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DISORDERED EATING BEHAVIORS: AN OVERVIEW OF ASIAN CULTURES

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ABSTRACT

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 extra skinny and underweight model as an ideal figure is causing a distress and psychological disruption in eating 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 reinforcements become hazardous in the college years. The evidence comes from the fact that after obesity and asthma, disordered eating is the most common chronic illness among adolescents[1].

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 problem can be due to either overindulgence or avoidance. Late adolescent are at highest risk to develop disordered eating behaviors.

The term disordered eating emerged in medical and psychological literature in the late 1970s, coinciding with the introduction of diagnostic criteria for bulimia nervosa[2]. Disordered eating was first used to describe dietary chaos and emotional instability experienced during recovery from anorexia nervosa[3]. 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 restrictive dieting, emotional eating or purging[5].

Although the concept still lacks uniform definition, it is generally used to describe disordered eating behaviors that are broader than eating disorders defined in ICD-10 and DSM-IV-TR classifications. Contrary to these diagnostic classifications, milder forms of disordered eating are often not worthy enough for medical attention, although they are relatively common among adolescents and young adults in the general population. . 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 severe 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 Americans[7]. Eating disorders have been frequently reported in western countries in the late 20th century[2,8,9] which depicts the female to male 9:1 ratio of eating disorder. However very few studies focus on the incidence or prevalence of disordered eating behavior exclusively. 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 behaviors[10].

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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 figure[1].

Implications for studying Disordered Eating Behaviors

The focus on disordered eating is important as there are many individuals who present with the disordered eating behaviors without meeting the full criteria of DSM-IV associated with eating disorders (i.e. anorexia nervosa and bulimia nervosa). These behaviors often result in outcomes that are harmful to both physical and mental health, and can easily develop into a clinical disorder if preventative measures are not implemented[2].

Disordered Eating Behaviors vs Eating Disorders

Disordered eating can be defined as "*a wide spectrum of harmful and often ineffective eating behaviors used in attempts to lose weight or achieve a lean appearance*" [11]. Among the general population a very small number of people are considered to have full blown eating disorder as compare to disordered eating behaviors.

The prevalence of disordered eating is much greater than that of clinically diagnosed eating disorders. It has been estimated that the majority (64-68%) of college- aged women manifest some sort of disordered eating behavior[12]. Further, it has been postulated that the current social acceptance of the chronic dieter has led even "normal" eating behaviors to consist of disordered aspects. For example, in an article which focuses on preventative measures for disordered eating[13] included 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 Disorders[14]. Anorexia nervosa, Bulimia nervosa, and Eating disorders not otherwise specified. 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 behind the behavior, and whether or not the person maintains a sense of free choice with regard to eating behaviors. When people use food to resolve underlying emotional 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 eating disorder. If disordered eating becomes sustained, distressing, or begins to interfere with everyday activities, 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 Garner[15] further clarify this by differentiating between two types of non-specified eating disorders, atypical and sub-threshold. Atypical refers to individuals who exhibit one or more, but not all, disordered 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 severity[15]. An individual who meets the full criteria for anorexia nervosa, but maintains a body weight of less than 90% of expected weight would fall into this category. In addition, individuals with disordered eating do not present all of the psychological characteristics associated with clinical eating disorders.

Prevalence of Eating Disorders in Asian Cultures

The manifestation and presentation of the symptoms 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.

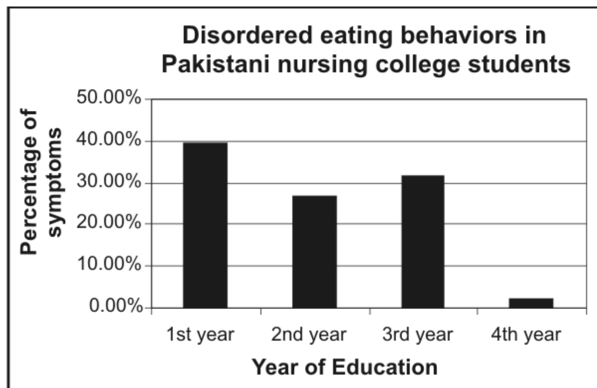
Estimates of anorexia nervosa in Asian countries range from 0.002 % to 0.9%[16] and that of bulimia nervosa range from 0.46% (Lee, 1993) to 3.2%[17]. It was noted that anorexia nervosa is only found in clinical population of Malaysia but the number has remained almost the same for more than one and half decade[18]. Lee has reported very low incidence of anorexia nervosa in Hong Kong[19]. 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 population[20]. The prevalence of anorexia nervosa in Irani schoolgirls is about 0.9% and is highest among the Asian communities[21]. Other than Asia, there are several reports 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 schoolgirls suffer from bulimia nervosa, which is again the highest rate among Asian countries[16]. Other countries like Singapore or Uganda have no population-based survey and only the individual cases have been reported suggesting a lower incidence of this disorder[22]. Table 1 shows the prevalence of eating disorders in different Asian countries.

Table 1
Prevalence of Eating Disorders in Asian Cultures

Country Studied (Year)	Sample	Prevalence of Anorexia	Prevalence of Bulimia	Source
Malaysia (1981)	6000 psychiatric patients 732 hospitals	0.05%		30 31
Japan (1985)	Male and female Female	0.0036% 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 732 hospitals		0.46%	34 35
Japan (1992)	Male and female Female	0.0045% 0.0097%		
Egypt (1994)	351 school girls		1.2%	36
Japan (1993)	259 students (15-18 yrs) Male Female		 0.7% 1.9%	37
Japan (1997)	130 hospitals and 1326 clinics (female)	0.0048%	0.01%	38
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 survey conducted by researcher in Lahore Pakistan, explored that disordered eating patterns are present in 42 % of college girls. These findings are consistent with Baber et al[26] 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, practitioners or mental health workers as the people are very reluctant to admit disordered eating as a problem. Instead 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 disordered eating is still neglected and unresolved in Pakistan. A preliminary survey by authors showed that most of the cases has been identified through gastroenterologists with the complaints of nausea, burning, indigestion 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 determine. 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 Turkey[26]. 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 men[27]. It may be due to the fact that the measures that have been developed to diagnose disordered eating behaviors are geared towards women. An item from the Eating Disorders Inventory-2[28] 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 disordered eating in men is clearly contingent upon the development of more appropriate instruments. So for identifying 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 survey[29]. Another study showed the association of anorexia nervosa with depression[30] which explained the possibility of anorexia 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 shape[31]. 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 researcher 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 need[32]. Rehman conducted research on obesity in adolesance in Pakistan[33]. The results showed that 17% of O level or grade 10th students 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 adolescents.

Future research directions

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

1. There is no specific instrument to assess disordered eating behavior in Pakistani population. These tools are culturally biased and do not reflect the full spectrum of eating disorders in Asia and especially Pakistani culture. Moreover the translated version of these scales may not provide accurate meanings in Pakistani culture. There is a need to develop an indigenous scale to assess disordered eating behavior.
2. There is a strong need to conduct extensive work on identification of contributing psychosocial factors related to eating behavior such as body image, self esteem and life style. Gender differences and socioeconomic status in relation to disordered eating should be investigated to see the true picture of eating disorders in our society.
3. Family functioning of the disordered eating individuals must also be studies to draw some conclusion for further implications.
4. Larger samples are needed to explain the accurate 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 understanding of the relationship and may classify important mechanism.
5. There is a dire need to promote awareness among health professionals and general population about serious health consequences of disordered eating behaviors in Asian cultures.

REFERENCES

1. Lucas AR, Crowson CS, Fallon WM, Melton LJ. The ups and downs of anorexia nervosa. Int J Eat Disord 1999; 26: 397-405.
2. Russell G. Bulimia nervosa: an ominous variant of anorexia nervosa. Psychol Med 1979; 9: 429-48.
3. Palmer RL. The dietary chaos syndrome: a useful new term? Br J Med Psychol 1979; 52: 187-90.
4. Abraham SF , Mira M , Beumont PJ ,Sowerbutts TD, Llewellyn JD. Eating behaviors among young women. Med J Aust 1983; 2: 225-8.
5. Kagan DM, Squires RL. Eating disorders among adolescents: patterns and prevalence. Adolescence 1984; 19: 15-29.
6. Polivy J, Herman PC. Causes of eating disorders. Ann Rev Psychol 2002; 53: 187-213.
7. Sanftner JL, Crowther JH, Crawford PA, Watts DD. Maternal influences (or lack thereof) on daughters' eating attitudes and behaviors. Eat Disord: J Treat Prevent 1996; 4: 147–59.
8. Cooper L, Fairburn C. The eating disorder examination: a semi-structured interview for the assessment of the specific pathology of eating disorders. Int J Eat Disord 1987; 6: 1-8.

9. Garner D, Garfinkel P. Socio-cultural factors in the development of anorexia nervosa. Psychol Med 1980; 10: 647-56.

10. Johnson MD, Powers T, Dick H. Disordered eating in active and athletic women. Clin Sports Med 1994; 13: 355-69.

11. Gatenby SJ. Eating frequency: methodological and dietary aspects. Br J Nutr 1997; 77: S7-20.

12. Hesse-Biber S. Eating patterns and disordered in a college population: Are college women's eating problems a new phenomenon? Sex Roles 1989; 20: 71-89.

13. Kalodner CR, Scarano GM. A continuum of non clinical eating disorders: A review of behavioral and psychological correlates and suggestions for intervention. J Ment Health Counsel 1992; 14: 30-41.

14. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed TR. Washington DC: American Psychiatric Association 2002.

15. Fairburn CG, Garner D. Studies of epidemiology of bulimia nervosa: an undetected problem. Br J Psychiatry 1986; 147: 401–8.

16. Nasser M. Screening for abnormal eating attitudes in a population of Egyptian secondary school girls. Soc Psychiatr Psychiatr Epidemiol 1994; 29: 25-30.

17. Lee S. How abnormal is the desire for slimness? A survey of eating attitudes and behaviour among Chinese undergraduates in Hong Kong. Psychol Med 1993; 23: 437-51.

18. Buhrich N. Frequency of presentation of anorexia nervosa in Malaysia. Aust NZ J Psychiatry 1981; 15: 153-5.

19. Lee S. Anorexia nervosa in Hong Kong: a Chinese perspective. Psychol Med 1991; 21:703-11.

20. Kuboki T, Nomura S, Ide M, Suematsu H, Araki S. Epidemiological data on anorexia nervosa in Japan. Psychiatry Res 1996; 62: 11-6.

21. Nobakht M, Dezhkam M. An epidemiological study of eating disorders in Iran. Int J Eat Disord 2000; 28: 265-71.

22. Ung EK, Lee S, Kua EH. Anorexia nervosa and bulimia — a Singapore perspective. Singapore Med J 1997; 38: 332-5.

23. Kiriike N, Nagata T, Sirata K, Yamamoto N. Are young women in Japan at high risk for eating disorders? Decreased BMI in young females from 1960 to 1995. Psychiatry Clin Neurosci 1998; 52: 279-81.

24. Suzuki K, Takeda A, Matsushita S. Co prevalence of bulimia with alcohol abuse and smoking among Japanese male and female high school students. Addiction 1995; 90: 971-5.

25. Nakamura K, Hoshino Y, Watanabe A, Honda K, Niwa S, Tominaga K, et al. Eating problems in female Japanese high school students: a prevalence study. Int J Eat Disord 1997; 26: 91-5.

26. Babar N, Alam M, Ali SS, Ansari A, Atiq M, Awais A, et al. Anorexic behavior and attitudes among female medical and nursing students at a private university hospital. J Pak Med Assoc 2002; 52:272-5.

27. Tylka TL, Subich LM. A preliminary investigation of the eating disorders continuum with men. J Counsel Psychol 2002: 49: 273-9.

28. Garner DM. Eating Disorder Inventory-2: professional manual. Odessa, FL: Psychological Assessment Resources, Inc, 1991.

29. Mumford DB, Whitehouse AM, Choudry IY. Survey of eating disorders in English medium schools in Lahore, Pakistan. Int J Eat Disord 1992; 11: 173–84.

30. Kaiser F, Syed A, Qazi A. Association of anorexia nervosa with depression. Rawal Med J 2007; 32: 77-9.

31. Suhail K, Nisa Z. Prevalence of eating disorders in Pakistan: relationship with depression and body shape. Eat Weight Disord 2002; 7: 131-8.

32. Safdar NF. Thinness: a woman's conflict or Eating Disorders: Facts and the Search for Solutions. J Pak Med Assoc 2006; 56,345-6.

33. Rehman T, Rizvi Z, Siddiqui U, Ahmad S, Sophie A, Siddiqui M, et al. Obesity in Adolescents of Pakistan. J Pak Med Assoc 2003; 53: 35-40.