# Full Length Research Paper

# Anorexia and bulimia nervosa: The scenario among Nigerian female students

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Eating disorders are a major source of physical and psychosocial morbidity among young women. The present study was two-fold; one was to confirm if such eating disorders like anorexia and bulimia which have plagued the developed western world have engulfed the women of Nigeria and to identify young Nigerian female students most at risk of subsequently developing an eating disorder. Anorexia and bulimia have for long been considered a western disorder or the disorder of the developed world but the results obtained clearly indicate that assumption is incorrect. 58% of the students involved in this study indicated a predisposition to two eating disorders namely: anorexia and bulimia.

Key words: Eating disorders, anorexia, bulimia, Nigerian, female students.

### INTRODUCTION

Eating disorders are a major source of physical and psychosocial morbidity among young women (Fairburn and Harrison, 2003; Crow and Peterson, 2002). It would be valuable to be able to detect those at most risk of developing an eating disorder, either to prevent the disorder from developing or to be able to start treatment early. Because clinical experience and research evidence have indicated that eating disorders commonly begin with behaviour that resembles normal dieting (Fairburn and Harrison, 2003; Hsu, 1990; Hayward et al., 2004), young women who are dieting constitute an important high- risk group, although only a small minority will develop an eating disorder (Patton et al., 1990; Patton et al., 1999).

The overall aim of the present study was two fold: to develop a means of identifying young Nigerian females most at risk of subsequently developing an eating disorder and to confirm if such eating disorders as anorexia and bulimia, prevalent in developed/western countries, exist and to what extent, among Nigerian women.

In the United States, about 7 million women and 1 million men suffer from eating disorders (Fairburn and Harrison, 2003). But today, with the rise in the westernization of Nigeria, the fear of the rise of such disorders within this population is a growing concern. Nigeria is a country of great culture and is culturally inclusive of women of all sizes and shapes; they are appreciated for their inner being. Today with the modern influences of fashion and media, Nigerian cultural concepts have begun to change specifically within modern cultural cen-

tres, namely, Lagos State, a prime target for the study of these influences.

Eating disorders involve complex behavioural factors that are associated with underlying psychopathologies such as emotional and personality disorders. Additionally, environmental factors such as family pressures and a culture in which there is an over abundance of food and an obsession with thinness may contribute to the onset of eating disorders. Genetic or biologic susceptibility contributes to environmental factors to increase the chances of developing and eating disorder. There are three general categories of eating disorders namely: Bulimia nervosa, Anorexia nervosa and Binge eating (American Psychiatric Association, 1994).

Bingeing without purging is characterized as compulsive overeating (binge eating) with the absence of bulimic behaviours, such as vomiting or laxative abuse (used to eliminate calories). Binge eating usually leads to becoming overweight. But for the purpose of this study only anorexia nervosa and bulimia nervosa were the focus of this study.

Eating disorders rank as the third (3<sup>rd</sup>) most common chronic illness in adolescents females (Whitaker, 1992). It has an incidence of up to 5% prevalence rate in any given population (Stein, 1991). Two major types are recognized in school children (Patton et al., 1990); they are the restrictive form in which food intake is seriously limited (Anorexia Nervosa) and that in which binge eating episodes are followed by attempts to lose weight through vomiting, cathartics, exercise and fasting (Bulimia Nervosa).

Thus, the focus of this study was to confirm whether this was also prevalent among young Nigerian students. Bulimia nervosa is more common than anorexia and it usually begins in early adolescence. Bulimia is characterized by cycles of bingeing and purging and typically takes the following pattern: Bulimia is often triggered when young women attempt restrictive diets, fail, and react by binge eating. In response to the binges, patients compensate, usually by purging, vomiting, using enemas or taking laxatives, diet pills or drugs to reduce fluids. Patients then revert to severe dieting, excessive exercise or both. (Some patients with bulimia follow bingeing only with fasting and exercise. They are then considered to have non-purging bulimia). The cycle then swings back to bingeing and then to purging again.

Some studies have reported that patients with bulimia average about 14 episodes of binge-purging per week. To be diagnosed with bulimia, however, a patient must binge and purge at least twice a week for 3 months. In some cases, the condition progresses to anorexia. Most people with bulimia, however, have a normal to highnormal body weight, although it may fluctuate by more than 10 pounds because of the binge-purge cycle (Stein, 1991).

The term "anorexia" literally means absence of appetite. Anorexia nervosa involves an aversion to food that leads to a state of starvation and emaciation. It is a very serious illness that some experts believe is an entirely different condition from bulimia and should be not be diagnosed as a simple eating disorder. Individuals displaying anorexic symptoms show at least 15% to as much as 60% of weight loss. The patient with anorexia nervosa has an intense fear of gaining weight, even when severely underweight. Individuals with anorexia nervosa have a distorted image of their own weight or shape and deny the serious health consequences of their low weight. Women with anorexia nervosa miss at least three consecutive menstrual periods (though some experts believe women can be anorexic without this occurrence.)

Anorexia nervosa has two subtypes: restrictive or binge-eating/purging type (American Psychiatric Association, 1994). Patients with this condition are often characterized as anorexia restrictors or anorexic bulimic patients. Each type is equally prevalent. Anorexia restricttors reduce their weight by severe dieting. Anorexic bulimic patients maintain emaciation by purging. Although both types are serious, the bulimic type, which imposes additional stress on an undernourished body, is the more damaging.

## METHODOLOGY

#### Selection of participants

Studies indicate that, eating disorders occur predominantly among girls and women. About 90 - 95% of patients with anorexia nervosa and about 80% of patients with bulimia nervosa are female (Whitaker, 1992). Thus only young females between the ages of 13 - 21 were selected for this study. A total of 1,171 individuals in the selected range participated in this study. These individuals, mostly school students were requested to complete the study questionnaires.

#### Study design

Three types of questionnaires were employed during this study, each corresponding to deeper levels of investigation. The first level involved the use of the pre-screening questionnaire that covered details such as: students' age, socio-economic status and their level of appreciation to different types of food. This helped select the individuals appropriate for this study. The study focused at analysing the percentage of Nigerian female students who exhibit a pre-disposition to eating disorder and investigate the methods of dieting used by Nigerian female students.

The second level of investigation was carried out using the Eating Attitude Test (EAT-26), which was used for this study with a few modifications for the purpose of this study. The Eating Attitudes Test (EAT-26) was the screening instrument used in the 1998 National Eating Disorders Screening program. The EAT-26 is probably the most widely used standardized measure of symptoms and concerns characteristics of eating disorders. However, studies have shown that the EAT-26 can be an efficient screening instrument.

Responses for each item are weighted from zero to three, with a score of 3 assigned to the responses farthest in the "symptomatic" direction, a score of 2 for the immediately adjacent response, a score of 1 for the next adjacent response and a 0 score assigned to the three responses farthest in the "asymptomatic" direction. Based on this, the individuals were separated into individuals showing no symptoms, those who were showing symptoms of dieting and those who may be predisposed to the disorder (Fairburn and Beglin, 1994; Black and Wilson, 1996).

Finally the third level of investigation employed the personal questionnaire was used to analyse the back-ground reason behind these individuals showing a possible predisposition to these eating disorders, such as being part of broken or dysfunctional homes, maternal preoccupancy with weight, peer pressure, teenage crushes and low self esteem where all considered. Informed consents were obtained from the school heads of the various schools involved, students above 18 years and parents of those below 18 years.

#### Survey method

A total of 2,000 copies of the questionnaire were distributed with the assistance of enumerators at the second

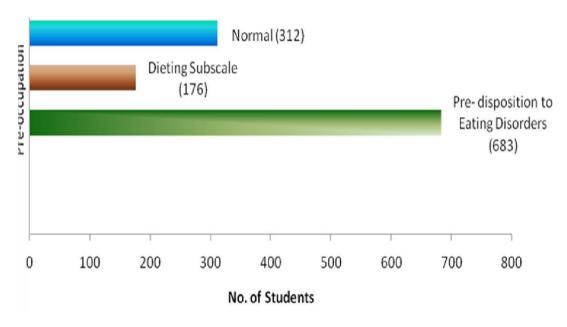


Figure 1. Students with a pre- disposition to eating disorders.

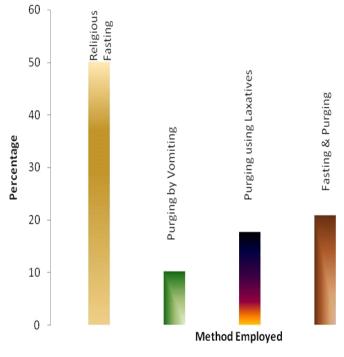


Figure 2. Methods of dieting

level of investigation to the students who were selected from the first investigation.

# RESULTS

Out of the 2,000 questionnaires sent out, 1171 (58.6%) were retrieved and analysed for this study. From this, 1171 students were analysed in this study, 683 students

(58%) were found to show a possible pre-occupation with either one of these disorders. Out of the remaining 488 students 176 were found to fall under the dieting subscale of students while the remaining 312 students had no inclination towards either of the disorders or towards dieting. Figure 1 indicates the percentage of Nigerian female students who exhibit a pre-disposition to eating disorder. Also, it was noticed that, among those identified as pre-disposed to the eating disorder, students of the age group 13 - 16 showed a higher incidence (56%).

By the third level of Investigation, the different methods of dieting used by these students were studied and the incidence methods used by these students were quantified. The number students found to be masking their obsession behind religious fasting were 50.1%, purging by vomiting were 10.2%, purging with the aid of laxatives were 17.7% and finally fasting and purging (either by vomiting or use of laxatives) were 20.9%. Figure 2 portrays the different methods of dieting used by Nigerian female students.

#### DISCUSSION

Anorexia and bulimia have for long been considered a western disorder or the disorder of the developed world but the results obtained clearly indicate that this assumption is incorrect. 58% of the students involved in this study indicated a predisposition to two eating disorders namely: anorexia and bulimia. This was in line with a study carried out in rural Africa, which suggested that eating disorder such as anorexia nervosa may exist there and may not be a solely 'western' phenomenon (BBC News, Health, 2000).

There is no single cause for eating disorders. Although

concerns about weight and body shape play a role in all eating disorders, the actual cause of these disorders appear to result from many factors like the underlying psychopathologies such as emotional and personality disorders. Furthermore, environmental factors such as family pressures and a culture in which there is an over abundance of food and an obsession with thinness may contribute to the onset of eating disorders. Form the investtigation it was noted that most of these children come from troubled homes or homes where their mothers don't feel comfortable with their size or relatives are obese.

The study also analysed the cultural role in this disorder. The Nigerian culture regardless of the ethnic group encourages healthy eating and exercising. Un-fortunately, with the constant infiltration of the western culture, food and fashion the Nigerian culture and fashion have undergone an extreme make- over. The average woman now defines beauty in terms of her weight and shape rather than how well she carries herself. The average Nigerian fashion magazines no longer display images of well built women but now portray young and slim women to model their designs.

From the study, it was also noted that, most of the common methods of dieting seen in the western world like the use of diet pills, diet lotions or creams, extreme cardio-muscular workouts etc. were not practiced among these students. This may be due to the lack of funds to procure these diet pills or due to difficulty in obtaining such pills.

It was also revealed from the study, that the awareness about these disorders namely anorexia and bulimia was negligible and thus, the students have not been educated about its ill effects on their health and mind in the long run.

All over the world, one will notice that very high value is placed on women being thin. Our society admires men for what they accomplish and what they achieve, but women are usually evaluated by and accepted for how they look, regardless of what they do. This was not so in the past, a woman was evaluated for how well she trained her children and how she maintained her home but today a new clause has been included, that is, des-pite all that she does, how good she looks is more important. Though beauty is in the eye of the beholder, an image has been painted for the average woman regarding how she should look and we believe that this has lead to the deadlydieters disease.

This concern about body image and losing weight certainly have adverse consequences: some of which include depression from low body esteem, low self worth, poor nutrition from extensive dieting, inadequate calcium and iron intake, under-nutrition, anorexia or bulimia etc. (Edlin et al., 2000). Thus, there is a need for this disorder to be nipped in the bud before it plagues the country like it has done in the western world.

Educational institutions play an important role in moulding the young women of tomorrow and thus, this should serve as an avenue to educate these children about the importance of a well balanced diet and good eating behaviour. Families should also be educated on the importance of family meals and the implications that parents with bad eating habits have on their children.

Now that it is evident that, anorexia and bulimia are no longer a western disorder, the various educational institutions and governmental bodies should work hand in hand to help prevent the full blown manifestation of this disorder in Nigeria. Since research within this field in the African context is sparse, there is need for further investigation. Detailed studies analysing the underlying reasons for this disorders in the Nigerian perspective, will assist in curbing the spread of such eating disorders.

#### REFERENCES

- American Psychiatric Association. Diagnostic and Statistical Manual for Mental Disorders, fourth edition (DSM-IV) (1994). Washington, DC: American Psychiatric Press.
- BBC News, Health (2000). Anorexia found in rural Africa.
- Black CMD, Wilson GT (1996). Assessment of eating disorders: interview versus questionnaire. Int. J. Eat Disord. 20:43–50.
- Crow SJ, Peterson CB (2002). The economic and social burden of eating disorders: a review. Ibid. pp. 383–396.
- Edlin G, Golantry E, Brown KM (2000). Essentials for Health and Wellness (2nd ed) Jones and Barleft publishers, Singapore.

Fairburn CG, Beglin SJ (1994). Assessment of eating disorders: interview or self-report questionnaire? Int. J. Eat Disord. 16:363–370.

- Fairburn CG, Harrison PJ (2003) Eating disorders. Lancet 361:407-416. Hsu LKG (1990). Eating Disorders. New York, Guilford.
- Jacobi C, Hayward C, de Zwaan M, Kraemer HC, Agras WS (2004). Coming to terms with risk factors for eating disorders: application of risk terminology and suggestions for a general taxonomy. Psychol. Bull. 130:19–65.
- Patton GC, Johnson-Sabine E, Wood K, Mann AH, Wakeling A (1990). Abnormal eating attitudes in London schoolgirls: a prospective epidemiological study: outcome at twelve month follow-up. Psychol. Med. 20:383–394.
- Patton GC, Selzer R, Coffey C, Carlin JB, Wolfe R (1999). Onset of adolescent eating disorders: population based cohort study over 3 years. Br. Med. J. 318:765–768.
- Stein DM (1991). The prevalence of bulimia: A review of the empirical research. J. Nutr. Educ. 23 (205): 13.
- Whitaker AH (1992). An epidemiological study of anorevic and bulimic symptoms in adolescent girls: Implications for pediatrician. Pediatric Annal. 21:752-759.