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# ABSTRACT

DISORDERED EATING BEHAVIORS: AN OVERVIEW OF ASIAN CULTURES

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Disordered eating refers to troublesome eating patterns that are less frequent or less severe than diagnosed eating disorders. The difference between disordered eating and occasional disruption of normal eating patterns is the urgency and the persistence behind the eating behavior. Review of recent researches showed that disordered eating or atypical eating disorder is far more common and widespread than actual eating disorders. A survey of recent research literature shows an alarming rise in eating disorders in South Asian and Islamic countries. The aim of this paper is to highlight disordered eating behaviors in people of Asian cultures especially Pakistan.

**Key words:** Eating behavior, Asian culture, Pakistan.

# INTRODUCTION

Eating practices are dramatically changing around the world and there is a rapid transition in culture due to fastest means of communication. This shift of culture has created a lasting affects in developing cultures of Asia, including Pakistan. Emphasis of media on an ex- tra skinny and underweight model as an ideal figure is causing a distress and psychological disruption in eat- ing behavior of young boys and girls. In the whole course of life, we are conditioned to turn to food for pleasure and reinforcement. It is surprising that these reinforce- ments become hazardous in the college years. The evi- dence comes from the fact that after obesity and asthma, disordered eating is the most common chronic illness among adolescents1.

## Defining the Concept of Disordered Eating Behavior

Healthy eating is pleasurable eating; it is eating without fear or a connection to one’s emotional well- being. Disordered eating is an excessive, immoderate behavior. Disordered eating can be changes in eating patterns that occur in any stress inducing situation, fears about personal appearance and bad health. The prob- lem can be due to either overindulgence or avoidance. Late adolescent are at highest risk to develop disor- dered eating behaviors.

The term disordered eating emerged in medical and psychological literature in the late 1970s, coincid-

ing with the introduction of diagnostic criteria for bulimia nervosa2. Disordered eating was first used to describe

dietary chaos and emotional instability experienced during recovery from anorexia nervosa3. Soon, the term was used more loosely to describe young women, who *“…diet at some time and lose more than 3 kg in weight; may experience episodes of binge eating and “picking” behavior; wish to be thinner irrespective of their current body weight and abuse laxatives or diuretics in order to achieve a fashionably slim figure*4*".* Another early study defined disordered eating as “bingeing, highly restric- tive dieting, emotional eating or purging5.

Although the concept still lacks uniform definition, it is generally used to describe disordered eating be- haviors that are broader than eating disorders defined in ICD-10 and DSM-IV-TR classifications. Contrary to these diagnostic classifications, milder forms of disor- dered eating are often not worthy enough for medical attention, although they are relatively common among adolescents and young adults in the general popula- tion. . Disordered eating means unusual and troubled eating habits. “*Disordered eating refers to troublesome eating behaviors, such as restrictive dieting. Bingeing, or purging, which occur less frequently or are less se- vere than those required to meet the full criteria for the diagnosis of an eating disorder”* 6*.*

Eating disorders affect seventy million individuals worldwide whereas it affects five to ten million Ameri- cans7. Eating disorders have been frequently reported in western countries in the late 20th century2,8,9 which depicts the female to male 9:1 ratio of eating disorder. However very few studies focus on the incidence or preva-

lence of disordered eating behavior exclusively.

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Johnson, Powers and Dick found in their studies that 9% of the female college athletes were diagnosed for an eating disorder where as 58% were found at high risk for development of disordered eating behavior. The same study reflects 1% of male diagnosed as eating disorder and 38% were at risk for developing disordered eating behaviors10.

In Non-Western societies, like western societies the prevalence of disordered eating behaviors in women has greatly increased in recent years, concurrent with the decreasing size of the ideal figure1.

## Implications for studying Disordered Eating Behaviors

The focus on disordered eating is important as there are many individuals who present with the disor- dered eating behaviors without meeting the full criteria of DSM-IV associated with eating disorders (i.e. anor- exia nervosa and bulimia nervosa). These behaviors often result in outcomes that are harmful to both physi- cal and mental health, and can easily develop into a clinical disorder if preventative measures are not imple- mented2.

## Disordered Eating Behaviors vs Eating Disorders

Disordered eating can be defined as “*a wide spec- trum of harmful and often ineffective eating behaviors used in attempts to lose weight or achieve a lean appear- ance*” 11. Among the general population a very small number of people are considered to have full blown eating disorder as compare to disordered eating behav- iors.

The prevalence of disordered eating is much greater than that of clinically diagnosed eating disor- ders. It has been estimated that the majority (64-68%) of college- aged women manifest some sort of disordered eating behavior12. Further, it has been postulated that the current social acceptance of the chronic dieter has led even “normal” eating behaviors to consist of disor- dered aspects. For example, in an article which focuses on preventative measures for disordered eating13 in- cluded a specific section on interventions for “normal” eaters, briefing on page 35 that, “*it seems as though ‘normal’ eating with its emphasis on weight control, may actually be quite abnormal*”.

There are three primary types of clinical eating disorders as defined by the Diagnostic and Statistical Manual of Mental Disorders14. Anorexia nervosa, Bu- limia nervosa, and Eating disorders not otherwise speci- fied. Each disorder has specific diagnostic criteria, both behavioral and psychological, that must be met.

A clarification of the differences between clinically diagnosed eating disorders and the general concept of disordered eating is very important to understand. What distinguishes disordered eating from occasional quickly or spotting eating is the purpose and consistency be- hind the behavior, and whether or not the person main- tains a sense of free choice with regard to eating behav- iors. When people use food to resolve underlying emo- tional issues, there is a problem. When the decision about what and how to eat is based on compulsive and inflexible emotional needs, they have become a slave to the food ritual. By definition, disordered eating is a

misuse of food to resolve emotional problems. On the other hand, disordered eating may develop into an eat- ing disorder. If disordered eating becomes sustained, distressing, or begins to interfere with everyday activi- ties, then it may require professional evaluation to label the diagnosis of an eating disorder. For the purpose of current study disordered eating behavior is considered to be the most important variable.

Fairburn and Garner15 further clarify this by differ- entiating between two types of non-specified eating dis- orders, atypical and sub-threshold. Atypical refers to in- dividuals who exhibit one or more, but not all, disor- dered eating criteria. For example, individuals who may binge, but not purge; those who purge, but do not binge; and chronic dieters. Sub-threshold refers to persons who meet all of the criteria, but not to sufficient severity15. An individual who meets the full criteria for anorexia nervosa, but maintains a body weight of less than 90% of ex- pected weight would fall into this category. In addition, individuals with disordered eating do not present all of the psychological characteristics associated with clini- cal eating disorders.

## Prevalence of Eating Disorders in Asian Cultures

The manifestation and presentation of the symp- toms of eating disorders may vary from culture to culture so the diagnostic criteria based on western norms may not always be appropriate to diagnose individuals in other cultures. For example cutting the food into small pieces can be a problematic behavior in western culture but not in Asian culture because the food generally used in Asian cultures like Chapatti (a kind of bread) and rice can not be cut into pieces with the help of knife and fork as it is used in west.

Estimates of anorexia nervosa in Asian countries range from 0.002 % to 0.9%16 and that of bulimia nervosa range from 0.46% (Lee, 1993) to 3.2%17. It was noted that anorexia nervosa is only found in clinical popula- tion of Malaysia but the number has remained almost the same for more than one and half decade18. Lee has reported very low incidence of anorexia nervosa in Hong Kong19. According to a hospital based survey in Japan, the female clinical population is 1.5 times more likely to develop an eating disorder than the non clinical popu- lation20. The prevalence of anorexia nervosa in Irani schoolgirls is about 0.9% and is highest among the Asian communities21. Other than Asia, there are several re- ports of bulimia in Islamic region. Disordered eating is 1.2% among the schoolgirls in Cairo and using the same type of survey it was found that 3.2% of the Iranian school- girls suffer from bulimia nervosa, which is again the high- est rate among Asian countries16. Other countries like Singapore or Uganda have no population-based sur- vey and only the individual cases have been reported suggesting a lower incidence of this disorder22. Table 1 shows the prevalence of eating disorders in different Asian countries.

Table 1

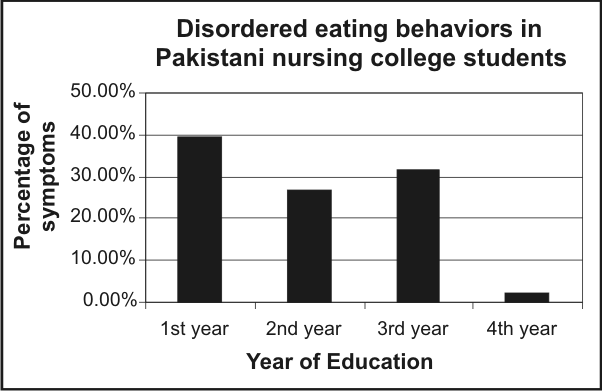
Prevalence of Eating Disorders in Asian Cultures

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| --- | --- | --- | --- | --- |
| **Country Studied (Year)** | **Sample** | **Prevalence of Anorexia** | **Prevalence of Bulimia** | **Source** |
| Malaysia (1981) | 6000 psychiatric patients | 0.05% |  | 30 |
|  | 732 hospitals |  |  | 31 |
| Japan (1985) | Male and female | 0.0036% |  |  |
|  | Female | 0.0063% |  |  |
| Japan (1998) | 456 women (18-21 yrs) |  | 2.9% | 32 |
| Hong Kong (1989) | 500,0000 adults | 0.002% |  | 33 |
| Hong Kong (1991) | 1020 college students |  | 0.46% | 34 |
|  | 732 hospitals |  |  | 35 |
| Japan (1992) | Male and female | 0.0045% |  |  |
|  | Female | 0.0097% |  |  |
| Egypt (1994) | 351 school girls |  | 1.2% | 36 |
| Japan (1993) | 259 students (15-18 yrs) |  |  | 37 |
|  | Male |  | 0.7% |  |
|  | Female |  | 1.9% |  |
| Japan (1997) | 130 hospitals | 0.0048% | 0.01% | 38 |
|  | and 1326 clinics (female) |  |  |  |
| Iran (2000) | 3100 school girls (15-18 yrs) | 0.9% | 3.2% | 39 |

## Measurement Issues

EAT-26 is commonly used around the world and translated versions are used in non-western countries for evaluation. But the EAT-26 and other tools are based on western culture and may not be a true representative of Asian perspective. Moreover, it is very difficult to find appropriate population based findings because most of the studies use convenient samples. Moreover the very large group surveys are necessary to conduct, as the incidence is very low in Asian culture. A preliminary sur- vey conducted by researcher in Lahore Pakistan, ex- plored that disordered eating patterns are present in 42

% of college girls. These findings are consistent with Baber et al26 as shown in the graph below:



**Eating Disorders in Pakistan**

In the light of recent research we cannot deny the presence of eating disorder in Pakistan. Unfortunately, very few cases have been reported to doctors, practitio- ners or mental health workers as the people are very reluctant to admit disordered eating as a problem. In- stead obesity was focused to some extent and obese people are somewhat more privileged to receive some medical interventions and related help. During the last decade some awareness and knowledge about eating disorder has grown considerably but the concept of dis- ordered eating is still neglected and unresolved in Paki- stan. A preliminary survey by authors showed that most of the cases has been identified through gastroenter- ologists with the complaints of nausea, burning, indi- gestion and acidity etc in Pakistan. Some other cases have been identified by dentists surprisingly for loss of dental enamel or calcium deficiency in teeth due to binge and purge behavior. Knowing when disordered eating, eating has become an eating disorder, is difficult to de- termine. The number of individuals having disordered eating is higher than full blown eating disorder which is rarely reported in hospital setting.

The most surprising finding is the high prevalence of eating disorder i.e.39.5% of female nursing college students in their first year of study in Pakistan, which is highest between the South Asian and Islamic countries such as Oman or Turkey26. The decrease in prevalence

of this disorder alongside a corresponding increase in the nursing year of study is another surprising finding and there is a marked difference among the first year percentage to fourth year percentage i.e. 39.5% to 2.4%, which can be probably due to fact that the mean age of eating disorder fall nearly in this age group at peak.

Most of the studies conducted in this area focused more on women, than men27. It may be due to the fact that the measures that have been developed to diag- nose disordered eating behaviors are geared towards women. An item from the Eating Disorders Inventory-228 illustrates this phenomenon: “I think that my thighs are too large.” While women are usually dissatisfied with their bodies because they think they are too large, men may think otherwise. Men often strive for a muscular, or larger, physical ideal. Further investigation into disor- dered eating in men is clearly contingent upon the de- velopment of more appropriate instruments. So for iden- tifying the disordered eating behaviors in Pakistani youth, an indigenously developed scale is required as a preliminary step for identification of disordered eating behaviours.

Prevalence of eating disorder in school girls in Lahore, Pakistan was explored in survey29. Another study showed the association of anorexia nervosa with depression30 which explained the possibility of anor- exia nervosa as a depression spectrum disorder. These findings are consistent with the fact that prevalence of eating disorder in Pakistan is related with depression and body shape31. This study further revealed that 59% of the normal weight and 21% of the underweight women considered themselves to be overweight, 17% scored below the threshold of EAT 26. Bulimia nervosa was found in 2 women and EDNOS was also found in two women. These results showed an increased prevalence of eating disorder in Pakistan.

Several other researchers focused the issue of either thinness or obesity in Pakistani society. A re- searcher discussed thinness as a woman inner conflict and emphasized the role of nutritionist and dietitians to provide information about a healthy diet and suggest specific meal plans as per need32. Rehman conducted research on obesity in adolesance in Pakistan33. The results showed that 17% of O level or grade 10th stu- dents were underweight, 65% were normal weight and 18% were over weight so they emphases the role of physical activity for obese people and raised the consciousness about weight status of Pakistani adoles- cents.

## Future research directions

There is still the dearth of scientific work regarding disordered eating in Pakistani culture. Following sug- gestions have been given for further studies.

1. There is no specific instrument to assess disor- dered eating behavior in Pakistani population. These tools are culturally biased and do not re-

flect the full spectrum of eating disorders in Asia and especially Pakistani culture. Moreover the translated version of these scales may not pro- vide accurate meanings in Pakistani culture. There is a need to develop an indigenous scale to as- sess disordered eating behavior.

1. There is a strong need to conduct extensive work on identification of contributing psychosocial fac- tors related to eating behavior such as body im- age, self esteem and life style. Gender differences and socioeconomic status in relation to disordered eating should be investigated to see the true pic- ture of eating disorders in our society.
2. Family functioning of the disordered eating indi- viduals must also be studies to draw some con- clusion for further implications.
3. Larger samples are needed to explain the accu- rate prevalence and incidence rate in Pakistan. Generally convenience samples were used in studies of community groups, university samples or patients of different hospitals and clinics so it becomes difficult to find truly population based studies. Extensive work is needed regarding this area. Such studies will contribute to the under- standing of the relationship and may classify im- portant mechanism.
4. There is a dire need to promote awareness among health professionals and general population about serious health consequences of disordered eat- ing behaviors in Asian cultures.

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