Association Between Eating Disorders and Malnutrition Among the Students of University of Lahore, Islamabad Campus

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Abstract:

This study will help to encourage a better understanding of eating disorders; we can help people feel safe to tell someone about what they're experiencing and ensure the people around those suffering are able to see that there's something wrong earlier. The aim of a study is to check the association through their common underlying psychological factors, as well as their effect on internet usage among the young generation. To provide a basic understanding of self-control issue's association with both the eating disorder symptoms and excessive internet use, while emotional issue's association with the eating disorder symptoms.

Keywords: Eating Disorders; Malnutrition; Students; University

1. Introduction

Yearly, eating disorders affect millions of people. Today's generation focuses more on weight and body image than other factors, affecting people of all genders, races, ages, and ethnic backgrounds. Eating disorders have serious health consequences and require treatment. Recovery is likely with early intervention, the help of specially trained health care providers, and a support network. Eating disorders are serious conditions that cause major suffering for patients and their families. Better knowledge about perceptions of eating disorders and their treatment, and which factors facilitate or hinder recovery, is desired in order to develop the clinical work and better treatment.

Malnutrition is a serious condition that happens when one's diet does not contain the right amount of nutrients.

It means 'poor nutrition' and can refer to:

- Undernutrition: not getting enough nutrients.
- Over-nutrition: getting more nutrients than needed.

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1.1. Eating Disorder:

An eating disorder is more than just about food. It is a type of mental illness that involves unhealthy thoughts and behaviours towards food, weight, and body shape. If you have an eating disorder, you might worry so much about food that you aren't able to work, go to school, or enjoy time with friends.

Causes and Risks:

Eating Disorders are very complex illnesses. We still don't fully understand what causes them. Many things are involved, including a person's personality, mental health, genetic and biological factors, and social environment. The reasons are different for each person.Some risk factors for developing an eating disorder are:

- A need to be perfect
- Low self-esteem
- Poor body image
- Social pressure to be thin
- Problems coping and dealing with stress
- Bullying
- Having few or no friends
- Abuse or trauma
- Neglect
- Taking part in a sport or activity that puts a lot of emphasis on weight or size (modeling, ballet, gymnastics, wrestling)
- Type 1 diabetes

1.2. Types of eating disorder:

The five classifications of feeding and eating disorders are anorexia nervosa, bulimia nervosa, binge eating disorder, other specified feeding or eating disorder (OSFED), and avoidant restrictive food intake disorder (ARFID).

1.2.1. **Anorexia Nervosa** involves food restriction (limiting or not having certain foods or food groups). People with anorexia drastically limit their food intake and have an intense fear of gaining weight, even though their weight might be too low.

1.2.2. **Bulimia Nervosa** involves cycles of binge eating followed by purging behavior. People with bulimia will eat an unusually large amount of food in a short period of time and then exercise excessively or purge by self-inducing vomiting, using laxatives, enemas, or diuretics in an attempt to avoid gaining weight.

1.2.3. **Binge eating disorder** involves eating an unusually large amount of food in a short period of time and feeling a loss of control during this episode. People with binge eating disorders do not purge afterward, but often feel shame or guilt about their binge eating.

1.2.4. **Other specified feeding or eating disorder (OSFED)** involves some combination of symptoms of the other eating disorders such as an intense fear of weight gain and a preoccupation with food (thinking about food or having food-related thoughts most of the day). Many people with OSFED have symptoms of the other eating disorders, but may not meet the exact clinical criteria, and therefore are diagnosed with OSFED.

1.2.5. **Avoidant restrictive food intake disorder (ARFID).** A person who has ARFID does not eat enough which is marked by unhealthy weight, nutritional deficiency, and/or interference with social functioning. The main difference between anorexia and ARFID is that someone with ARFID does not have a fear of gaining weight or body image concerns. ARFID may be characterized by a limited list of foods someone will eat, extreme pickiness, or fear of an adverse reaction to food such as choking or vomiting.

Medical Complications

Eating disorders can do a lot of damage to your health. People with eating disorders often don't get the nutrients

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their bodies need to stay healthy and work properly. For example, people with eating disorders are at risk of heart or kidney failure leading to death if they are not treated.
Some symptoms of **anorexia nervosa** are:

- Thin, weak bones (osteopenia or osteoporosis)
- Hair and nails that break easily
- Dry and yellowish skin
- Fine hair growing all over the body (lanugo)
- Low iron levels and weak muscles
- Constipation
- Low blood pressure, slowed breathing and pulse
- Drop in body temperature, feel cold all the time.
- Lack of energy(for girls and women) not having periods

Some symptoms of **bulimia nervosa** are:

- Sore throat
- Swollen glands in the neck and under the jaw
- Decay in tooth enamel and very sensitive teeth
- Heartburn
- Pain in the stomach and intestine
- Kidney failure
- Dehydrated

People who try to get rid of calories after they eat by throwing up (or other forms of purging) will have many of these symptoms.

People with **binge-eating disorder (BED)** often binge on foods that are high in sugar, fat or salt. This kind of diet can lead to weight gain, and some people with BED are overweight or obese. As a result, people with BED are at risk of developing: Type 2 diabetes, High cholesterol, High blood pressure, Digestive problems, Heart problem etc.

[4] suggested that eating disorders such as anorexia nervosa (AN) and bulimia nervosa (BN) are increasingly prevalent among children and adolescents. electrolyte disturbances, in particular hypophosphatemia, should be serially monitored. The aims of medical treatment are to promote bodyweight gain and nutritional recovery. Eating disorders in children and adolescents.Journal of epidemiology and diagnosis. [2] addressed the medical practitioner has an important role to play in the management of adolescents with eating disorders, usually as part of a multidisciplinary team.

The role of the medical practitioner in the diagnosis and treatment of eating disorders, updating the reader on the changing epidemiology of eating disorders, revised diagnostic criteria, newer methods of assessing degree of malnutrition, more aggressive approaches to refeeding, and current approaches to managing low bone mass. Update on the medical management of eating disorders in adolescents.

[3] investigated the overall prevalence of eating disorders among children and adolescents is rising - the younger age group are more likely to present with anorexia nervosa while the older adolescent can present with either AN or bulimia nervosa. The overall prevalence of eating disorders among children and adolescents is rising - the younger age group are more likely to present with anorexia nervosa .while the older adolescent can present with either AN or bulimia nervosa.

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[6] suggested that Anorexia nervosa and bulimia are occurring with increased frequency among adolescents and preadolescents. The majority of our pediatric patients with eating disorders had evidence of physiologic derangement requiring medical intervention. The need for adolescents and preadolescents with eating disorders to receive ongoing medical practitioners to become familiar with eating disorders.

[8] recommended that undernourished state of patients with anorexia nervosa and bulimia nervosa controversial findings have been published regarding some aspects of the immune system that are otherwise impaired in more typical types of malnutrition, such as protein-energy malnutrition. In general, adaptation processes seem to occur enabling immune function to be preserved during long periods of the illness. [9] suggested that the eating disorders in children and adolescents has increased significantly in recent decades, making it essential for pediatricians to consider these disorders in appropriate clinical settings, to evaluate patients suspected of having these disorders, and to manage (or refer) patients in whom eating disorders are diagnosed.

[10] suggested that Body mass index was measured at all four assessment waves. Eating disorders were relatively rare among the men. The severity of most cases was mild to moderate and detection and treatment rates depended on the level of severity.

The most common eating disorder diagnoses in adolescents in the community are anorexia nervosa and binge eating disorder. **[7]** suggested that Anorexia nervosa is a debilitating illness that affects mostly females and their families. Multiple physiologic disturbances are present and can be life-threatening. A comprehensive assessment that stimulates patients and families to successfully engage in treatment is the cornerstone of good clinical care for this highly disabling disorder. **[5]** suggested that the role of the pediatrician in FBT for adolescent eating disorders, specifically focusing on how pediatric care changes during treatment. Pediatricians trained in earlier eating disorder treatment approaches, effective support of the approach by pediatricians is critical to its success.

[1] addresses that eating disorders are relatively common and serious disorders in adolescent and pre-adolescent age. The aim of this review is to update new findings related to mostly seen feeding and eating disorders in children and adolescents. The article focuses specifically on anorexia nervosa and bulimia nervosa.

2. METHODOLOGY

2.1 Source of Data collection:

The source was primary source as we collected the data through questionnaires distributed among the university students.

2.2 Hypothesis:

H0= There is no association between eating disorders and malnutrition.

H1= There is an association between eating disorders and malnutrition.

2.3 Research Design:

2.3.1 Population:

From almost 6500 students from the university, we collected 50 samples. These samples show the association between the eating disorders and malnutrition.

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2.3.2 Sample Size:
Sample collected of 50 students which compromises of 42 females and 8 males.

2.3.3 Sample Technique:
The sample compromised of 50 students at University of Lahore, with range age of 15-30. The questionnaires were administered during university timings. Participation, therefore, was voluntary, anonymous and confidential.

2.4. Method/Data collection:
This study was conducted among the students of University of Lahore, Islamabad campus. The main purpose of this study was to find the association between eating disorders and malnutrition. We use different techniques like chi square and crosstabs to evaluate the results. The study was conducted through questionnaires. We used to add all the possible factors that were associated with malnutrition and tried to find the association between eating patterns and malnutrition. We used different factors such as; age, gender, BMI, meals per day, supplementation, disease history, etc. after the questionnaires were collected, we developed different results which are discussed further.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean ± st.dev.	
weight	50	20.00	100.00	57.1200 ±13.36251	
height	50	5.00	6.00	5.3762 ±.23929	
gender	50	.00	1.00	.8400 ±.37033	
age	50	.00	2.00	1.0400 ±.28284	

	N	Minimum	Maximum	Mean
physical activity	50	.00	2.00	.8200± .43753
meals per day	50	.00	2.00	.8800± .65900
fruit intake	50	.00	2.00	.9400±.76692
vegetable intake	50	.00	2.00	1.0600± .65184
any snack during the day	50	.00	2.00	.5200±.83885

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sleeping pattern	50	.00	2.00	1.0000± .53452
water intake	50	.00	2.00	.9400± .76692
do you take any supplement	50	.00	1.00	.7800± .41845
any disease history/current medical condition?	50	.00	2.00	.9200± .39590
number of hours you daily spend on social media?	50	.00	2.00	1.3800± .77959
total number of meals	50	.00	2.00	.7800± .54548
ever made yourself vomited to control your weight?	50	.00	1.00	.0600± .23990
goes on eating binges where you feel that you may not be able to stop?	50	.00	2.00	.2200± .54548
ever exercised more than an hour per day to lose your weight?	50	.00	2.00	.5000± .73540
your prefernce of meals consumed daily	50	.00	2.00	.6800± .79385
do you eat anything regardless of your own choice just under peer pressure?	50	.00	2.00	1.2000± .69985
how do you feel if you are given milk to drink twice or thrice a day?	50	.00	2.00	.7800± .84007

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did you observe any change in your weight during last 6 months?	50	.00	2.00	1.0200± .89191

Table 2 :Meal Preference :

Indicator	**P-value**
Diet history	3.061
Sleeping pattern	2.742
Supplements	3.068
Social media	6.320
Binge eating	.778
Weight changes	3.712
Vomiting	.925
Vegetable intake	10.879
Exercise pattern	.058

Table 3: Peer Pressure:

Indicator	**P-value**
Disease history	12.235
Sleeping pattern	2.976
Supplements	2.732
Social media	10.968
Binge eating	7.341
Weight change	1.928
Vomiting	.749
Vegetable intake	4.765
Exercise pattern	17.502

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3.CONCLUSIONS AND RECOMMENDATIONS:

According to the statistics, there exists an association between sleeping patterns, and vegetable intake with meal preference. Disease history, sleep pattern, social media usage, binge eating, weight change, vomiting, and exercise have no association with meal preference. Disease history, sleeping pattern, social media, binge eating, weight change, vomiting, and vegetable intake have no association with peer pressure.

- **No association:**

Meal preferences * Disease History, Supplements * Meal preferences, Social. Media * Meal. Preferences, Binge. Eating * Meal. Preferences, Weight. Change * Meal. Preferences, Vomiting * Meal. Preferences, Exercise. Pattern * Meal. Preferences, Disease. History * Peer. Pressure, Sleeping. Pattern * Peer. Pressure, Supplements * Peer. Pressure, Social. Media * peer. Pressure, Binge. Eating * Peer. Pressure, weight. Change * peer. Pressure, Vomiting * peer. Pressure, Vegetable. Intake * peer. Pressure, Exercise. Pattern * peer. Pressure

As the p value of all these variables is equal to 0.05 so the null hypothesis is accepted.

According to result there is no associations between these variables.

- **Association:**

Sleeping pattern with Meal preferences, Vegetable. Intake * Meal. Preferences

As the p value of all these variables is smaller than 0.05 so the null hypothesis is rejected.

According to result there is associations between these variables

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