



## Eating disorders in South Africa: An inter-ethnic comparison of admission data

I Delport, C P Szabo

Eating disorders among black South African females were first reported in 1995, having been documented among white South African females since the 1970s.<sup>1</sup> There appears to be no subsequent literature that relates specifically to clinical cases of eating disorders among black female South Africans.<sup>2</sup> Differences in disorder presentation, on the basis of race, has been suggested in the international literature,<sup>3</sup> although Szabo *et al.*<sup>1</sup> found no specific clinical features that were unique to the black patients compared with white female sufferers. We explored possible differences in admission psychometric data among hospitalised black and white eating disorder (anorexia nervosa, bulimia nervosa) sufferers and found preliminary evidence for similarity of admission psychometric data for eating disorder sufferers, irrespective of race, in South Africa. Future research may not warrant racial categorisation of data, specifically for research purposes into eating disorders in South Africa.

### Method

The study used a convenience, and limited, sample comprising 10 black females (anorexia nervosa:  $N=5$ , bulimia nervosa:  $N=5$ ) and 10 age- and diagnosis-matched white females admitted to the eating disorders unit of Tara Hospital, during the period 1998 - 2004. Of the 13 black patients admitted to the unit during 1998 - 2004, 7 were diagnosed with anorexia nervosa and 6 with bulimia nervosa, according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (DSM-IV) criteria.<sup>4</sup> However, only 10 of these patients had adequate admission data which determined their inclusion. Tara Hospital is a specialised psychiatric hospital in Johannesburg and is part of the Division of Psychiatry at the University of the Witwatersrand. Until 1998, no black females suffering from an eating disorder had been admitted to the unit. Admission data (demographic and clinical) were gathered, as were psychometric data (on admission) using the Eating Disorder Inventory (EDI)<sup>5</sup>, Bulimic Investigatory Test, Edinburgh (BITE)<sup>6</sup> and Beck Depression Inventory (BDI)<sup>7</sup>. All of the aforementioned instruments are self-report questionnaires and have been used in previous South African studies, both clinical

and community-based.<sup>2,8</sup> The EDI comprises a range of both eating disorder-related and psychological dimensions, whereas the BITE is specifically designed to assess the presence and severity of symptoms of bulimia nervosa. The BDI provides a measure of depressive symptoms.

### Results

#### Demographic data (combined anorexia and bulimia nervosa patients)

All patients were female. In both racial groups the majority of patients were scholars (6/10 per group) and aged 13 - 19, the remainder being aged 20 - 29 (4/10 per group). Of those who were not scholars, 3 of the white patients were unemployed versus 2 of the black patients, with 1 of the white patients being employed versus 2 of the black patients. The majority of patients in both racial groups were resident in Gauteng Province (white 9/10; black 7/10).

Home language for the white patients was predominantly English (8/10), with a range of languages spoken at home by the black patients: Tswana=1, Xhosa=2, Zulu=2, Sotho=3, Venda=1, and English=1. During the period of study (1998 - 2004), there was a total of 435 admissions to the eating disorders unit (anorexia nervosa 245; bulimia nervosa 190), hence black females accounted for 3% of such admissions (13 out of 435 admissions).

#### Clinical/psychometric data

All patients fulfilled criteria for a diagnosis of either anorexia nervosa or bulimia nervosa, with no distinguishing clinical features in terms of race.<sup>4</sup> Using Mann-Whitney tests, there were no statistically significant mean score differences when comparing black and white patients i.e.  $p>0.05$  on each dimension (Table I). The small sample size dictated the use of a non-parametric test.

### Discussion

No statistically significant differences on psychometric measures, comparing black and white eating disorder (anorexia nervosa, bulimia nervosa) sufferers hospitalised for their condition, were established. Sample size may explain the lack of statistically significant differences; with a larger sample size, significant differences may exist. While there were differences between the groups in terms of individual dimensions measured by the questionnaires, the absence of significant findings cautions against attempts to interpret such differences. As with all self-report questionnaires, concerns





Table I. Psychometric data – anorexia nervosa/bulimia nervosa

	Anorexia nervosa				Bulimia nervosa			
	White (N=5)		Black (N=5)		White (N=5)		Black (N=5)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>BDI</b>	29.6	4.39	30.0	12.74	29.00	8.15	18.00	9.11
<b>EDI</b>								
DT	11.2	5.80	16.8	6.01	15.0	8.15	13.6	7.66
B	3.0	3.08	3.6	0.89	9.0	7.0	13.2	9.25
BD	9.2	5.06	20.4	9.58	20.8	9.62	18.2	7.82
I	10.2	4.6	18.0	9.16	21.4	12.17	11.0	5.7
P	7.6	4.97	11.2	4.93	11.6	7.92	12.6	1.81
ID	7.2	5.49	10.8	4.32	13.0	5.83	8.0	3.87
IA	12.8	4.38	13.2	9.65	19.2	11.47	12.8	7.91
MF	6.6	3.2	11.8	8.55	14.6	8.64	3.4	1.51
<b>BITE</b>								
Sym	12.0	7.38	12.6	6.58	20.4	9.81	11.0	8.45
Sev	12.6	4.44	12.2	3.89	17.2	10.56	6.6	7.36

EDI DT: drive for thinness; B: bulimia; BD: body dissatisfaction; I: ineffectiveness; P: perfectionism; ID: interpersonal distrust; IA: interoceptive awareness; MF: maturity fears.  
BITE Sym: symptom scale score; Sev: severity scale score.

related to valid responses to the questions of each instrument are a consideration. Notwithstanding these data issues, the absence of significant differences is in keeping with the earliest clinical descriptions of black South African females with eating disorders, which found no specific characteristics distinguishing black sufferers from white.<sup>1</sup> This was also noted in the current study. The implication is that in a specific setting, irrespective of racial or language differences, the clinical presentation and reporting of eating disorder symptoms (both clinically and in terms of the instruments used) would appear to be similar. Therefore, the notion of differences between racial groups is seemingly (albeit with a limited sample in a specific context) challenged. The findings of a recent study of family interaction among bulimia nervosa sufferers (comparing a white and a so-called 'ethnic minority' sample) in the USA supports a growing literature suggesting fewer differences and more similarities amongst ethnic groups in relation to eating disorders.<sup>9</sup> While earlier South African psychometric data (involving both the EDI and BDI) exist for hospitalised anorexia nervosa sufferers, such data involved an exclusively white sample, albeit from the same hospital.<sup>8</sup> Our study

provides further inter-ethnic data and appears to be the first to provide psychometric data on black female South Africans hospitalised for either anorexia nervosa or bulimia nervosa. To date, such data have predominantly involved community-based rather than clinical samples.<sup>2</sup>

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