

## A Statistical Review of Binge Eating Disorders (BED) on College Students of Bengaluru

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### **Abstract:**

**Aim:** To provide a statistical review and discussion addressing the eating disorder patterns of college students, health risk factors and the relationship between BED stress.

**Background:** The term Binge Eating Disorders (BED) reflects the range of disturbed eating patterns, including anorexia nervosa and bulimic nervosa. In the last few decades a substantial amount of research studies has been undertaken in this area globally, as matter of concern of college students related to disorders has affected the individual's health aspects and stressed due BED and also their ability to function and achieve in their academics.

**Methods:** A statistical tools are used for the study with cross sectional research of sampling size of 51 and the study is carefully tested under hypothesis conditions of chi-square method by using Minitab software.

**Conclusion:** The study reveals that the Binge Eating Disorders (BED) varies from students to students and has low to high impact on health risks based on the intensity level student's eating

disorders. The proper treatment should be given to the students else they face major health issues related to bowel system and mind diseases

### **Background:**

Binge Eating Disorder is also known as consumption of abnormal amount of food with loss of control to stop overeating. In 1959 a psychiatrist & researcher, Albert stunkard enlightened that BED can crop up in both men and women of usual weight, which may often directs to the progress of unexpected obesity or high weight gain. Many BED Foods are higher in fats and carbohydrates ingredients that may cause in the release of the hormone called serotonin in the human brain, which can provoke delightful feelings. The most common eating disorders among both males & females are bulimia and anorexia, with no definite regards to ethic group and income level. Two specific types of eating disorders, anorexia and bulimia, have been identified as the most common eating disorders among both males and females ages 14-20 years, with no specific trend in regards to income level or ethic group (Dooley-Hash et al.,

2012). Unfortunately, many adolescents with eating disorders are not identified until lives threatening physical complications become apparent.

For this motive, people who are dealing with binge eating disorder often drift down towards foods with these components, either for comfort or as a means of escaping from difficult situations. The consequences of Binge eating disorders include physical, emotional and social difficulty. Many people are suffering from BED fight back with disgust in emotions and have guilt, such as anxiety or depression in their lifestyle.

Cook & Sawyer 2004; Smink et al., 2013, researcher suggested that success of treatment and recovery of disease depends on easily identification at the starting time of BED. Early on recognition of an eating disorder is very important to avoid life risk medical problems as well as chance to recover from healthy and social issues. Researcher Amianto, Ottone, Daga, & Fassino, 2015, suggested that psychological treatments are more effective than medical treatments like bariatric surgery and many other approaches. There are many numbers of psychological treatments that deals with BED like interpersonal therapy, schema therapy, cognitive behavioral therapy, dialectical therapy and others too. However many researchers suggested that psychological treatments are more

effective than chemical treatment, however some pharmacological treatments also reducing the disorders caused by binge eating.

Artur Pałasz, Małgorzata Janas-Kozik, 2018, studies revealed that BED can cause anxiety and anorexia nervosa disorders. There are many medical treatment and psychotherapies used to reduce the abnormalities caused by binge eating behavior and disorders.

McIntosh et al., 2016, studies assessed that 3 different psychotherapies are used for treatment of binge eating disorders. The outcomes of their study showed that schema therapy is more efficient in treatment of binge eating, with high reductions in disorders of binge. However cognitive behavioral therapy (CBT), dialectical therapy is also used to reduce binge disorder with slight differences in outcome of treatment.

Cooper et al., 2016; investigated with possible outcome of treatment of BED and psychotherapies with its low long term worth of treatment for binge eating disorder symptoms. There are many disorders caused by binge eating like personality disorders and depressive order and pretreatment of binge eating have been found to be worst outcomes.

Kessler et al., 2013; study predicts that over eating of food is a major feature that cause binge disorders and it is also linked with many psychological and physical health problems, which will impact on the quality of individual

lifestyle and lack of social functioning. His research also assess on the importance of role of dieting behaviour or restriction of binge eating, regulation of emotional feelings and obsessions with body weight & its shape.

G. Terence Wilson, PhD; Denise E. Wilfley, PhD; W. Stewart Agras, MD; et al, 2010 concludes that binge eating is linked with obesity and overweight issues. Therefore cognitive behavioral therapy & other psychotherapies play an effective role in eliminating binge disorders after one or two year's duration. For high binge disorder psychopathology, most of the psychotherapies are the first line treatment choice for individuals with effect of binge eating disorder.

M.J. Cooper 2004 described that hunger is the starting factor for bodily sensation to binge eating behavior; it also motivates the human thoughts of no control over binge behavior. It activates both negative and positive beliefs that also describe the conflict between both positive and negative belief about binge eating. The different negative beliefs accompanied are feelings of depression, anxiety or guilt. The research suggests about individual must cope along with emotions and feelings, that reinforces the beliefs about binge eating & control over the intensity of emotional moods and disorders.

Author Waller, 2002, suggests that binge eating disorders can be controlled by dietary restriction.

Also they suggested that psychological and behavioral environment factors plays an effective role in dietary restriction and avoid the major issues caused by binge eating Behaviour.

Fairburn (1998) studies have suggested that cognitive-behavioral techniques (CBT) have more advantages to control the binge disorder. CBT delivered to individuals, which includes individual's self-control, stimulus monitoring, and nutritional restructuring and cognitive to self-help the individual's rehabilitation with BED using self-help formats. There is lot of improvement found with CBT therapy after 6 month follow up with BED individuals.

### **Problem Identification**

The eating behavior patterns of the college students are changed in recent years due influence of western cultures food habits as they indulge into varieties of foods such as pizza, burgers, Chinese foods and so on. On this increasing note, the college students suffering from many health risks leads to number of diseases, stress and depressions due to craving foods. The study is to understand the eating disorder patterns, health risk factors and little explore on stress of the students.

**Objective of the Study**

- To study the eating disorders patterns of college students.
- To identify specific health risk factors for BED.
- To examine the relationship between Binge Eating Disorder (BED) and Students stress.

**Research Methodology**

The cross sectional study is used for prevalence of college student’s eating disorders and we evaluated around 51 participants through Google forms questionnaires, personal interviews and also referring literature reviews and medical reports disclosed by the Hospitals.

The random sampling variables are both male and female college students. For analysis purposes simple average method and Chi-square are adopted to tabulate and interpretation of the results

**Scope and limitations**

The study confined to the college students of the age group between 18 to 25 years and restricted to only 5 colleges students in Bangalore and considered only three parameters i.e. eating disorder behavior, few health risk factors and stress of the college students for the study. The questionnaires are created in Google docs and distributed to the students to record the responses

**Hypothesis**

**H0:** No impact of BED on specific health risks

**H1:** Impact of the BED on specific health risks

Chi-Square Test are calculated by using the Minitab software

						<b>Total</b>
<b>H0</b>	177	106	161	92	76	<b>612</b>
	160.94	110.82	149.65	100.94	89.65	
	1.602	0.210	8.861	0.792	2.078	
<b>H1</b>	51	51	51	51	51	<b>255</b>
	67.06	46.18	62.35	42.06	37.35	
	3.846	0.504	2.067	1.901	4.986	
<b>Total</b>	228	157	212	143	127	<b>867</b>
<b>Chi-Square Test=18.846, DOF=4, P-Value=0.001</b>						

The Calculated P-Value=0.001 is less than the 0.05, Hence H0 can be rejected and Accept the Alternative hypothesis. I.e. there is an impact of the Binge Eating Disorder on Specific Health risks.

**Results**

As per the data collected from the College Students through series of interviews and questionnaires; the following are findings observed:

Students consume more food (41.9%) than planned with large amount as 4%. The study reveals that the respondents are not conscious about quantity of eating (13%) and keep

confidential about the food eating habit (48.4%) with loved ones. Also they feel difficulty in controlling their eating habits (21.5%).

Few respondents (17.13%) eat speedily and also suffer from sleeping disorders due to excess eating habits (22.1%). Lastly, the respondents face health issues related to Bowel system due to excessive and repetitive eating disorders.

### Discussion

The reason for taking excessive food by college students due to several reasons such as taste of the food, the level of hungriness, cravings towards desired foods, Addiction and use of the electronic gadgets (mobiles, laptops, tablets and so on) during eating. Few respondents hide their eating behaviors because of inferior complex, social anxiety, fear and scolds from loved ones. The survey finds that the other set of college students controls eating varieties of food due to health conscious, bowel problems, price sensitive, hygienic. Also indicates most of the college students eats rapidly than as usual because kleptophobia (fear of food stolen by others), time constraint and so on. Lastly, the respondents suffer from bowel ailments such as abdominal pain, diarrhea, and nausea and so on due to over eating and also lack sleeps due to over eating.

The PValue (0.001) is with in the range of 0.05, which indicates that BED of college students increase the health risks also leads to weight

gain, obesity, heart diseases, hyper tension, type two diabetes etc.

Like every binge eating disorder, it is necessary to get help and treatment as early as possible. Treatment will be contingent on the severity of the disease, sometimes necessitates a psychiatrist and a dietitian to get at the root causes of the students binge eating.

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