



PERGAMON

Journal of Behavior Therapy  
and Experimental Psychiatry 29 (1998) 163–170

JOURNAL OF  
behavior  
therapy  
and  
experimental  
psychiatry

# Behavioral treatment of obsessive-compulsive disorder in African Americans: Clinical issues

K. Elaine Williams<sup>a,\*</sup>, Dianne L. Chambless<sup>a</sup>, Gail Steketee<sup>b</sup>

<sup>a</sup> *The American University, Washington D.C.*

<sup>b</sup> *Boston University, School of Social Work*

---

## Abstract

African Americans with obsessive-compulsive disorder are underrepresented in behavioral treatment outcome studies. This paper consists of a clinical discussion of issues arising during the treatment with exposure plus response prevention of two African-American women with obsessive-compulsive disorder. Clinical issues, such as excessive shame, insanity fears, and a sense of uniqueness, complicated the treatment process. However, both clients made significant improvement as assessed by behavioral testing, target ratings and the Yale–Brown Obsessive-Compulsive Scale. © 1998 Elsevier Science Ltd. All rights reserved.

*Keywords:* OCD; Obsessive-compulsive disorder; African American minorities

---

The efficacy of exposure and response prevention as treatment of OCD has been well documented (e.g., Foa et al., 1984, 1980a,b; O'Sullivan et al., 1991). However, these studies have been conducted on predominantly white samples. Because of this racial homogeneity, it is not clear that exposure and response prevention are the treatments of choice for OCD patients who belong to a minority racial group.

Although the Epidemiological Catchment Area study revealed that the percentage of African Americans (0.04 to 0.08) satisfying DSM-III criteria for lifetime incidence of OCD meets or exceeds the percentage of the nonblack population (0.03 to 0.04) satisfying the criteria (Robins et al., 1984), black OCD clients have been dramatically underrepresented in the clinical literature. For example, only 2 of 44 OCD clients in Rasmussen and Tsuang's (1986) study were black. To the best of our knowledge, the existence of blacks with OCD is mentioned in only five other papers (Bertschy and Ahyi, 1991; Friedman et al., 1993; Hatch et al., 1992, 1996; Hollander et al., 1991). Of

---

\* Correspondence address: 3615-F Chain Bridge Road, Fairfax VA 22030, USA. Tel.: 001 703 383 1386; E-mail: kewpsych@aol.com.

these papers, only the most recent (Hatch et al., 1996) deals with the application of behavior therapy to black OCD patients.

If the catchment area study found that the incidence of OCD in African Americans is similar to or greater than the incidence in the general population, why the virtual absence of blacks in studies of behavioral treatment? One explanation is that, in general, African Americans do not seek treatment in research settings (Neal and Turner, 1991). Instead, they are likely to consult a minister or a physician, or if in a crisis, to visit the local emergency room (Neighbors, 1985, 1988). The usual procedure for emergency room patients is for them to be seen by a staff physician, and perhaps, a psychiatrist. Considering the sources of treatment that African Americans are likely to contact, we assume that black OCD patients are more apt to receive pastoral counseling, medication, and possibly crisis-oriented psychotherapy than exposure plus response prevention. The end result is that there have been no systematic studies, or even case studies, of how African-American OCD patients respond to behavioral techniques that have been tested on white clinical samples.

We recently completed a study at American University that included evaluation of treatment outcome in an exposure plus response prevention protocol for OCD patients. American University's location in Washington, DC, a city with a large African-American population, provides clinical researchers with an apparently strong opportunity to include black clients in research samples. However, the university is in a neighborhood that is usually perceived as white and affluent. During the five years the study was underway, only two black OCD patients overcame their hesitation at seeking treatment from a white academic institution in a white section of their city and completed our protocol. In this paper we describe the treatment process, the progress they made, and qualitative features of the treatment process that may be especially salient for African Americans.

As was the case with all our OCD patients, these two black clients participated in a protocol that began with 2 sessions of information gathering and behavioral analysis followed by 16 sessions of exposure plus response prevention tailored to their particular problems. Clients were seen twice per week for the first 12 exposure sessions and weekly for the last 4. Four subsequent weekly sessions promoted the maintenance of treatment gains. Each patient's progress was monitored via monthly telephone calls during a 6-month follow-up period. Clients were required to refrain from other mental health treatment or from changes in psychoactive medication during both the active treatment and follow-up periods of the protocol.

Both African-American patients were women in their early 40s, high school graduates who held secretarial jobs in large offices in the predominantly white world of business and federal government in Washington, DC. Both resided in predominantly black areas of the city. Each woman had one child whom she had raised alone. While neither was married at the time she entered treatment, both lived either with or very near extended family, and relationships with these relatives were very important to them.

First, we consider whether the presentation of OCD symptoms in these two cases and the process of treatment were affected by their ethnicity. Overall they were not, yet in each case the therapist's sensitivity to ethnic issues seemed important.

Client A contacted our clinic due to a 17-year history of excessive washing related to concerns about contamination. Some of the washing was stimulated by her fear that she would harm herself by inadvertently ingesting traces of chemicals. Thus, she avoided handling substances commonly used in office work, such as copy machine toner, white-out, typewriter ribbons, and possibly leaky pens. This avoidance was difficult for her to maintain, given her position as a secretary. She carefully checked the integrity of the pens in her desk and avoided making contact with fresh ink on paper. She also engineered other people changing her typewriter ribbons, etc. When forced to carry out such a task, she engaged in a 15-minute washing ritual afterwards. Another source of contamination was surfaces touched by other people. These included doorknobs, handrails, shopping cart handles, desk surfaces, office equipment used by office mates, and any surface in a public restroom. In short, any spot that could possibly have been touched by another person was suspect.

Part of the discomfort associated with public surfaces had to do with anxiety about picking up other peoples' germs and becoming ill. Thus far, Client A's obsessions would seem typical of OCD washers. However, Client A also feared that if she touched a spot that had been touched by another, that person would gain the power to "put the root" on her. In other words, people could cast a spell on her if she touched a spot that they had touched. Clinicians generally consider such concerns unusual and assess for indications of psychosis. Client A, like all clients in this study, underwent the Structured Clinical Interview for DSM-III-R. None of her responses suggested a psychosis.

Further exploration with Client A revealed that, although she was not totally convinced that people could wield magical power over her, the credence in "roots" that had been indoctrinated in her as a child still influenced her fears. Belief in root magic is not unusual among African Americans, especially among those reared in the southeastern states, as this woman had been, and among blacks with a Caribbean background. In Client A's case, as in many OCD cases, a cultural belief system had influenced the content of an obsessional fear (see also Wig et al., 1978). However, the cultural beliefs at hand may sound strange to the majority of therapists who are white, middle-class, and uninformed of this aspect of the African-American subculture. Indeed Paradis et al. (1992) reported the misdiagnosis of a Caribbean-born black woman with similar beliefs. On structured interviewing, the authors determined the client had an anxiety disorder rather than the diagnosis of paranoid schizophrenia assigned by the psychiatrist at the outpatient clinic she attended. As Fink et al. (1996) noted in their social phobia case study, the symptoms of anxiety disorders cross racial lines; however, the nature of the symptoms may be influenced by ethnic issues.

Client B contacted our clinic because she realized that her need to hoard beer was inappropriate and out of control. Through the course of the previous four years she had bought and stored so much beer that it completely filled one of the rooms in her home and parts of another. Although the nature of what she hoarded was unusual, there is no reason to believe that it was influenced by black culture. Much later, we learned that this client also avoided wearing new and colorful clothing because she feared having a panic attack if she did so. This symptom began when she heard a minister say red was the color of the devil. Even though Client B did not consider herself a religious woman, this pronouncement had a profound impact.

One issue that set these two women apart from our white clients with OCD was their level of shame at having the disorder. While many of our white clients have expressed embarrassment over having a psychological problem and have been distressed at their perceived loss of control over their thoughts and actions, they have rarely harbored strong fears that they were actually psychotic. Both of our African-American clients were frightened that their obsessions and rituals were evidence that they had lost their minds and that, if people in their communities knew of their behaviors, they would be considered crazy. Client B once said something like this, "If white people get anxious, they can be neurotic and get better with a little therapy. All of you are going to a (outpatient) therapist. But when a black person gets anxious, people think she's crazy and ought to be put away".

This shame and the secrecy that it fostered influenced the course of treatment for both women. Client A's self-consciousness about her disorder led her to believe that her irrational concerns were evident to anyone around her. She was, therefore, extremely reluctant to engage in even discrete exposure in public settings, such as riding a grimy bus accompanied by the therapist, because she was certain that others would be aware of the purpose for which she was riding the bus. In our opinion, the habituation process was hampered by her sense that her fears were so transparent to the general public, which would surely consider her crazy.

Extreme shame interfered with Client B's treatment in a more dramatic way. She concealed her distress over wearing new and colorful clothing until she was nearing termination of treatment for hoarding. She had denied problems other than hoarding, even while undergoing extensive pretreatment interviewing, because she feared that our awareness that she had two types of irrational fears and behaviors would lead us to conclude that she was crazy and to refuse to treat her. Unfortunately, the therapist (KEW) had attributed the client's limited wardrobe to the financial constraints generated by spending so much money on beer. It was painfully difficult for Client B to discuss this concern even after working with the therapist closely for five months because she feared being judged as hopeless. She sobbed and gasped for breath as she worked up the courage to report that there was an additional area in which her behavior was out of control. Hatch et al. (1996) have similarly encountered a greater reluctance among black OCD patients to fully report their symptoms.

A related issue that arose during treatment was the clients' awareness that, as African-American OCD patients, they were unusual. For each woman, the shame about having OCD was reinforced by her perception that she was the only black person to have such a disorder. Each client at some point during treatment asked the therapist if she had other patients who were black, and, if so, how many had OCD. The answer made it clear that they were in the minority of minorities. Their sense of isolation was further reinforced when they learned that no other blacks attended the local OCD support groups. When they discovered that they could not count on other blacks to be attending these groups, they decided not to attend, saying they could not possibly attain a sense of belonging were they ever to attend one.

Is behavior therapy delivered by a white therapist in an academic setting an effective intervention for black OCD clients? We ask this question because therapist-client racial match has been found to influence response to treatment for some

ethnic groups, although not for blacks in particular (Sue et al., 1991). Our presumption was that behavior therapy would be an appropriate approach for such clients, but generalization of treatment efficacy requires empirical demonstration.

We used three methods to measure symptom improvement: target ratings, the Yale Brown Obsessive Compulsive Scale (YBOCS; Goodman et al., 1989), and a behavioral avoidance test (BAT). Target ratings consist of clients' self-ratings of up to 3 fears/obsessions and rituals on scales of 0 to 8. The YBOCS is a structured interview that yields subtotal scores for Obsessions (0–20) and Compulsions (0–20), as well as a Total score (0–40). The YBOCS interview was administered by an independent assessor. The BAT consists of presenting the client with three practical tasks, individually tailored to elicit his or her fears, avoidance, or rituals (see Steketee et al., 1996). The BAT yields two scores: avoidance of the task, reflected by a 0 (no avoidance) to 2 (total avoidance) scale, and anxiety experienced while dealing with the task, measured by the 0–100 Subjective Units of Discomfort Scale (SUDS). It should be noted that, for Client B, the baseline and outcome data collected pertained only to hoarding beer because we did not become aware of the colored clothing issue until late in the treatment process (Tables 1 and 2).

The reliability and clinical importance of changes clients made on the YBOCS were assessed via a procedure for testing change in individual clients developed by Jacobson et al. (1984) and modified by Christensen and Mendoza (1986): the Reliable Change Index. According to this method, statistically reliable change has occurred when the client's Reliable Change Index score equals or exceeds 1.96. This score represents the difference between the posttest score and the pretest score, divided by the standard error of the estimated difference scores. Clinically significant change is deemed to occur when the client has not only reliably improved but also scores in the normal range on the measure (as defined by having a posttest score more likely to fall in the distribution of scores from a normal control sample than from the clinical sample). Only reliable change was assessed for target ratings because normative data on these measures are not available, thus precluding calculation of clinically significant change. Finally, because neither normative data nor the test-retest reliability data necessary for the calculation of the RC Index are available for the BAT, change on this measure was examined informally.

Overall, the evidence indicates notable change for each client. Both proved to be reliably and clinically significantly changed on the YBOCS and reliably changed on target ratings of fear and avoidance. Client B, but not Client A, was reliably changed on target ratings of frequency and duration of rituals as well. Consistent with the target ratings, Client A was rated as having changed more on the YBOCS Obsessions subscale than on YBOCS Rituals.

Both patients also demonstrated improvement on the BAT. Client B's test assessed her ability to resist purchasing beer for a day, to give away beer, and to pour perfectly good beer down the drain. Her performance and SUDS on the BAT reflected increasing ease at doing these things. Although Client A displayed less avoidance behavior on her posttest and 6-month follow-up BATs, her anxiety levels (SUDS) did not appear to decrease. This may be due to initial underreporting of SUDS. Her SUDS score of 3.33 on a 0–100 scale at pretest was very low and did not accurately

**Table 1**  
Client A's improvement over time

Measure	Pre	Post	6 Month	1 Year
<b>Mean target ratings</b>				
Fear/avoidance	6.5	4.0	1.0	3.0
Rituals	4.0	2.0	1.0	2.0
<b>YBOCS total score</b>	<b>22.0</b>	<b>6.0</b>	<b>10.0</b>	<b>—</b>
Obsessions total	10.0	0.0	2.0	—
Rituals total	11.0	6.0	8.0	—
<b>BAT</b>				
Mean avoidance	1.0	0.33	0.33	—
Mean SUDS	3.33	5.33	4.63	—

**Table 2**  
Client B's improvement over time

Measure	Pre	Post	6 Month	1 Year
<b>Mean target ratings</b>				
Fear/avoidance	7.0	0.67	1.0	1.0
Rituals	7.5	0.00	1.0	1.0
<b>YBOCS total score</b>	<b>24.0</b>	<b>0.00</b>	<b>0.0</b>	<b>0.0</b>
Obsessions total	9.0	0.00	0.0	0.0
Rituals total	15.0	0.00	0.0	0.0
<b>BAT</b>				
Mean avoidance	1.0	0.0	0.0	0.0
Mean SUDS	39.5	22.5	5.0	10.0

reflect some of her apparent feelings during the test. For example, she blushed and described waves of heat and chills when asked to handle something grimy (trash) and to touch an open bottle of white-out to her lips. During exposure sessions as well, this client reported her distress in terms of physical (and obvious) reactions to contaminants rather than subjective anxiety. The absence of Client A's 1-year follow-up BAT data is due to the interference of shame. She refused to undergo the BAT at this point because she hated to be reminded of the "silly things I used to do". Although she did not have perfect control over her rituals, she felt that she was improved and did not want to be reminded of the period in her life when she was governed by OCD symptoms.

Improvement in Client B's everyday life was evident in her keeping only as much beer on hand as she could reasonably use. She never had more than two 6-packs available unless she was planning a party. She subsequently underwent additional and largely successful behavioral treatment focused on wearing new and colorful clothing. She continues to avoid wearing the color red but otherwise scores in the normal range on the YBOCS.

For Client A's life, the improvement translated into decreased concern about griminess, office chemicals, and other people's powers over her and somewhat decreased washing. However, she still washed more than necessary because, for her, washing relieved general stress. It may be that her improvement would have been greater had exposure and response prevention been supplemented with stress inoculation procedures. However, the type and duration of intervention delivered was restricted according to the research protocol.

It is encouraging that each of these women demonstrated objective improvement in OCD symptoms and functioning. Obviously, with a sample size of only two, we are unable to compare improvement between racial groups and cannot generalize to most African Americans with OCD. A goal of the present paper is to increase awareness among scientist-practitioners that African-American patients have been underrepresented in clinical studies of OCD. Black OCD patients should actively be recruited for such studies to ascertain whether treatment methods developed with white patients should be modified when African Americans are treated. Clinicians may need to be sensitive to some of the special issues that black OCD patients bring with them when they do seek treatment.

## Acknowledgements

Preparation of this paper was supported by NIMH Grant No. R01-MH44190 to Gail Steketee and Dianne Chambless. Dianne Chambless is now at the Department of Psychology, The University of North Carolina at Chapel Hill, and K. Elaine Williams is now in private practice in Fairfax, VA.

## References

- Bertschy, G., & Ahyi, R. G. (1991). Obsessive-compulsive disorders in Benin: Five case reports. *Psychopathology*, 24, 398–401.
- Christensen, L., & Mendoza, J. L. (1986). A method of assessing change in a single subject: An alteration of RC Index. *Behavior Therapist*, 17, 305–308.
- Fink, C. M., Turner, S. M., & Beidel, D. C. (1996). Culturally relevant factors in the behavioral treatment of social phobia: A case study. *Journal of Anxiety Disorders*, 10, 201–209.
- Foa, E., Steketee, G., Grayson, J. B., Turner, R. M., & Latimer, P. (1984). Deliberate exposure and blocking of obsessive-compulsive rituals: Immediate and long-term effects. *Behavior Therapy*, 15, 450–472.
- Foa, E., Steketee, G., & Milby, J. B. (1980a). Differential response of exposure and response prevention in obsessive-compulsive washers. *Journal of Consulting and Clinical Psychology*, 48, 71–79.
- Foa, E., Steketee, G., Turner, R. M., & Fischer, E. C. (1980b). Effects of imaginal exposure to feared disasters in obsessive-compulsive checkers. *Behaviour Research and Therapy*, 18, 449–455.
- Friedman, S., Hatch, M., Paradis, C. M., Popkin, M., & Shalita, A. R. (1993). Obsessive-compulsive disorder in two black ethnic groups: Incidence in an urban dermatology clinic. *Journal of Anxiety Disorders*, 7, 343–348.
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). The Yale–Brown Obsessive Compulsive Scale: 1. Development, use and reliability. *Archives of General Psychiatry*, 46, 1006–1011.

- Hatch, M. L., Friedman, S., & Paradis, C. (1996). Behavioral treatment of obsessive-compulsive disorder in African Americans. *Cognitive and Behavioral Practice*, 3, 303–315.
- Hatch, M. L., Paradis, C., Friedman, S., Popkin, M., & Shalita, A. R. (1992). Obsessive-compulsive disorder in patients with chronic pruritic conditions: Case studies and discussion. *Journal of the American Academy of Dermatology*, 46, 549–551.
- Hollander, E., DeCaria, C. M., Aronowitz, B., Klein, D. F., Liebowitz, M. R., & Shaffer, D. (1991). A pilot follow-up study of childhood soft signs and the development of adult psychopathology. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 3, 186–189.
- Jacobson, N. S., Follete, W. C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. *Behavior Therapy*, 15, 336–352.
- Neal, A. M., & Turner, S. M. (1991). Anxiety disorders research with African Americans: Current status. *Psychological Bulletin*, 109, 400–410.
- Neighbors, H. W. (1985). Seeking professional help for personal problems: Black Americans' use of health and mental health services. *Community Mental Health Journal*, 21, 156–166.
- Neighbors, H. W. (1988). The help-seeking behavior of black Americans. *Journal of the National Medical Association*, 80, 1009–1012.
- O'Sullivan, G., Noshirvani, H. J., Marks, I., Monteiro, W., & Lelliott, P. (1991). Six-year follow-up after exposure and clomipramine therapy for obsessive compulsive disorder. *Journal of Clinical Psychiatry*, 45, 450–457.
- Paradis, C. M., Friedman, S., Lazar, R. M., Grubea, J., & Kesselman, M. (1992). Use of a structured interview to diagnose anxiety disorders in a minority population. *Hospital and Community Psychiatry*, 43, 61–64.
- Rasmussen, S. A., & Tsuang, M. T. (1986). Clinical characteristics and family history in *DSM-III* obsessive-compulsive disorder. *American Journal of Psychiatry*, 143, 317–322.
- Robins, L. N., Hezler, J. E., Weissman, M. M., Orvaschel, H., Gruenberg, E., Burke, J. D., & Regier, D. A. (1984). Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of General Psychiatry*, 41, 949–958.
- Steketee, G. S., Chambless, D. L., Tran, G. Q., Worden, H., & Gillis, M. M. (1996). Behavioral avoidance test for obsessive-compulsive disorder. *Behaviour Research and Therapy*, 34, 73–83.
- Sue, S., Fujino, D. C., Li-tze, H., Takeuchi, D. T., & Zane, N. W. S. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. *Journal of Consulting and Clinical Psychology*, 59, 533–540.
- Wig, N. N., Varma, V. K., Pershad, O., & Verma, S. K. (1978). Socio-cultural and clinical determinants of symptomatology in obsessional neurosis. *International Journal of Social Psychiatry*, 24, 157–162.