# Eating disorders are real treatable medical illnesses

Revelas A, MD, PhD, General Practitioner
Department of Pathology, St Nicolas General Hospital, Crete
Correspondence to: Angela Revelas, e-mail: donnoiko24@yahoo.gr
Keywords: eating disorders, children, adults, female athletes

#### **Abstract**

Eating disorders frequently appear during the teen years or in young adulthood. Common eating disorders include nervosa, bulimia nervosa and binge-eating disorder. Eating disorders affect both men and women.

Peer reviewed. (Submitted: 2012-06-21. Accepted: 2012-10-09.) © Medpharm

S Afr Fam Pract 2012;55(3):252-255

## Introduction

Eating disorders are among the most common psychiatric problems affecting young women<sup>1</sup> and these conditions impose a high burden of morbidity and mortality. Eating disorders are associated with devastating medical and psychological consequences, including death, osteoporosis, and growth and developmental delays. Physical findings, such as a low body mass index, amenorrhea, bradycardia, gastrointestinal disturbances, skin changes and changes in dentition, can help to detect eating disorders. Unfortunately, the diagnosis of eating disorders can be elusive, and more than one half of all cases are undetected.2 The family physician's office is an ideal setting in which to identify eating disorders and to initiate treatment in a timely fashion. The family physician can play an important role in diagnosing these illnesses and can coordinate the multidisciplinary team of psychiatrists, nutritionists and other professionals to successfully treat patients with eating disorders. This review focuses on the recognition and diagnosis of eating disorders in primary care.

# **Eating disorders in Africa**

Eating disorders in South Africa have typically been viewed as the "exclusive domain" of Caucasian South Africans, the economic elite who have been closely aligned with Western cultural ideals.<sup>3,4</sup> However, in the changing socio-historical context of post-apartheid South Africa, several surveys of racially diverse groups of adolescents<sup>5,6</sup> and young adults<sup>7,10</sup> have suggested that non-Caucasian South Africans may in fact not be "immune" to pathological eating disorders. These surveys of ethnically diverse 15- to 25-year-old high school and college students demonstrate that the scores achieved by black girls and women with regard to pathological eating disorders are at least as high as those of

Caucasian girls and women. In some instances,<sup>7,8</sup> this was also true for black male South African students. However, in the absence of follow-up interviews or true epidemiological studies, the prevalence of eating disorders in South Africa remains largely unknown. Moreover, only one small case study of non-Caucasian South Africans who met the criteria for an eating disorder (mostly bulimia nervosa) has been reported.<sup>11</sup> While eating disorders have been studied among black South Africans, there is still no real evidence of self-starvation in this population. Reports of pathological eating disorders from other parts of the African continent are quite rare. A few case studies of anorexia nervosa in black Africans, including three Nigerians and one Zimbabwean, have been published.<sup>12-14</sup>

Socio-cultural factors, such as ethnicity and socioeconomic status, have long been considered to be important in the development of eating disorders. In particular, it has been argued that Western ideals of thinness in girls and women play a major role in the development of pathological eating disorders.<sup>15</sup> Consequently, eating disorders have historically been described as illnesses afflicting young, white, educated girls and women with a high socio-economic status, living in the Western world. This stereotyping of anorexia and bulimia nervosa has led to the categorisation of these disorders as culture-bound, a notion that has now been refuted by numerous reports of eating disorders in non-Western populations. Instead, it has been suggested that eating disorders should be viewed as "culture-reactive", 16 and that they affect individuals who are experiencing a "culture change". Vulnerability in this model is tied less to the pursuit of a thin ideal, and more to the erosion of traditional values. Consequently, crosscultural findings suggest multiple potential risks for eating disorders, including changing gender roles,17 frustration with continued inequalities in spite of cultural change<sup>18</sup> and changes in competitive environments.19

South Africa continues to undergo rapid socio-cultural change. Several hypotheses have been advanced to explain the emergence of unhealthy eating habits and attitudes among black South Africans. One such argument postulates that recent socio-political changes in South Africa challenged traditional gender roles, leaving black women unprepared for their "new roles", and consequently more vulnerable to the development of eating disorder symptomatology.<sup>17</sup> Another hypothesis refers to black South Africans' increased exposure to Western culture since the abolition of apartheid in 1994. In particular, the abolition of apartheid made Africans more mobile as laws that restricted their movement to cities were rescinded.

However, perhaps what is more crucial is the effect that these changes might have on young South Africans. Adolescence, an important window in terms of identity development, has perhaps been most impacted by sociocultural changes in South African society. Many factors that were instrumental in shaping black adolescent identity prior to the abolition of apartheid are now fundamentally different within contemporary South Africa.<sup>20</sup> Black adolescents now have to attempt to negotiate the apparently contradictory expectations of pre- and post-apartheid South Africa, which may contribute to role confusion, rather than identity integration. In this society, where adolescents have to cope with new social realities and also the widespread destruction of black family relations,20 it is not surprising that a proliferation of gang membership, substance abuse and antisocial behaviour has resulted.21 With the increasing presence of Western ideological symbols at many levels of the social fabric, e.g. language, dress code and recreational activities, many black adolescents have adopted an identity that represents a shift from African collectivism to a more Western individualism and competitiveness. This identity allows them to cope in their new socio-historical realm, but at the same time marginalises or alienates them from their own or traditional realities.20

## **Aetiology**

Risk factors for developing an eating disorder include participation in activities that promote thinness, such as ballet dancing, modelling and athletics,22 and certain personality traits, such as a low self-esteem, difficulties with expressing negative emotions or resolving conflict, and being a perfectionist.1 Eating disorders are particularly common in young women with type 1 diabetes mellitus. Up to one third of women with type 1 diabetes may have eating disorders, and these women are at especially high risk of microvascular and metabolic complications.23

The role of family history in the development of eating disorders is unclear. A family history of mood disorders in a first-degree relative also might be a risk factor.<sup>24</sup>

# **Diagnosis**

Early diagnosis with intervention at an earlier age correlates with improved outcomes in patients who have eating disorders. 5 Because family physicians serve as primary care providers for a large percentage of adolescents, they have an important role to play in diagnosing these disorders.

The hallmark of anorexia is a refusal to maintain bodyweight at or above 85% of expected weight, as defined by ageappropriate body mass index charts. Patients with anorexia use caloric restriction or excessive exercise to control emotional needs or pain and are terrified of becoming overweight. Patients with nonpurging-type bulimia also might severely restrict calories or exercise excessively to lose weight, but do not meet the weight criteria for the diagnosis of anorexia.

Bulimia is characterised by uncontrollable binge-eating episodes, often followed by purging behaviour, such as vomiting or the use of laxatives. Patients with binge-eating or purging-type anorexia also might binge and purge. Patients who have bulimia may be of a normal weight, or they may be under- or overweight, whereas patients with binge-eating or purging-type anorexia are underweight.

## **Differential diagnosis**

A wide variety of medical problems can masquerade as eating disorders. Hyperthyroidism, malignancy, inflammatory bowel disease, immunodeficiency, malabsorption, chroni infections, Addison's disease and diabetes should be considered before a diagnosis of an eating disorder is made. Most patients with a medical condition that leads to eating problems express concern over their weight loss. However, patients with an eating disorder have a distorted body image and express a desire to be underweight.<sup>25</sup>

Psychiatric co-morbidity is extremely common. Illnesses such as affective, obsessive-compulsive and somatisation disorders, as well as substance abuse, must be considered when patients present with such symptoms.<sup>26</sup>

Major depression is the most common co-morbid condition in patients with anorexia. The lifetime risk is as high as 80%.<sup>24</sup> Anxiety disorders, especially social phobia, are also common.<sup>24</sup> Obsessive-compulsive disorder has a prevalence of 30% in patients with eating disorders.<sup>27</sup> Substance abuse prevalence is estimated at 12-18% in patients with anorexia, and 30-70% in patients with bulimia.28

## Establishing a care plan

Once a person is diagnosed with an eating disorder, initially psychosocial and clinical factors should be considered, followed by periodic reassessment. The role of the physician is to assess medical complications, monitor weight and nutrition status, assist in the management strategies of other team members and to serve as the care coordinator. Dietitians provide information on a healthy diet and meal planning and may assist the team in identifying appropriate

weight goals. Behavioural healthcare professionals perform cognitive behavioural, interpersonal or family therapy and can help with pharmacotherapy. 29,30-32 A stepped-care approach may be applied, in which the initial intervention should be determined by the patient's needs and available treatment resources.33-35

# **Patient-physician interaction**

A therapeutic relationship between the physician and patient is central to the treatment of an eating disorder.<sup>29,36,37</sup> As a foundation to this relationship, the physician needs to understand how difficult it can be for patients to change eating-related thoughts and behaviour. Such behaviour may serve critical functions for patients, such as helping them to manage their stressors, difficult emotions and boredom. Eating disorders also reinforce patient beliefs that their lives are structured and self-controlled, that they are safe and special, and that they must be thin to be worthwhile.<sup>38,39</sup> A collaborative approach which acknowledges the difficulties associated with change and employing curious, nonconfrontational questioning, i.e. Socratic style, may help motivate the patient to engage in treatment.<sup>37,39</sup>

#### Medical assessment and treatment

A baseline general medical and psychiatric assessment should be performed at the time of diagnosis and periodically thereafter, as clinically indicated. It is necessary to monitor physiological and psychological signs of decline, such as shifts in weight, blood pressure, pulse, cardiovascular or metabolic status, suicidal ideation or attempts, and other impulsive and compulsive self-harm behaviour.<sup>29</sup> Although life-threatening medical complications require inpatient hospitalisation, the majority of complications will resolve when healthy eating habits are restored and a normal weight is achieved. Patients with a binge-eating disorder may require management of the complications associated with being overweight or obese.

Even with successful treatment of an eating disorder, osteoporosis may remain as a medical concern, primarily for patients with anorexia. Dental erosions are often seen in patients with bulimia, but remain a concern for any patient who purges by vomiting. To evaluate if osteoporosis is present, dual-energy X-ray absorptiometry is recommended. particularly in patients who have had amenorrhea for longer than six months.<sup>29</sup> The primary treatment for eating disorderrelated osteoporosis is weight gain. The effectiveness of calcium and vitamin D supplementation, oestrogen therapy and growth factors (insulin-like growth factor 1) has been mixed.<sup>40</sup> Currently, bisphosphonates are not recommended because of concerns about effectiveness and long-term safety.29

Irreversible dental erosions from recurrent regurgitation of gastric acid may occur in those who purge using selfinduced vomiting. In addition to routine dental care, patients should be instructed to use a baking soda mouth rinse and to brush their teeth after vomiting.41 Desensitising toothpastes and fluoride applications may decrease tooth sensitivity.

#### **Behavioural interventions**

Behavioural interventions for treating eating disorders help patients to change their undesirable behaviour, e.g. bingeing, purging and restricting food consumption, and thoughts, e.g. a negative body image, negative selfevaluation and perfectionist thinking. Assessing a patient's motivation to change should be an early treatment step. Patients with eating disorders are often ambivalent about changing, but physicians may be able to enhance their motivation.<sup>37</sup> Unless there are compelling concerns about the health of an unmotivated patient, physicians should provide feedback about their apprehension and offer their assistance if the patient decides to change.

#### **Patient education**

It is helpful to provide patients and their families with education on the nature, course and treatment of eating disorders. When treating children and adolescents, caregivers and family members should be included in the treatment process to share information, provide guidance on behavioural management, i.e. meal planning and the facilitation of communication.30,31 Family member participation in support groups should also be encouraged.30

#### Conclusion

Early detection, specifically of eating disorders, is crucial so that appropriate medical, nutritional and psychological intervention can be implemented. Eating disorders are complex and comprise both genetic and social factors, with a developmental component that is strongly linked to adult illness.

### References

- Kreipe RE, Birndorf SA. Eating disorders in adolescents and young adults. Med Clin North Am. 2000;84(1):1027-1049.
- 2. Becker AE, Grinspoon SK, Klibanski A, Herzog DB. Eating disorders. N Engl J Med. 1999:340:1092-1098.
- 3. Le Grange D, Tibbs J, Selibowitz J. Eating attitudes, body shape, and selfdisclosure in a community sample of adolescent boys and girls. Eating disorders. Journal of Treatment and Prevention. 1995;3(1):253-266.
- 4. Nash E, Colborn AL. Outcome of hospitalised anorexics and bulimics in Cape Town. S Afr Med J. 1994;84(1):74-79.
- 5. Caradas AA, Lambert EV, Charlton KE. An ethnic comparison of eating attitudes

- and associated body image concerns in adolescent South African schoolgirls. J Hum Nutr Diet. 2001:14(2):111-120.
- Szabo CP, Hollands C. Abnormal eating attitudes in secondary schoolgirls in South Africa: a preliminary study. S Afr Med J. 1997;87(1):524-530.
- Le Grange D, Telch CF, Tibbs J. Eating attitudes and behaviors in 1,435 South African Caucasian and non-Caucasian college students. Am J Psychiatry. 1998;155(2):250-254.
- Marais DL, Wassenaar DR, Kramers AL. Acculturation and eating disorder symptomatology in black men and women. Eat Weight Disord. 2003;8(1):44-54.
- Senekal M, Steyn NP, Mashego TB, Nel JH. Evaluation of body shape, eating disorders and weight management-related parameters in black female students of rural and urban origins. South African Journal of Psychology. 2001;31:45-53.
- 10. Wassenaar DR, Le Grange D, Winship J, Lachenicht L. The prevalence of eating disorder pathology in a cross-ethnic population of female students in South Africa. European Eating Disorders Review. 2000;8:225-236.
- 11. Szabo CP. Eating disorders and adolescence. South African Journal of Child and Adolescent Mental Health. 1998;10(1):117-125.
- Famuyiwa OO. Anorexia nervosa in two Nigerians. Acta Psychiatr Scand. 1988;78(5):550-554.
- 13. Gregory LD, Buchau T. Anorexia nervosa in a black Zimbabwean. Br J Psychiatry. 1984;145:326-330.
- Nwaefuna A. Anorexia nervosa in a developing country. Br J Psychiatry. 1982;138(1):270-272.
- Brownell KD. Dieting and the search for the perfect body: where physiology and culture collide. Behav Ther. 1991;22:1-12.
- DiNicola V. Anorexia multiforme: self-starvation in historical and cultural context. Transcultural Psychiatric Research Review. 1990;27:245-286
- 17. Ruggiero G. One country, two cultures. In: Nasser M, Katzman M, Gordon R, editors. Eating disorders: the new socio-cultural debate. Cape Town: University of Cape Town, 2001; p. 127-147.
- 18. Nasser M, Katzman M, Chanturia RT, et al. An exploration of eating disorders in a Georgian sample. Int J Soc Psychiatry. 2002;48(3):220-230.
- Catina A, Joja O. Emerging markets: submerging women. In: Nasser M, Katzman M. Gordon R. editors. Eating disorders: the new socio-cultural debate. Cape Town: University of Cape Town, 2001; p.111-126.
- 20. Stevens G, Lockhat R. "Coca-Cola kids": reflections on black adolescent identity development in post-apartheid South Africa. South African Journal of Psychology. 1997;27:250-255.
- 21. Thiel G. Cape drug war heads for the polls. Mail and Guardian. 1997 April 4.
- Mehler PS. Diagnosis and care of patients with anorexia nervosa in primary care settings. Ann Intern Med. 2001:134(11):1048-1059
- 23. Walsh JM, Wheat ME, Freund K. Detection, evaluation, and treatment of eating disorders: the role of the primary care physician. J Gen Intern Med. 2000:15(8):577-590.

- 24. Herzog DB, Nussbaum KM, Marmor AK. Comorbidity and outcome in eating disorders. Psychiatr Clin North Am. 1996;19(4):843-859.
- 25. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th ed. Washington, DC: American Psychiatric Association; 2000,
- 26. Carney CP, Andersen AE. Eating disorders. Guide to medical evaluation and complications. Psychiatr Clin North Am. 1996;19(4):657-679.
- 27. Milos G, Spindler A, Ruggiero G, et al. Comorbidity of obsessive-compulsive disorders and duration of eating disorders. Int J Eat Disord. 2002;31(3):284-289.
- 28. Vastag B. What's the connection? No easy answers for people with eating disorders and drug abuse. JAMA. 2001;285(8):1006-1007.
- 29. Yager J, Devlin MJ, Halmi KA, et al. Practice guideline for the treatment of patients with eating disorders. 3rd ed. Washington, DC: American Psychiatric Association; 2006.
- 30. National Collaborating Centre for Mental Health. Eating disorders: core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. Clinical guideline 9. London: National Institute for Health and Clinical Excellence: 2004.
- 31. American Academy of Pediatrics, Committee on Adolescence. Identifying and treating eating disorders. Pediatrics. 2003;111(1):204-211.
- 32. Bacaltchuk J, Hay P, Trefiglio R. Antidepressants versus psychological treatments and their combination for bulimia nervosa. [Cochrane review]. In: The Cochrane Library, Issue 4, 2001, Oxford: Update Software.
- Davison GC. Stepped care: doing more with less? J Consult Clin Psychol. 2000:68(5):580-585
- Hay PJ, Bacaltchuk J, Stefano S. Psychotherapy for bulimia nervosa and binging. [Cochrane review]. In: The Cochrane Library, Issue 3, 2004. Oxford: Update
- Wilson GT, Vitousek KM, Loeb KL. Stepped care treatment for eating disorders. J Consult Clin Psychol. 2000;68(4):564-572.
- 36. Loeb KL, Wilson GT, Labouvie E, et al. Therapeutic alliance and treatment adherence in two interventions for bulimia nervosa: a study of process and outcome. J Consult Clin Psychol. 2005;73(6):1097-107.
- 37. Vitousek K, Watson S, Wilson GT. Enhancing motivation for change in treatmentresistant eating disorders. Clin Psychol Rev. 1998;18(4):391-420.
- Gale C, Holliday J, Troop NA, et al. The pros and cons of change in individuals with eating disorders: a broader perspective. Int J Eat Disord. 2006;39(5):394-403.
- Geller J, Brown KE, Zaitsoff SL, et al. Collaborative versus directive interventions in the treatment of eating disorders: implications for care providers. Prof Psychol Res Pr. 2003;34(4):406-413.
- 40. Legroux-Gerot I, Vignau J, Collier F, Cortet B. Bone loss associated with anorexia nervosa. Joint Bone Spine. 2005;72(6):489-495.
- 41. Little JW. Eating disorders: dental implications. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2002;93(2):138-143.