A STUDY ON PREVALENCE OF EATING DISORDER AMONG ADOLESCENT GIRLS AND IMPACT OF NUTRITION EDUCATION

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Abstract: Eating Disorders are serious mental health disorders which involve severe problems in Food thoughts and in eating behaviors can cause health issues due to inadequate Nutrition. Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder are the three types of Eating Disorder. The participants were an adolescent girls aged 18-21 years was selected using Quota sampling method in Erode and analyzed the prevalence of eating disorder using the EAT Questionnaire and Anthropometric methods. And the participants diagnosed with eating disorder were given Nutrition education through mass media and post evaluation was done using a self structured questionnaire to identify the effectiveness of Nutrition education to subdue the symptoms of Eating Disorder.

Index terms: Eating disorder, Anorexia, Bulimia, Binge, Nutrition Education.

INTRODUCTION:

Eating Disorder is a serious condition which affects both the physical and mental health which often develops in adolescence and young adulthood. Eating disorders (ED) are the most common chronic diseases among female adolescents. The most common eating disorders include anorexia nervosa, bulimia nervosa and binge eating disorder (1). Behaviors associated with eating disorders were restrictive eating, binge eating, compulsive exercises, laxative use and purging. It has a serious impact on the physical, mental and social health of the individuals. Eating disorders (EDs) are serious psychiatric illnesses that typically develop during adolescence or young adulthood. These disorders are associated with both physical and psychological sequelae and often lead to considerable impairment and distress (2). In anorexia Nervosa, Starvation is the choice of the sufferer to which they were more concerned about their weight in which they were less open to the treatment with underweight. In Bulimia Nervosa, excess consumption of food by losing consciousness in extreme emotional situations followed by purging by inducing vomiting. The Non-purging type they involve themselves in severe exercise or fasting to compensate the excess. Binge Eating Disorder no control over the food intake leads to excessive weight gain with related diseases and illnesses. Eating pathology has an important
role in increasing the onset of obesity and mental illnesses. It increasingly affects the ages of adolescence where the future health is determined. Peer pressure and social media are the contributing factors for increasing body consciousness and leanness among the adolescent’s results in dieting, which put forward to Eating disorders. Anthropometric measurements helps in identifying the degree of effect of eating disorder directly affects the nutritional status of an individual. Social media is an important platform in which the teen age can be influenced in positive way to give a positive result.

MATERIALS AND METHODS:

SELECTION OF PARTICIPANTS:

Adolescent girls of age group (18-19 years) from Erode were selected as participants for the present study. The participants were selected using Quota sampling method which is a non-probability method. The participants possess a common attribute of adolescent girls and it is a convenience sampling approach.

EVALUATION FOR EATING DISORDER:

The EAT-26 questionnaire was used to assess Eating Disorder behaviors. It is a valid tool with 26 cases to assess risk factors for eating disorder such as food restriction, eating, cleaning, and environmental effects on food intake(3) followed by Anthropometric Assessment for the participants. The Body Mass Index (BMI) is calculated for all the participants. And the people who were scored above 20 and have the symptoms of binge eating, excess weight gain were selected for Nutrition education.

NUTRITION EDUCATION THROUGH MASS MEDIA:

Nutrition education was imparted through audio-visual aids (social media including Instagram and Gmail). Education was also given using machine operated teaching aid. (PowerPoint presentation)

An Instagram and Gmail account was created with the name Feast right and imparted nutrition education and insisted to clarify their queries through social media. And a face to face communication, through the Powerpoint presentation was given to all participants and their doubts were clarified.

POST EVALUATION AFTER NUTRITION EDUCATION

A self-structured questionnaire was prepared in order to assess the effectiveness of nutrition education in their behavior of eating disorder to analyse their behavioral changes. The anthropometry of the participants was assessed again using stadiometer and weighing balance to identify their weight changes in relation to height .BMI was calculated to analyse the changes in the participant’s anthropometric measurements after one month of nutrition education.

RESULTS AND DISCUSSION:

ANTHROPOMETRIC ASSESSMENT:

Among the participants who undergo the assessment using EAT Questionnaire were involved in the anthropometric study. Among that 45% of the participants were underweight, 29.4% were normal, 16.3% were overweight and 9.4% were obese. On observing the Anthropometric data of the participants diagnosed with eating disorder 36% of the participants were underweight, 30% were normal, 18% were overweight and 16% were obese.
The prevalence rate of Eating disorder in adolescent girls were about 31.25%. We found that as per the Anthropometrical data and its correlation with its symptoms, 36% participants were affected with Anorexia nervosa, 36% participants with Bulimia nervosa and 28% participants with Binge-eating disorder.

**EATING BEHAVIOUR:**

About 30.62% participants are intentionally restricting food consumption rather than hungry. 27.5% participants are preoccupied with food. 28.7% participants were having the binge eating behavior. About 42.5% participants were concerned to avoid foods that are rich in carbohydrate content. 58.75% of participants always enjoy trying new foods.

**PSYCHOLOGICAL DISTURBANCES:**

3.125% participants felt guilty after eating and about 44.375% participants never felt guilty of eating. 10.625% of the participants accepted that they had self-control around food but 30.625% of them responded that they never had control around food. 8.75% participants agreed that they gave too much time and thought to food, 23.75% said that it happened rarely, 34.375% of the participants had never gave too much time to think about food.

**SOCIAL AND ENVIRONMENTAL INFLUENCES:**

28% of the participants felt concerned that others would prefer on their eating behavior. 34.5% of the participants were concerned about their low weight for their height. 37.5% were influenced by the friends and environment would pressure them to eat. 47.5% they never concerned that they were over weight. 11.875% of the participants are always conscious about their thinness and 37.5% were never preoccupied about their underweight.

**IMPACT OF NUTRITION EDUCATION:**

After a course of Nutrition Education, 58% had a change in their weight, 32% adopted the dietary modifications prescribed in the nutrition education and 54% have reduced symptoms of eating disorder.

**SUMMARY & CONCLUSION:**

The findings were 2/3rd of the participants are diagnosed with Anorexia and Bulimia nervosa and 1/3rd of the participants is diagnosed Binge eating disorder. The study population who were diagnosed with eating disorder has less compensatory behavior like vomiting and use of laxatives. The eating disorder due to the behavior modification when they were concerned about their physique and this is influenced by the social and environmental influences by the peer group. Carbohydrate foods are intentionally avoided by the participants concerning their weight. As on adolescent age, exploration of New taste and new foods were seen in most of the participants diagnosed with eating disorder. Social media is a platform where the fruit of wellness can be imbibed but when it is occupied on moderate. And the social media platform of nutrition education with the name of Feast right has an irreplaceable changes in modifying their weight and lowering the symptoms of eating disorder.

**REFERNECES:**
