Published in final edited form as:

Int J Eat Disord. 2010 April ; 43(3): 282–285. doi:10.1002/eat.20684.

Characteristics of Black Treatment Seekers for Eating Disorders

Nisha H. Fernandes, BA¹, Scott J. Crow, MD^{1,*}, Paul Thuras, PhD², and Carol B. Peterson, PhD¹

¹Department of Psychiatry, University of Minnesota, Minneapolis, Minnesota

²Mental Health, VA Medical Center, Minneapolis, Minnesota

Abstract

Objective—This study sought to investigate differences in eating psychopathology between black and white treatment seekers at a specialty eating disorders (EDs) center.

Method—Participants were drawn from 1680 individuals ($n = 32$ blacks; $n = 1648$ whites) who received treatment for an ED at a specialized center between 1979 and 1995, and had completed the EDs Questionnaire. The 32 black participants were matched to 153 white participants for ED diagnosis, year of presentation, and gender.

Results—The majority of the participants were diagnosed with eating disorder not otherwise specified (EDNOS). No black participants met criteria for anorexia nervosa (AN). Black participants reported more body dissatisfaction and a higher percentage fulfilled the obesity criterion compared to white participants. There were few differences in reported history of previous treatment.

Discussion—Black and white participants with EDs appeared similar in most respects, but AN was notably absent among black participants. In contrast to previous research, body dissatisfaction was surprisingly higher in black than in white participants.

Keywords

eating disorders; ethnicity; black and white treatment seekers; body dissatisfaction

Introduction

Eating disorders (ED) have serious mental, physical, and social health implications.¹ In the past, white, upper to middle class females were viewed as being at a greater risk for reporting body image problems and eating disturbances,² but recent research has found no significant differences in rates of disordered eating symptoms among various ethnic groups.³ In fact, some evidence suggests that members of different ethnic groups may be just as likely to report a distorted body image and exhibit disordered eating,² a finding that casts uncertainty on the previously held beliefs regarding ED and ethnicity.

*Correspondence to: Scott J. Crow, MD, Department of Psychiatry, University of Minnesota Medical School, 2450 Riverside Avenue, Minneapolis, Minnesota 55454-1495. crowx002@umn.edu.

To date, most research on this topic has focused on the prevalence of eating psychopathology and health care utilization among minority groups in community samples.^{4–6} However, little work has examined differences in black and white individuals seeking treatment for an ED. One study that did explore this topic focused only on women with binge eating disorder (BED).⁷ Research is needed to investigate the ethnic differences among a more diagnostically diverse group of individuals who seek ED treatment.

The purpose of the present study was to describe differences in diagnosis patterns and clinical characteristics between black and white individuals who sought treatment for an ED. We hypothesized that fewer black individuals would seek treatment for an ED than white individuals and fewer black individuals would present with anorexia nervosa (AN).⁸ Further, we hypothesized that black treatment seekers would be at a significantly higher BMI, but black and white treatment seekers would not differ significantly in demographics, body dissatisfaction, fear of weight gain, or previous treatment.

Method

Participants

Participants were obtained from a large sample ($N = 1885$) of individuals seeking ED treatment at the University of Minnesota from 1979 to 1995. Of the entire sample, 1704 individuals (90.4%) provided information regarding ethnicity. White participants ($n = 1648$) made up 89% of the entire sample; Asians, 0.3% ($n = 5$); Hispanics, 0.3% ($n = 5$); Native Americans, 0.1% ($n = 2$); African Americans, 1.9% ($n = 32$); and “Other”, 0.7% ($n = 12$). Men represented a small percentage of the sample (black men = 4, 12.5% of black participants; white men = 86, 5.2%).

Procedures

At the first clinic visit, all participants completed the Eating Disorders Questionnaire (EDQ⁹), which includes questions about demographics, weight history, eating behaviors, weight control behaviors, menstrual patterns, history of abuse, psychiatric symptoms, medical status, chemical use, and family medical conditions. Body dissatisfaction was measured on a scale of 1–5 with 1 defined as “not at all dissatisfied” and 5 defined as “extremely dissatisfied.” Fear of weight gain was measured on a scale of 1–5 with 1 defined as “not at all afraid” and 5 defined as “extremely afraid.” Feelings about body specific parts were rated on a scale of 1–7 with 1 defined as “extremely positive” and 7 defined as “extremely negative.”

Participants were assigned an ED diagnosis based on criteria outlined in DSM-IV¹⁰ including AN, bulimia nervosa (BN), and BED. Several categories of subthreshold EDs were created, including, partial bulimia nervosa (P-BN), partial anorexia nervosa (P-AN), and partial binge eating disorder (P-BED), based on the criteria previously utilized by Crow and colleagues.¹¹ If a participant met criteria for both full and partial ED diagnoses, the full ED took precedence. Similarly, BN took precedence over BED, and AN took precedence over BN. The criteria used were as follows: For AN: (1) BMI ≤ 17.5 and (2) fear of weight gain that was either a 4 or a 5. For BN: (1) Binge eating episodes (BE) with loss of control

noted “often” or “always” occurring on an average of 2 times per week or more in the last month, and (2) purging 2 times per week or more in the last month. For BED: (1) BE on an average of 2 times per week or more in the last month, and (2) purging behaviors not more than once in the previous month. For P-AN: (1) BMI ≥ 18.5 , and (2) a fear of weight gain that was ≥ 3 . For P-BN: (1) BE occurring “several times a month or more” in the last month, and (2) compensatory behaviors “several times a month or more” in the last month. For P-BED: (1) BE “several times a month or more” in the last month, and (2) purging “less than several times” in the previous month. Those who did not meet criteria for one of the above diagnostic groups were placed into an “eating disorder not otherwise specified (EDNOS)” category.

Five white participants were randomly matched to each black participant by year of presentation for an ED, ED diagnosis, and gender. Three of the black participants were matched to only three white participants each, due to a limited number of white participants within that particular year who also presented with the same ED type and gender, and one black participant was only matched to four white participants. Additionally, year of presentation for treatment was not available for two of the black participants, who were therefore matched to white participants by ED diagnosis and gender only.

Approval for the project was obtained from the University of Minnesota’s Institutional Review Board before initiation of the study.

Statistics

Data were analyzed using the Statistical Package for the Social Sciences (SPSS, Chicago, IL), version 13 for Windows. Continuous variables were examined using *t*-tests. Chi-square tests were used to compare frequencies. Categorical variables were compared using Chi-square analysis. Differences in body dissatisfaction for specific body parts were assessed with multivariate analyses of variance (MANOVA). Variables examined were chosen a priori and alpha levels of less than .05 were considered statistically significant.

Results

Matching of black to white participants yielded 153 white participants. Sample characteristics are described in Table 1. Among the 1648 white participants, 63% met criteria for EDNOS, 9.5% for AN, 9.3% for P-AN, 18% for BN, 8.9% for P-BN, and 0.6% for P-BED; none met criteria for BED. Of the 32 black treatment seekers, 75% met criteria for EDNOS, 22% met criteria for BN, and 3% for P-BN; none met criteria for AN, P-AN, BED, or P-BED.

The difference between current and ideal weight was significantly greater for black than for white participants [$F(1,164) = 29.610, p < .001$], and black participants reported significantly higher body dissatisfaction. There were no significant group differences in ratings of dissatisfaction with face, arms, shoulders, breasts, stomach, waist, hips, buttocks, or thighs. There was a trend toward less fear of weight gain in black compared to white participants, with 17.2% of black participants reporting being not at all afraid of weight gain.

There was a significant main effect for BMI between black and white participants (33.9 vs. 23.7, $p < .01$). Half of the black participants fulfilled the BMI criterion for obesity compared to 16% of the white participants. Further, for both black and white participants, BMI was positively correlated with body dissatisfaction. When BMI was included as a covariate, the difference between black and white individuals was no longer significant [$F(1,141) = 1.17$, $p < .282$, $\eta^2 = .01$]. However, at all levels of BMI, black participants tended to report lower body dissatisfaction than white participants at the same BMI.

There were no significant differences in prior hospitalization for psychiatric problems ($\chi^2 = .165$, $df = 1$, $p = .685$), but white participants were significantly more likely to have received outpatient treatment (50.3% vs. 21.4%). Additionally, there was a trend for fewer black than white participants to have previously participated in some form of supervised weight loss program. There was no significant difference in the use of medications for obesity, participation in psychotherapy for eating or weight problems, or participation in self help groups.

Discussion

One major finding of this study is the absence of black participants with AN or P-AN in a 20-year treatment seeking sample. This finding is consistent with those of Striegel-Moore et al.⁸ who reported that no black women in a large community sample met lifetime criteria for AN, compared to 1.5% of the white participants. While several research studies have supported the finding that AN appears to be uncommon among black individuals in the community,^{12,13} this study is the first to document a similar finding in a clinical treatment-seeking sample.

EDNOS was the most common diagnosis of both black and white treatment seekers, consistent with previous research finding that EDNOS accounted for an estimated 60% of cases presenting for treatment.¹⁴ Other than EDNOS, BN was the most common disorder among all treatment seekers in this sample. None of the participants met criteria for BED, likely because during the time this sample was acquired, cases of BED were referred to a different facility.

Black participants were more likely to be obese than white participants, consistent with a nationally representative sample from 1988 to 1994,¹⁵ and black participants also had a significantly higher average BMI than white participants, consistent with past literature.^{16,17} Additionally, black participants reported higher body dissatisfaction than white participants but a trend toward less fear of weight gain. Black participants reported a greater discrepancy between their current and ideal weights when compared to white participants, a finding that was contrary to previous community studies.^{4,16,18} These findings suggest that those black participants who did seek treatment might have differed significantly from others of the same ethnicity in the community. Or, as previous studies suggest, perhaps black participants who sought treatment for an ED had more closely assimilated into the majority culture and its emphasis on the thin ideal.^{16,18,19} Another explanation for the higher body dissatisfaction could be the relatively high percentage of obesity among black participants. A previous study reported that individuals experienced greater discrepancy between their ideal and

current weight as their BMI increased.²⁰ Since black individuals in our study were significantly heavier than white individuals, this effect of BMI on body dissatisfaction may help to explain our finding that black treatment seekers reported greater body dissatisfaction than white treatment seekers.

There are several strengths to this study, including the large, diagnostically diverse clinic-based sample that included all individuals seeking treatment. Limitations of the current study are also worth noting. First, BED was not represented in the sample. Because BED is a clinically significant eating disturbance occurring among both black and white individuals,⁶ the lack of BED in this sample is a clear shortcoming. Another limitation is that although this was a large sample, the numbers of black treatment seekers, our group of interest, were limited. The fact that this study examined treatment seekers at only one facility also makes the results more difficult to generalize.

In summary, these findings indicate that in nearly two decades, no black individuals with AN or P-AN sought treatment at a large Midwestern clinic. Although black and white treatment seekers were similar in many respects, they differed in several important ways including body dissatisfaction and BMI. Future investigations should address these and other potential ethnic differences in individuals seeking treatment for ED, to improve the effectiveness and accessibility of clinical interventions.

References

1. Agras WS. The consequences and costs of the eating disorders. *Psychiatr Clin North Am.* 2001; 24:371–379. [PubMed: 11416936]
2. Yanovski SZ. Eating disorders, race, and mythology. *Arch Fam Med.* 2000; 9:88. [PubMed: 10664649]
3. Shaw H, Ramirez L, Trost A, Randall P, Stice E. Body image and eating disturbances across ethnic groups: More similarities than differences. *Psychol Addict Behav.* 2004; 18:12–18. [PubMed: 15008681]
4. Crago M, Shisslak CM, Estes LS. Eating disturbances among American minority groups: A review. *Int J Eat Disord.* 1996; 19:239–248. [PubMed: 8704722]
5. Cachelin FM, Rebeck R, Veisel C, Striegel-Moore RH. Barriers to treatment for eating disorders among ethnically diverse women. *Int J Eat Disord.* 2001; 30:269–278. [PubMed: 11746286]
6. Pike KM, Dohm F, Striegel-Moore RH, Wilfley DE, Fairburn CG. A comparison of black and white women with binge eating disorder. *Am J Psychiatry.* 2001; 158:1455–1460. [PubMed: 11532731]
7. Grilo CM, Lozano C, Masheb RM. Ethnicity and sampling bias in binge eating disorder: Black women who seek treatment have different characteristics than others who do not. *Int J Eat Disord.* 2000; 38:257–262.
8. Striegel-Moore RH, Dohm FA, Kraemer HC, Taylor CB, Daniels S, Crawford PB, et al. Eating disorders in black and white women. *Am J Psychiatry.* 2003; 160:1326–1331. [PubMed: 12832249]
9. Mitchell JE, Hatsukami D, Eckert E, Pyle R. Eating disorders questionnaire. *Psychopharmacol Bull.* 1985; 21:1025–1043.
10. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders.* 4. Washington, DC: American Psychiatric Association; 1994.
11. Crow SJ, Agras WS, Halmi K, Mitchell JE, Kraemer HC. Full syndromal versus subthreshold anorexia nervosa, bulimia nervosa, and binge eating disorder: A multicenter study. *Int J Eat Disord.* 2002; 32:309–318. [PubMed: 12210645]
12. Hoek HW, van Hoeken D. Review of the prevalence and incidence of eating disorders. *Int J Eat Disord.* 2003; 34:383–396. [PubMed: 14566926]

13. Taylor JY, Caldwell CH, Baser RE, Faison N, Jackson JS. Prevalence of eating disorders among blacks in the National Survey of American Life. *Int J Eat Disord.* 2007; 40:S10–S14. [PubMed: 17879287]
14. Fairburn CG, Bohn K. Eating disorder NOS (EDNOS): An example of the troublesome “not otherwise specified” (NOS) category in DSM-IV. *Behav Res Ther.* 2005; 43:691–701. [PubMed: 15890163]
15. Flegal KM, Carroll MD, Kuczmarski RJ, Johnson CL. Overweight and obesity in the United States: Prevalence and trends, 1960–1994. *Int J Obes.* 1998; 22:39–47.
16. Abrams KK, Allen LR, Gray JJ. Disordered eating attitudes and behaviors, psychological adjustment, and ethnic identity: A comparison of black and white female college students. *Int J Eat Disord.* 1993; 14:49–57. [PubMed: 8339099]
17. White WC, Hudson L, Campbell SN. Bulimarexia and black women: A brief report. *Psychotherapy.* 1985; 22:449–450.
18. Rucker CE, Cash TF. Body images, body size perceptions, and eating behaviors among African-American and white college women. *Int J Eat Disord.* 1992; 12:291–299.
19. Hsu LKG. Are eating disorders becoming more common in blacks? *Int J Eat Disord.* 1987; 6:113–124.
20. Fitzgibbon ML, Blackman LR, Avellone ME. The relationship between body image discrepancy and body mass index across ethnic groups. *Obes Res.* 2000; 8:582–589. [PubMed: 11156434]

Sample characteristics

TABLE 1

Variable	Black Participants n = 32	White Participants n = 153	χ^2	F	df	Effect Size	p
Age (years)	31.2	28.9		1.32	1,160	d = .24	.252
Marital status (% Divorced/% Widowed)	22.6%/9.7%	7.8%/0.7%	17.85		4	ϕ = .31	.001
Body dissatisfaction (1–5)	4.00	3.26		7.365	1,148	d = .58	.007
Difference between current and ideal weight (pounds)	78.5	27.7		29.61	1,164	d = 1.09	<.001
Fear of weight gain (% Not afraid/% Very or extremely afraid)	17.2%/75.7%	4.7%/75.8%	9.126		4	ϕ = .22	.058
BMI (kg/m ²)	33.9	23.7		28.9	1,177	d = 1.07	<.001
Treatment out of hospital for psychiatric problems	21.4%	50.3%		7.909	1	ϕ = .21	.005
Supervised dieting	37.5%	60.8%		6.918	3	ϕ = .19	.075
Medication for obesity	25.0%	36.0%		2.042	3	ϕ = .11	.564
Participation in psychotherapy for eating or weight problems	25.0%	45.0%		6.895	4	ϕ = .19	.142
Self help group participation	12.5%	24.8%		3.021	3	ϕ = .13	.388