem to be the most at-risk group to develop an eating disorder and this is due to a number of different environmental, social, psychological and biological factors.

There are number of causes which are responsible for developing an eating disorder in adolescents. A common risk factor in Indians found that the psychosocial stressors relating to family or achievement like feelings of failure in regards to parental expectations. (Chandra PS et al., 1995) Some other causes are a person's parents getting divorced, to emotional or sexual abuse a traumatic life-threatening event. Girls who early in adolescence felt most negatively about their bodies were more likely to develop eating problems (on EAT-26) 2 years later (Attie et al., 1989). A cause can be a person commenting negatively on weight or appearance or exposure to the media or thin models and actresses. Cultural pressures which consider "thinness" as beautiful for women and it places undue pressure on people to achieve unrealistic standards. This creates a strong desire to be very thin. Once this thing enters in adolescents mind then they start focusing on food and weight and what starts out as a diet slowly escalates to a way of regaining control over situation. Constant messages of beauty, in addition to high praise for disciplined eating and exercise, are being enforced and reinforced at inescapable levels (Daubenmier, 2005). Such messages are leaving many to fight vicious battles with their inner thoughts, body image, and relationship with food (The Emily Program, 2013). The factors that increase the risk for the onset of eating disorders in adolescents are: genetics, body changes during puberty, the vulnerability of adolescents to the ideals of thinness, social pressures to be thin, body image dissatisfaction, restrictive diet, depression and low self-esteem. A study shows that in different cultures, eating disorders may come from a number of conditions unrelated to compensatory behaviours or weight, but the shape of the body. (Portela de Santana ML et al, 2012)

### **Sample**

The sample comprised of 1080 students drawn from different schools of Tata nagar. The age group of 1080 purposively selected participants was 11-20 years.

### **Inclusive Criteria**

- All participants should be adolescent girls i.e. age group 11-19 year
- Girls with the symptoms of eating disorder

### **Exclusive Criteria**

- Girls above the age group of 20 years cannot participate in this study

- Girls with severe psychological problem cannot participate

**Tool**

Eating disorder examination questionnaire prepared by Fairburn and Beglin (1994) was used for the assessment of Eating disorder among adolescent girls. The scale consists of 28 statements which are concerned with Restraint category, eating concern, shape concern and weight concern. Higher the score on the scale greater is the symptom of eating disorder and vice versa.

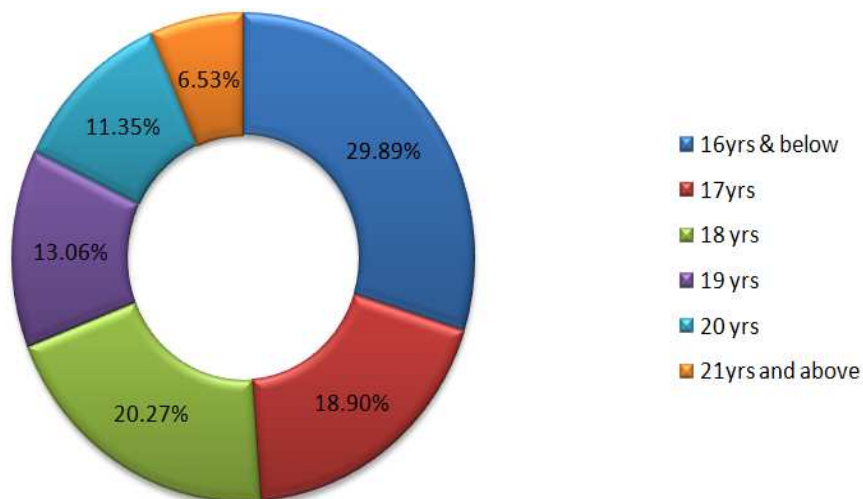
**RESULTS**

To have proper understanding of the severity of the eating disorder cognitions and its influence on the teenage girls of India, it is important to analyze the current scenario. For doing so the questionnaire scores and data obtained from the samples were used, the data collected was filtered and multiple combinations were made for having detailed analysis.

The data gathered from the questionnaire of 1080 samples was used for analyzing the impact of eating disorder cognitions on teenage girls. Initially the data from all the participants were used to generate the statistics of population influenced by different sub-scales of eating disorder. Then the Ed sub-scales were distributed age wise to understand the target age group of Ed. All The data collected are tabulated and converted in graphs for graphical analysis.

**Table 1: Age Wise Population Distribution of Samples**

Age Wise Population Distribution of Samples	
Age	Percentage of Population (%)
16yrs & below	29.89%
17yrs	18.90%
18 yrs	20.27%
19 yrs	13.06%
20 yrs	11.35%
21yrs and above	6.53%



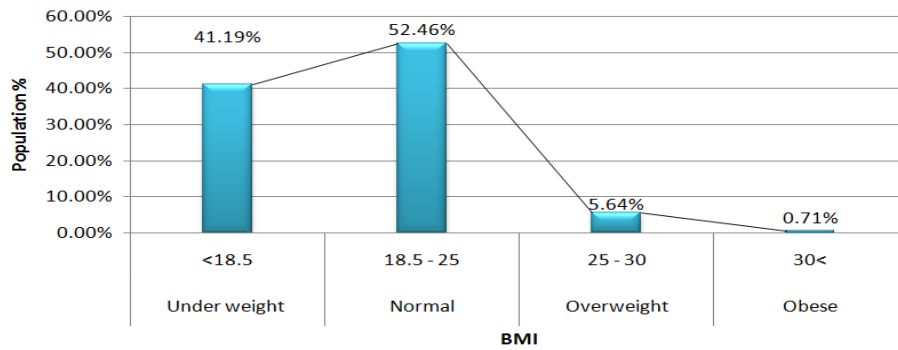
**Graph 1: Age Wise Population Distribution of Samples**

As per the population distribution, 29.89% sample participated in data collection were from age group 13 to 16 years, followed by age group of 18 yrs, 17yrs, 19 yrs, 20years and 21 yrs and above with population percentage as 20.27%,

18.90%, 13.06%, 11.35% and 6.53% respectively.

**Table 2: BMI Classification and Population Distribution of Samples**

BMI Classification and Population Distribution of Samples		
Details	BMI	Percentage of Population (%)
Under weight	<18.5	41.19%
Normal	18.5 - 25	52.46%
Overweight	25 - 30	5.64%
Obese	30<	0.71%

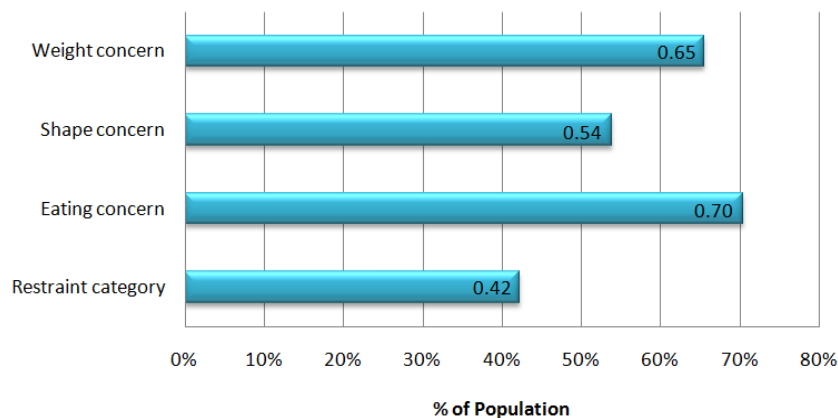


**Graph 2: Population Distribution of Samples Vs BMI Classification**

It is observed that 52.46% of total population is having BMI within normal range where as 41.19% of the population is under weight. Only 05.64% of population is categorized as overweight and 00.71% of population is considered under obese category. Overall 6.35% of population requires controlling their diet and adopting healthy habits to control their weight.

**Table 3: Impact of Various Categories of Eating Disorders on Population Distribution of Samples**

Impact of Various Categories of Eating Disorders on Population Distribution of Samples	
Details	Percentage of Population (%)
Restraint category	42%
Eating concern	70.43%
Shape concern	53.87%
Weight concern	65.49%

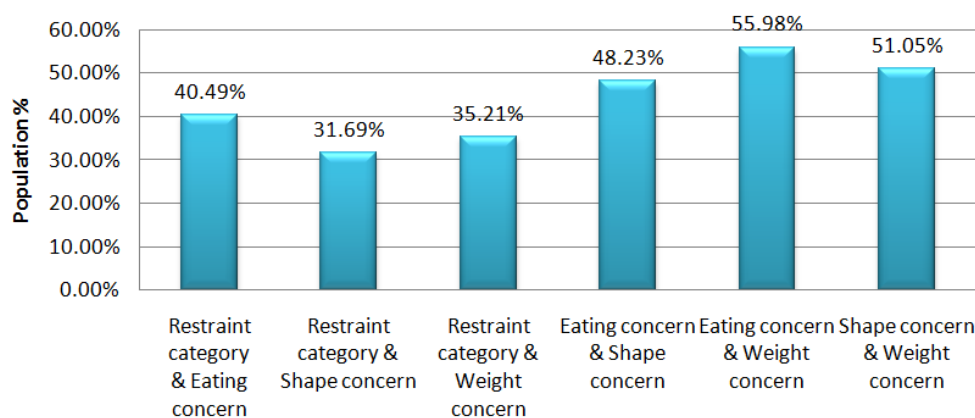


**Graph 3: Impact of Various Categories of ED on Population Percentage**

Out of the four ED symptoms, eating concerns was observed to be the highest with 70% of teen age girl population being affected by it. Whereas 60% of population was influenced by weight concern followed by 54% of population influenced by shape concern and 42% of samples population are influenced by restraint concern.

**Table 4: Impact of Various Eating Disorders Sets on Population Distribution**

Impact of Various Eating Disorders Sets on Population Distribution	
Details	Percentage of Population (%)
Restraint category & Eating concern	40.49%
Restraint category & Shape concern	31.69%
Restraint category & Weight concern	35.21%
Eating concern & Shape concern	48.23%
Eating concern & Weight concern	55.98%
Shape concern & Weight concern	51.05%



**Graph 4: Impact of Various Eating Disorders Sets on Population Distribution**

When we observed the ED symptoms in pairs, eating concern and weight concern was found out to be influencing the highest population distribution followed by SC-WC set and EC-SC sets indicating that eating concern and weight concern are very common in the young generation of girls. The data also indicates that sets with either EC / WC are also having SC and RC symptoms and their influence is on the major proportion of the population.

## DISCUSSIONS

It is very important to understand the prevalence of eating disorder among adolescent girls in the present scenario and its influences on them. Below is the discussion of the tables in sequence.

Table-1 indicates age wise population distribution of samples. The present study was based on adolescent girls only. So, as per the table-1, 29.89% sample participated in data collection were from age group 13 to 16 years, followed by age group of 18 yrs, 17yrs, 19 yrs, 20years and 21 yrs and above with population percentage as 20.27%, 18.90%, 13.06%, 11.35% and 6.53% respectively. The age wise population distribution of samples was done because it is helpful to observe the level of eating disorder in different age group.

Table-2 indicates BMI (Body Mass Index) classification and population distribution of samples. It is observed that 52.46% of total population is having BMI within normal range where as 41.19% of the population is under weight. Total 93.65% of population is categorized as under weight or normal on the basis of BMI index hence no control on eating habits is required for this group of population. Whereas 41.19% of population need to improve their diet in order to improve their

health. Only 05.64% of population is categorized as overweight and 00.71% of population is considered under obese category. Overall 6.35% of population requires controlling their diet and adopting healthy habits to control their weight.

Table-3 shows the impact of various categories of eating disorders on population distribution of samples. Out of the four eating disorder categories, eating concerns was observed to be the highest with 70% of teen age girl population being affected by it. Whereas 60% of population was influenced by weight concern followed by 54% of population influenced by shape concern and 42% of samples population are influenced by restraint concern. When we compare the statistics from table - 2 and table - 3 it implies that due to high influence of eating concern and weight concern majority of population of teen age girls are under weight or of normal category as per BMI categorisation. It is clear from the observation that these subjects need to improve their eating habits as well as reduce the psychological concerns to attain a healthy mind and body.

Table-4 shows the impact of various categories of eating disorders sets on population distribution. When we observed the eating disorder symptoms in pairs, eating concern and weight concern was found out to be influencing the highest population distribution followed by Shape concern-Weight concern set and eating concern-shape concern sets indicating that eating concern and weight concern are very common in the young generation of girls. The data also indicates that sets with either EC / WC are also having SC and RC symptoms and their influence is on the major proportion of the population.

From the above result table, it is very clear that eating disorder is spreading its roots very rapidly among adolescent girls. Adolescence is a very crucial stage where a girl needs to take extra care of her. But due to the modernization and craziness to remain slim, the today's adolescent girls are indulging in different wrong activities like skipping meal, self-starvation which results into eating disorder. The above statistics shows the prevalence in the present context.

There are many ways to cure eating disorder cognitions. Major Types of Therapies for Eating Disorders are Medical Nutrition Therapy, Dialectical Behavioural Therapy (DBT), Acceptance and Commitment Therapy (ACT), Art Therapy, Dance Movement Therapy, Equine Therapy, Exposure and Response Prevention Therapy (ERP), Family Therapy, Interpersonal Psychotherapy (IPT), The Maudsley Method etc. Instead of this there are many medicines that are commonly used for treatment of eating disorders. The commonly used drugs are Prozac oral, fluoxetine oral, sarafem oral etc. But as we all know there is a side effect of all the drugs as it directly affect to liver. Eating Disorders are a growing mental health concern with serious consequences for those who struggle. The individual and complex nature of eating disorders presents a need for new, innovative treatment modalities. One such treatment that is gaining interest in the eating disorder field is the holistic modality of yoga.

Few studies have been done which shows the positive impact of yoga on eating disorder. (Carei, Fyfe-Johnson, Breuner, Brown, 2010) found that Individualized yoga treatment decreased EDE scores at 12 weeks, and significantly reduced food preoccupation immediately following yoga sessions. Yoga treatment did not have a negative impact on BMI. Results suggest individualized yoga therapy holds promise as adjunctive therapy to standard care. (McIver, O' Halloran, & McGartland, 2009) revealed that for the yoga group, self-reported reductions in binge eating and increases in physical activity were statistically significant. Small yet statistically significant reductions for BMI, hips and waist measurement were obtained. The wait-list control group did not improve significantly on any measures. (Rawat & Pandya, 2016) found the significant effect of yogic intervention on eating disorder cognitions among adolescent girls.

## CONCLUSIONS

The statistics in the present research work shows that the eating disorder cognitions in adolescent girls is spreading very rapidly. There is a dire need to take care of adolescent girls during this stage. As it is very crucial period for them. A woman is the backbone of the society, hence it is necessary that they should be healthy.

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