

# Prevalence of Eating Disorders among Female Students of Tonekabon University (Tonekabon-Iran)

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**Abstract**—aim of this research is to study the prevalence of eating disorder amongst female students of Tonekabon University. The community being studied is the female students of Tonekabon University. 300 students were randomly selected and requested to complete the 'eating attitude test-26'.

**Index Terms**— Eating disorders, Female students, Tonekabon University

## 1 INTRODUCTION

Eating disorder presents a serious problem these days. Every year the number of people suffering from anorexia and bulimia increase and consequents of the disease may be health or even life threatening.[1]

This disorder presents a significant problem among adolescent and young women in many westernized countries and is associated with nervous, physical and psychiatric problems.[2]

Anorexia nervosa is a psychological and physical condition of semi starvation in which individuals weigh 85% or less of what would ordinary be there healthy body weight, resulting in physical impairments and in the 90% of patients who are females Cessation of menses.

This condition is to due to highly restricted food intake, often accompanied by excessive exercise and sometimes purging by self-induced vomiting, laxative use or other means.

These behaviors are usually related to obsessional and a perfectionist thinking that focuses on a distorted body image and fear of becoming fat.[3]

Feeling normal fullness after eating is felt as discomfort and experienced as a failure of control, moral weakness and a source of great guilt. These perfectionists are failing in their major (anorexia) project and will redouble their effort by eating nothing for a day or even restricting their water intake. This can precipitate death through cardiac arrest, particularly if they are also vomiting the little intake they do allow.[4]

The association between anorexia nervosa and depression has long been recognized by clinicians.[5]

A study in Sweden using structured interview for DSM-III-R criteria found that 85% of patients with anorexia nervosa (AN) had a depressive disorder.[6]

About half of sufferers eventually develop binge-eating episodes – that is, periodic decontrol over eating on incapacity to satiate. [7]

Bulimia nervosa (BN) is a condition in which individuals binge, eat large calories, up to 2000 at a time or more and

then purge themselves of what they have eaten usually by forcing themselves to vomit and sometimes by means of laxatives, diet pills, diuretic pills or excessive exercising.

These behaviors occur at least several times per week for months on end, the condition is usually related to over concern with ones weight and shape, and is accompanied by feeling of shame, disgust and being out of control.[8]

Like anorexia nervosa, Bulimia was recognized to occur as early as the 17<sup>th</sup> century. [9]

According to Wilson [10] to be diagnosed with bulimia nervosa individuals must experience episodes of binge-eating 'at least twice a week' on average, for three to six months.

In addition to the primary eating disorders, several other conditions occur among individuals with psychiatric disorders that may markedly affect eating behavior and weight. For instance, individuals with severe depression experience an increase in appetite and food cravings. Patients with psychic delusions due to Schizophrenia or other conditions may think food is poisoned and refuse to eat.[11]

Recent studies have found that EDNOS (Eating Disorder Not Otherwise Specified) is the most common eating disorder, diagnosis both in outpatients and inpatients settings. Underweight patients that do not report over-evaluation of shape and weight are a distinctive and scarcely studied subgroup of EDNOS.

Their self-evaluation is largely or exclusively based on their abilities to control their eating purge.[12]

The incidence of eating disorders in females has been extensively studied in both anorexia nervosa and bulimia nervosa.[13]

In a study of 105 patients with eating disorders, Braun [14] found that the life time prevalence of any offensive disorder was 41.2 % in anorectic restrictors, 82% in anorectic bulimics, 64.5% in patients with bulimia nervosa and 78% in patients with bulimia nervosa with a past history of anorexia nervosa.

According to Treasure [15] the present time prevalence of

all eating disorders is about 5%.cultural, social and inter-personal elements can trigger onset and change in networks can sustain the illness.

Although it is clear that anorexia nervosa occurs in men as well as women, and in younger as well as in older people, few studies report incidence rate for males or for people beyond the age of 35.

The majority of male incidence rate reported was below 0.5 per 100,000 populations per year. [16]

Studies have reported the female to male ratio to be around 11 to 1.[17]

On an overall female rate of 15.0 per 100,000 population per year, Lucas [18] reported a rate of 9.5 for 30-39-year-old women,5.9 for 40-49-year-old women,1.8 for 50-59-year-old and 0.0 for women aged 60 and over .

According to a research by Casper [19], women who had recovered from anorexia nervosa rated higher on risk avoidance, displayed greater restraint in emotional expression and initiative, and showed greater conformance to authority than age-matched normal women.

Lucas [20] found that the age-adjusted individuals rates of AN in females 15-24-year-old showed a highly significant linear increasing trend from 1935-1989,with an estimated rate of increase of 1.03 per 100.000 person per calendar year.

## 2 METHOD

This is a descriptive study and aims to objectively describe the features of the desired community.

The research took place over a period of 4 months. (March 2010 - June 2010). In this research, based on the total population -6000 female students-a sample of 300 were randomly selected. Subjects were students who attended classes at university throughout the week. The team, attended classes on different hours of different days and selected few names from the participants of the class-regardless of their BMI, body shape and weight-afterwards, subjects completed the questionnaire. EAT-26 was used as the main method of data collection.

The eating attitude test (EAT-26) has been proposed as an objective, self report, measuring the symptoms of anorexia nervosa. It has been used as a screening instrument for detecting previously undiagnosed cases of anorexia nervosa in populations at high risk of the disorder. [21]

Subjects can score between 0 – 78.any score above 20 is diagnosed with eating disorder.

The EAT-26 can only show some symptoms of eating disorder. To classify the type of disorder (AN or BN) a diagnostic interview will need to take place.

## 3 RESULTS

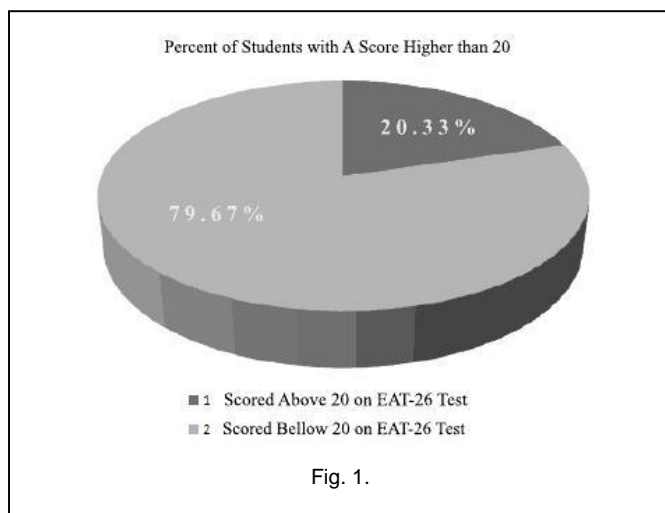
The results of this study showed that among 300 cases under review, 61 of them received a score higher than 20 on the EAT-26 test and were diagnosed with eating dis-

orders.

TABLE 1. EAT-26 TEST RESULTS

SAMPLE POP-ULATION	STUDENTS SCORING ABOVE 20	PERCENTAGE OF STUDENTS WITH A SCORE HIGHER THAN 20
300	61 STUDENTS	20.33 %

This amount forms 20.33 % of the total population of female students at Azad university of Tonekabon.



Among the three sub-scales namely: Oral Control – food habits and Esurience (desire to eat), the most points belonged to food habit sub-scale (86.88%) second is oral control and the rest were high in esurience sub-scale.

The main problem and barrier throughout the research was the subject's orientation towards the questions on the test which was resolved by the researcher's explanation in person.

## 4 DISCUSSION

The purpose of this study is to measure the prevalence of eating disorder in female students of Tonekabon University. According to the results 20.33% of subjects were identified with eating disorder.

In our country, in the field of eating disorder, few studies have been carried out.[22]

In measuring the prevalence of eating disorders amongst high school students (male and female) in Sari- North of Iran-In the academic year of 2002-2003 in 10.5% of the students, abnormal attitude towards eating was observed. This conclusion suggests the frequency of abnormal attitude toward eating disorder is more or less similar to that

of other communities.

Patients with this attitude most likely have some psychological disorder such as, depression. If this issue is not managed in the appropriate manner, many side effects will follow. [23]

AN and BN occur disproportionately often in industrialized (vs. economically less developed countries) nations, but are otherwise reported to occur with surprisingly uniform prevalence in developed parts of Europe, Asia and the Americas.[24]

Young girls and women have been influenced by western culture and have adapted the same behaviour towards issues like appearance and body shape.[25]

The extent of the impact has not, yet, been provided in statistics.[26]

In a study to determine the prevalence of eating disorder among female high school students in Tehran-Capital of Iran-results show that 9.0 % were diagnosed with anorexia, 23.3% with Bulimia and 63.7% with a mild eating disorder.[27]

In another study by Seyedi [28] the prevalence of eating disorder among 600 female high school students in Kerman was found to be 7.6%.

Some studies suggest an increase in incidence of AN over various time period, whereas others report an increase in incidence followed by stabilization.[29]

Epidemiological studies show that eating disorder is mostly a white female disease in industrialized countries. Societies, in which, slimness is a main criteria of attraction.[30]

Unfortunately, in the past few years eating disorders has increased in Iran. As the most people diagnosed with this disorder are the young generation, therefore, education on this matter is one of the most important means of handling this issue.

Generally, the level of research conducted on aetiology and treatment of eating disorder In Iran is very low. Young girls of today will be the mother of our future generation and their mental and physical health plays an important role in the future of our children and country. Therefore, this field need far more extensive research and exact aetiology and strategies for prevention and therapy.

## 5 CONCLUSION

The results show that, based on the eat-26 test criteria, from the total population under study, 61 students, and equal to 20.33% of the total number of students- were diagnosed with eating disorders. Eating disorders are breaking out rapidly in our society and among the young generation and if not dealt with properly serious consequences will to be expected.

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