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**Research article** 

**Medical research** 

# Prevalence of eating disorders among Physiotherapy students of the age group 18-25 years

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# ABSTRACT

#### Introduction

A mental disorder which shows up as abnormal eating habits which negatively affect a person's physical or mental health is defined as an Eating disorder. Eating disorders include binge eating disorder in which people eat a lot of food in short time. Some others include Anorexia nervosa in which an individual eats little and therefore has little body weight, there is another disorder called bulimia nervosa wherein people eat too much to only try to keep themselves away from the food. The earlier these disorders are diagnosed and assessed, the better the chances are for enhanced treatment and fuller recovery. Therefore, we intended to undertake a study to find out the frequency of such disorders among physiotherapy students of Nashik and if they existed, design strategies to overcome them in future.

#### Aim

To assess the prevalence of eating disorders in physiotherapy students of the age group 18-25 years in Nashik, Maharashtra

#### Methods

A cross sectional study was conducted in 80 Physiotherapy students of Nashik. The incidence of Physiotherapy students with eating disorders in Nashik, Maharashtra was found out using validated self-administered questionnaires.

# Results

Data was collected using self administered questionnaires, the Eating Attitudes Test (EAT-26). The data was sorted and analyzed in SPSS version 16. According to EAT-26, 38.25% individuals were found to be at high-risk of eating disorders, with 87.9% females and 12.1% males.

# Conclusion

A significant fraction of Physiotherapy students in Nashik are at high risk of development of eating disorders, females being more prone than males. Strategies should be designed to prevent occurrence of such disorders among physiotherapy students in future.

Keywords: Eating Disorders, EAT-26, Physiotherapy students

# **INTRODUCTION**

Eating disorders are a group of disorders which exhibit eating habits which are abnormal in nature. In these; either excessive or insufficient food is partaken by an individual which can prove hazardous for the individual. Most common forms of eating disorders are found out to be Binge eating, anorexia and bulimia nervosa. [1]

These disorders are believed to be as good as life destructing as they have a strong association with mental psyche of an individual. If we name a few, eating disorders mostly occur along with psychiatric disorders like depression and anxiety disorders. Eating disorders frequently occur with other psychiatric disorders such as depression, substance abuse, and anxiety disorders. [2]

People exhibiting anorexia have an excessive fear of gaining weight; also this always keeps them fearful of gaining weight. Bulimia is best shown up by uncontrolled eating with weak attempts to reduce the unwanted calories by great efforts [3]. Bulimia is characterized by a cycle of binge eating, followed by attempts to remove unwanted calories. The exact cause of Binge eating disorders is yet unknown. The characteristic eating of excessive eating better known as binge attacks is classically known. Eating disorders are thought to be a combination of abnormalities either in the physiology, psychology of environment. [4]

Many studies in the past have reported the prevalence of eating disorders .Various studies have reported prevalence of eating disorders. In the west, prevalence of anorexia nervosa has been reported to range from 0.1%-5.7%, where bulimia nervosa has range from 0.3%-7.3% particularly in the subjects with female gender.<sup>5</sup>

Prevalence of 3.8% was found in a study performed on college students bulimia nervosa in females and 0.2% in males [4]. A study done by Pyle et al. showed 4.7% of female college students with eating disorders [5]. Students in the field of medicine are associated with high levels of stress factor and is rightly one of the most important factors for eating disorders [6]. It is hence important to analyse and address such maladies in physiotherapy students who are the productive future assets of the society. A study done in US has shown 15% of the female medical students with eating disorders. [7]

Eating disorders are labelled as a mental health condition as they have the potential to lead to various other physical morbidities too. Keeping these hazardous consequences in view, it is pertinent to note that future Physiotherapists studying/going out in the field to practice might be at excessively high risk of establishing eating disorders which will hamper the quality of physiotherapy services.

The earlier these type of disorders are diagnosed, the better it would be for designing prophylactic, preventive and curative strategies. Also, the earlier these disorders are diagnosed and assessed, the better the chances are for enhanced treatment and better recovery. A descriptive study was hence planned to assess the prevalence of eating disorders among physiotherapy students in Nashik, Maharashtra.

# **METHODOLOGY**

Study design: Cross sectional study Study setting: Nashik Duration of study: 6months Sample size: 80 Sampling technique: convenient sampling technique

#### Method of data collection

This was a cross sectional study conducted in a renowned physiotherapy college in Nashik namely MVP's College of Physiotherapy, Nashik.

# **Collection of Data**

The study which was done included 80 undergraduate physiotherapy students. Convenient sampling method was used. Students from first to final year participated in the study. In this cross sectional study,80 Physiotherapy college going students in the age group 18-25 years were screened for Eating disorders based upon'EAT-26 questionnaire' which was subjective and filled in by the Physiotherapy students. Out of 80 individuals who were screened through the two questionnaires, EAT-26 questionnaire detected 27 (33.75%) individuals with high risk of eating disorders.

Collection of data –all participants completed the self reported screening package which included the eat attitude test (EAT-26).English version of the questionnaire was used. No translated versions were used. Written consent form was filled in from all participants.

The Eating attitude test-26 (EAT-26) is a selfadministered validity tested questionnaire which is used in quantification of eating disorders. It consists of 26 questions out of which scoring is done on a 6 point likert scale from always to never. The total score ranges from 0 to 78.

#### Analysis of data

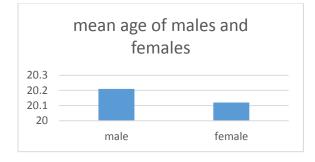
The data was sorted and analyzed in SPSS version 16. Means  $\pm$  standard deviations were taken into consideration for quantitative variable in our study.

# **RESULTS AND STATISTICAL ANALYSIS**

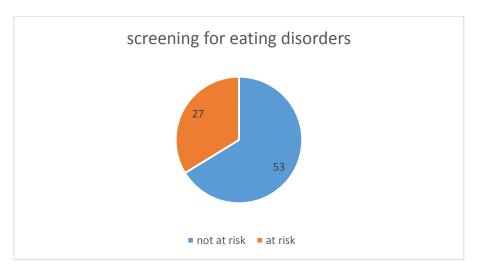
#### Table no -1 (this table shows number of students at risk of eating disorder among students)

<b>Risk of eating disorder</b>	Number
At risk of Eating disorder	27
Not at risk of eating disorder	53
Total	80

- Out of 80 individuals, all returned the complete questionnaires giving a response rate of 100%.
- Out of 80 individuals, 74 were females while 6 individuals were males.
- Statistically, the mean age of the population was 19.5 years ± 1.65 years. Mean age of male participants was 20.21 years ± 1.88 years, Mean age of female participants was 20.12 years ± 1.50 years.

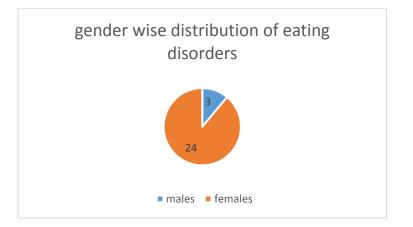


The average Eat-26 Score was 12.87/78 in male participants with standard deviation of 2.18 and, the average Eat-26 Score was 15.55/78 in female participants with standard deviation of 4.18.Thus, out of 80 individuals who were screened through the two questionnaires, EAT-26 questionnaire detected 27 (33.75%) individuals with high risk of eating disorders.



Out of reported 27 high-risk individuals, 3(11.1%) were males and 24 (88.8%) were females.

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Therefore prevalence of eating disorders was found out to be 33.75% out of which 3(11.1%)were males and 24(88.8%) were females. Physiotherapy students of younger age group were found to be more susceptible. 46 (57.5%) were from age group 18-21, while only 34 (42.5%) were from age group 22-23.

#### DISCUSSION

In the present study, we assessed the prevalence of Eating disorders in Physiotherapy students in age group 18-25 years. To date, this study is the first to examine the prevalence of eating disorders in Physiotherapy students. Based on the results of our study, prevalence of eating disorders was found out to be 33.75% out of which 3(11.1%) were males and 24(88.8%)were females. Physiotherapy students of younger age group were found to be more susceptible. Out of 80 individuals which were screened,46 (57.5%) were from age group 18-21, while only 34 (42.5%) were from age group 22-25.Out of 80 individuals, all returned the complete questionnaires giving a response rate of 100%. This showed compliance of students to the response regarding the questionnaires.

Out of 80 individuals, 74 were females while 6 were males. Statistically, the mean age of the population was 19.5 years  $\pm$  1.65 years. Mean age of male participants was 20.21 years  $\pm$  1.88 years, Mean age of female participants was 20.12 years  $\pm$  1.50 years.

The average Eat-26 Score was 12.87/78 in male participants with standard deviation of 2.18 and, the average Eat-26 Score was 15.55/78 in female

participants with standard deviation of 4.18. Thus, out of 80 individuals who were screened through the two questionnaires, EAT-26 questionnaire detected 27 (33.75%) individuals with high risk of eating disorders. Out of reported 27 high-risk individuals, 3(11.1%) were males and 24 (88.8%) were females which is substantial.

Also our study shows that significant amount of population of Physiotherapy students who are undergraduates at high risk of suffering from eating disorders with 27(33.75%) individuals scoring above the threshold for eating disorders. This is significantly more as compared to a study regarding eating disorder symptoms in 9.59% among Latino college students by Reyes-Rodriguez et al. [8, 9]

We have found out significant number of females at high risk of eating disorders in comparison to males Pope et al. has documented a coinciding ratio between male and female students in which a major proportion of female students (anorexia = 1% to 4.2% or bulimia = 6.5% to 18.6%) were reported to suffer from eating disorders but not even the male subjects one of was reported positive.<sup>10</sup>Another study has documented that female students are at a greater risk to develop eating Disorders. [11, 12]

#### CONCLUSION

A significant fraction of physiotherapy students in Nashik are at high risk of development of eating disorders, females being more prone than males. Strategies should be designed to prevent occurrence of such disorders among physiotherapy students in future.

# **REFERENCES**

- [1]. Striegel-Moore RH, Silberstein LR, Frensch P, Rodin J: A prospective study of disordered eating among college students. Int J Eat Disord 8(5), 1989, 499-509.
- [2]. Olden K, White SL: Health-related disparities: influence of environmental factors. Med Clin North Am 89(4), 2005, 721-738.
- [3]. Makino M, Tsuboi K, Dennerstein L: Prevalence of eating disorders: a comparison of Western and Non-Western Countries. Medscape Gen Med 6(3), 2004, 49.
- [4]. Striegel-Moore RH, Silberstein LR, Frensch P, Rodin J: A prospective study of disordered eating among college students. Int J Eat Disord 8(5), 1989, 499-509.
- [5]. Pyle RL, Neuman PA, Halvorson PA, Mitchell JE: An ongoing cross-sectional study of the prevalence of eating disorders in freshman college students. Int J Eat Disord 10(6), 1991, 667-677.
- [6]. Dahlin M, Joneborg N, Runeson B: Stress and depression among medical students: a cross-sectional study. Med Educ 39(6), 2005, 594-604.
- [7]. Herzog DB, Pepose M, Norman DK, Rigotti NA: Eating disorders and social maladjustment in female medical students. J Nerv Ment Dis 173(12), 1985, 734-737.
- [8]. Reyes-Rodriguez ML, Franko DL, Matos-Lamourt A, Bulik CM, Von Holle A, Camara-Fuentes LR, et al: Eating disorder symptomatology: prevalence among Latino college freshmen students. J Clin Psychol 66(6), 2010, 666-679.
- [9]. Pope HG, Hudson JI, Todd DY, Hudson MS: Prevalence of anorexia nervosa and bulimia in three student populations. Int J Eat Disord 3(3), 1984, 45-51.
- [10]. Sample C, Katzman MA, Wolchik SA, Braver SL: The prevalence of frequent binge eating and bulimia in a nonclinical. Int J Eat Disord 3(3), 1984, 53-62.
- [11]. Garner DM, Olmsted MP, Bohr Y, Garfinkel PE: The Eating Attitudes Test: psychometric features and clinical correlates. Psychol Med 12(4), 1982, 871-878.
- [12]. Pyle RL, Neuman PA, Halvorson PA, Mitchell JE: An ongoing cross-sectional study of the prevalence of eating disorders in freshman college students. Int J Eat Disord, 10(6), 1991, 667-677.

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