



## EDITORIAL

**YOUTH AT RISK — DIETING AND EATING DISORDERS: A SOUTH AFRICAN PERSPECTIVE**

Within the South African setting various risk-taking behaviours have been studied in adolescents,<sup>1</sup> with a subsequent proposal that a syndrome of adolescent risk-taking behaviour be considered valid in this population.<sup>2</sup> Recently it was established that urbanisation may be associated with an increase in the prevalence of certain of these behaviours.<sup>3</sup> Some of the behaviours studied were violence, substance use and suicidality. Dieting was not included.

The dieting industry has been estimated to generate \$33 billion (approximately R340 billion) annually.<sup>4</sup> It has been established that 33 - 66% of teenage girls are on diet at any one time and that up to 80% will diet at some point.<sup>5,6</sup> While dieting may be a benign practice in the case of the great majority of young women,<sup>7</sup> most teenage dieters are within a normal weight range and for the majority dieting is unjustified.<sup>8</sup> In addition, it is estimated that 'normal' dieters are eight times more likely to develop an eating disorder than their non-dieting counterparts,<sup>9</sup> with the prevalence of eating disorders occurring in direct proportion to the prevalence of dieting behaviour in a given community.<sup>10</sup> Longitudinal studies point unanimously to the role of dieting behaviour in the pathogenesis of eating disorders, especially if there is a family history of eating disorder, substance abuse or mood disorder.<sup>11</sup> It has been established that dieting selectively impacts on the serotonergic systems of women, but not men.<sup>12</sup> Furthermore, it has been proposed that dieting mediates changes in serotonergic functioning that may play a part in the development of eating disorders.<sup>13</sup> Aside from an association with eating disorders, dieting has been found to impair cognitive functioning.<sup>14</sup>

Eating disorders are conditions characterised by excessive and inappropriate concern regarding weight and shape. Efforts to address such concerns through dietary manipulation ultimately result in dysfunction at physical, emotional and cognitive levels, which subsequently compromises social, academic and occupational capacity. These conditions constitute a specific diagnostic category within psychiatric nomenclature,<sup>15</sup> with two recognised disorders, namely anorexia nervosa and bulimia nervosa, and a third entity 'Eating disorder, not otherwise specified'.

International data regarding the lifetime prevalence of eating disorders demonstrate that these conditions (anorexia and bulimia nervosa) affect between 1.6% and 7.9% of women

of all ages, as well as men (who are significantly less affected than women), with increasing numbers of sufferers emerging from a diverse range of ethnic and socio-economic backgrounds.<sup>15</sup> Within the South African context no meaningful data exist in this regard. A so-called 'prevalence' study of anorexia nervosa in South Africa<sup>16</sup> established that approximately 3% of a sample of high-school girls were more than 20% below their expected weight, which was assumed to indicate anorexia nervosa. The South African literature on eating disorders within a clinical context includes descriptions of anorexia nervosa sufferers,<sup>17,18</sup> case reports,<sup>19,21</sup> experimental data,<sup>22</sup> as well as outcome data for hospitalised anorexics<sup>23-25</sup> and a study of family relations.<sup>26</sup> In addition, eating behaviour and related phenomena in specific community-based samples<sup>27-37</sup> have been studied using a range of self-report questionnaires from North America (Eating Attitudes Test, 40-item version,<sup>38</sup> Eating Attitudes Test, 26-item version,<sup>39</sup> Eating Disorders Inventory<sup>40</sup>) and the UK (Bulimic Investigatory Test of Edinburgh,<sup>41</sup> Body Shape Questionnaire<sup>42</sup>). Such questionnaires are best viewed as screening instruments for eating disorders and not diagnostic tools.

Generally, the aforementioned community-based studies<sup>27-37</sup> have demonstrated that significant numbers of adolescent and young adult females of all ethnic groups demonstrate potentially disturbed eating attitudes and behaviour, as well as body shape and weight concerns that place them at risk for eating-related psychopathology. Furthermore, within an urban setting eating disturbances appear to be as prevalent among black females as among white females. These community-based studies suggest that one might anticipate the emergence of increasing numbers of eating disorder sufferers from within the black community. However, can one extrapolate from self-report questionnaire to clinical scenario? In terms of published material to date, the clinical reality in this regard suggests not,<sup>43,44</sup> yet media reports appear to be describing a process that lends credence to the research data. Within this context a North American study<sup>45</sup> published over 20 years ago established that while *Playboy* magazine centrefolds and Miss America Pageant contestants had demonstrated a trend towards being thinner over the preceding 20 years, young women in the general population had been increasing in weight. The authors concluded that this 'real-ideal' discrepancy placed tremendous pressure on women to diet. A front page report in the *Sunday Times* carried a photo of the Face of Africa 2001 winner, a slender young black Senegalese woman, who may well represent a Western ideal of beauty,<sup>46</sup> although precisely what this means has been the subject of media debate.<sup>47</sup> In the same edition a story documented the need for larger uniforms for black women in the South African National Defence Force.<sup>48</sup> The slender hips of the Face of Africa winner contrasted with the reported 'bigger hips' of black women in the defence force, potentially a graphic illustration of the real-ideal discrepancy described in the aforementioned North American study.<sup>45</sup> There



has also been a report of young black schoolgirls wiring their jaws shut to stop themselves eating so that they may acquire skinny supermodel figures.<sup>49</sup>

Taken together, both research and media reports are telling a story. In a rapidly urbanising South African society dieting should be viewed as a risk-taking behaviour, given the link with eating disorders and their associated morbidity and mortality.<sup>15</sup> A cross-cultural study of adolescent girls in South Africa<sup>33</sup> established that 85% of the sample had previously been on diet. Aside from the need for research detailing prevalence rates of eating disorders in South Africa, we also need to reflect on the contemporary preoccupation with thinness and associated dieting behaviour, and potentially extend our understanding of risk-taking behaviour.

### Christopher Paul Szabo

Department of Psychiatry  
University of the Witwatersrand  
Johannesburg

- Flisher AJ, Ziervogel CF, Chalton DO, Robertson BA. Risk-taking behaviour of Cape Peninsula high-school students. Part I. Introduction and methods. *S Afr Med J* 1993; **83**: 469-473.
- Flisher AJ, Ziervogel CF, Chalton DO, Leger PH, Robertson BA. Risk-taking behaviour of Cape Peninsula high-school students. Part IX. Evidence for a syndrome of adolescent risk behaviour. *S Afr Med J* 1996; **86**: 1090-1093.
- Flisher AJ, Chalton DO. Urbanisation and adolescent risk behaviour. *S Afr Med J* 2001; **91**: 243-249.
- Stipp D. New weapons in the war on fat. *Fortune*, 11 December 1995; 82-88.
- Heuneman RL, Shapiro LR, Hampton MC, Mitchell BW. A longitudinal study of gross body composition and body conformation and their association with food and activity in a teenage population. *Am J Clin Nutr* 1966; **18**: 325-338.
- Schleimer K. Dieting in teenage schoolgirls. A longitudinal prospective study. *Acta Paediatrica Scandinavica* 1983; **312**: Suppl. 1-54.
- Steinhausen HC. Anorexia and bulimia nervosa. In: Rutter M, Taylor E, Hersov I, eds. *Child and Adolescent Psychiatry*. London: Blackwell Science, 1994: 425-440.
- Patton GC, Carlin JB, Shao Q, et al. Adolescent dieting: healthy weight control or borderline eating disorder? *J Child Psychol Psychiatry* 1997; **38**: 299-306.
- Patton GC, Johnson-Sabine E, Wood K, Mann AH, Wakeling A. Abnormal eating attitudes in London schoolgirls — a prospective epidemiological study: outcome at twelve month follow-up. *Psychol Med* 1990; **20**: 383-394.
- Hsu LKG, ed. *Eating Disorders*. New York: Guildford Press, 1990.
- Hsu LKG. Can dieting cause an eating disorder? *Psychol Med* 1997; **27**: 509-513.
- Goodwin GM, Fairburn CG, Cowen PJ. Dieting changes serotonergic function in women, not men: implications for the aetiology of anorexia nervosa? *Psychol Med* 1987; **17**: 839-842.
- Cowen PJ, Clifford EM, Walsh AES, Williams C, Fairburn CG. Moderate dieting causes 5-HT<sub>2c</sub> receptor supersensitivity. *Psychol Med* 1996; **26**: 1155-1159.
- Green MW, Rogers PJ. Impaired cognitive functioning during spontaneous dieting. *Psychol Med* 1995; **25**: 1003-1010.
- American Psychiatric Association. Practice guideline for the treatment of patients with eating disorders (Revision). *Am J Psychiatry* 2000; **157**: Suppl. 1-39.
- Ballot NS, Delaney NE, Erskine PJ, et al. Anorexia nervosa — a prevalence study. *S Afr Med J* 1981; **59**: 992-993.
- Beumont PJV, George GCW, Smart DE. 'Dieters' and 'vomitters and purgers' in anorexia nervosa. *Psychol Med* 1976; **6**: 617-622.
- Norris DL. Clinical diagnostic criteria for primary anorexia nervosa. *S Afr Med J* 1979; **56**: 987-993.
- Hindler CG, Norris DL. A case of anorexia nervosa with Klinefelter's syndrome. *Br J Psychiatry* 1986; **149**: 659-660.
- Szabo CP, Berk M, Tlou E, Allwood CW. Eating disorders in black South African females. *S Afr Med J* 1995; **85**: 588-590.
- Szabo CP, Rausch G, Freeman CP. Hospitalised anorexics and tuberculosis: a series of cases. *European Eating Disorders Review* 1998; **6**: 171-177.
- Norris DL. The effects of mirror confrontation on self-estimation of body dimensions in anorexia nervosa, bulimia and two control groups. *Psychol Med* 1984; **14**: 835-842.
- Touyz SW, Beumont PJV. Anorexia nervosa. A follow up investigation. *Med J Aust* 1984; **141**: 219-222.
- Nash ES, Colborn AL. Outcome of hospitalised anorexics and bulimics in Cape Town, 1979-1989. *S Afr Med J* 1994; **84**: 74-79.
- Szabo CP, Terre Blanche MJ. Hospitalised anorexics — a preliminary evaluation of an inpatient programme. *S Afr Med J* 1998; **88**: 312-318.
- Szabo CP, Goldin J, le Grange D. Application of the Family Relations Scale to a sample of anorexics, bulimics and non-psychiatric controls: a preliminary study. *European Eating Disorders Review* 1999; **7**: 37-46.
- Weight LM, Noakes TD. Is running an analog of anorexia?: a survey of the incidence of eating disorders in female distance runners. *Med Sci Sports Exerc* 1987; **19**: 213-217.
- Shefer T. 'Abnormal' eating attitudes and behaviours among women students. *S Afr Med J* 1987; **72**: 419-421.
- Walker ARP, Walker BF, Locke MM, Cassim FA, Mloefie O. Body image and eating behaviour in interethnic adolescent girls. *J R Soc Health* 1991; **111**: 12-16.
- le Grange D, Tibbs J, Noakes TD. Implications of a diagnosis of anorexia nervosa in a ballet school. *Int J Eat Disord* 1994; **15**: 369-376.
- le Grange D, Tibbs J, Selibowitz J. Eating attitudes, body shape, and self-disclosure in a community sample of adolescent girls and boys. *Eating Disorders* 1995; **3**: 253-263.
- Szabo CP, Hollands C. Abnormal eating attitudes in secondary-school girls in South Africa — a preliminary study. *S Afr Med J* 1997; **87**: 524-530.
- Szabo CP, Hollands C. Factors influencing eating attitudes in secondary-school girls in South Africa — a preliminary study. *S Afr Med J* 1997; **87**: 531-534.
- le Grange D, Telch C, Tibbs J. Eating attitudes and behaviours in 1,435 South African Caucasian and non-Caucasian college students. *Am J Psychiatry* 1998; **155**: 250-254.
- Wassenaar D, 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.
- 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 Dietet* 2001; **14**: 111-120.
- 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.
- Garner DM, Garfinkel PE. The Eating Attitude Test: An index of the symptoms of anorexia nervosa. *Psychol Med* 1979; **9**: 273-279.
- Garner DM, Olmsted MP, Bohr Y, Garfinkel PE. The Eating Attitudes Test: psychometric features and clinical correlates. *Psychol Med* 1982; **12**: 871-878.
- Garner DM, Olmsted MP, Polivy J. Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *Int J Eat Disord* 1983; **2**: 15-34.
- Henderson M, Freeman CP. A self-rating scale for bulimia. The BITE. *Br J Psychiatry* 1987; **150**: 18-24.
- Cooper PJ, Taylor MJ, Cooper Z, Fairburn CG. The development and validation of the Body Shape Questionnaire. *Int J Eat Disord* 1987; **6**: 485-494.
- Szabo CP. Eating attitudes among black South Africans. *Am J Psychiatry* 1999; **156**: 981-982.
- Gabriel B, Szabo CP. The demographics of hospitalised anorexics: a ten year review. *S Afr Med J* 2001; **91**: 751-752.
- Garner DM, Garfinkel PE, Schwartz D, Thompson M. Cultural expectations of thinness in women. *Psychol Rep* 1980; **47**: 483-491.
- Jacobs C. Senegal's Diallo is new face of Africa. *Sunday Times* 2001; 27 May: 1.
- Adams S. Women editors differ on image of 'African beauty'. *The Star* 2001; 23 May: 1.
- Steenkamp W. Girls in uniform made to measure. *Sunday Times* 2001; 27 May: 8.
- Jordan B. Horrific 'diet' for the desperate. *Sunday Times* 2000; 10 September: 3.