Patient Preferences for Obsessive-Compulsive Disorder Treatment

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Objective: To explore preferences for the treatment of obsessive-compulsive disorder (OCD). We hypothesized that OCD patients will select a combination of medication and psychotherapy as their most preferred choice overall.

Method: The authors designed a treatment-preference survey using 2 health economics methods, forced-choice and contingent-ranking methods, to elicit preferences for OCD treatment available in mainstream care (serotonin reuptake inhibitors [SRIs], exposure and response prevention [EX/RP], and their combination) and for novel treatments under development at OCD research clinics. This survey was given by telephone to 89 individuals with OCD who called the OCD research clinic at the New York State Psychiatric Institute between July 2008 and January 2009. Diagnosis of OCD was based on a telephone screening evaluation adapted from the Structured Clinical Interview for *DSM-IV* Axis I Disorders.

Results: Most participants chose combination treatment (43%) or EX/RP (42%) over SRI medication (16%). Participants ranked investigational psychotherapy as their most-preferred novel treatment (endorsed by 48% of participants) and deep brain stimulation as their least-preferred novel treatment (endorsed by 77% of participants). Qualitative data suggest that prior treatment experience, concerns about medications, and logistical and practical concerns about treatment regimens affect preferences.

Conclusions: Patients with OCD have identifiable treatment preferences. In this sample of convenience, most preferred either combination treatment or psychotherapy. Future studies should investigate prospectively what modifies these preferences and how these preferences affect treatment outcome.

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The 2 first-line treatments for obsessive-compulsive disorder (OCD) are pharmacotherapy with serotonin reuptake inhibitors (SRIs) and cognitive-behavioral therapy (CBT), consisting of exposure and response prevention (EX/RP).[1] If a patient partially responds to 1 of these treatments, practice guidelines recommend adding the other.[1] Exposure and response prevention and SRIs are very different treatments. In EX/RP, patients are asked to confront their fears and to resist doing compulsions; the treatment is purposefully anxiety-provoking and requires a substantial short-term time commitment. Serotonin reuptake inhibitors do not directly confront patient fears, and treatment is less time-consuming. However, SRIs can have side effects, including sexual side effects. Thus, although EX/RP and SRIs are both efficacious treatments,[1] patients with OCD might prefer one or the other, and these preferences might affect whether a patient will choose and initiate a particular treatment, adhere to the treatment procedures, or discontinue or switch to another treatment. In this study, we systematically assessed the treatment preferences of people with OCD for the first time.

Treatment preferences have been studied in nonclinical groups and in people with medical illnesses,[2–5] but they have only recently been assessed for psychiatric disorders. In college students presented with trauma scenarios and treatment descriptions for posttraumatic stress disorder, in victims of physical and sexual assault, and in depressed primary care patients, people demonstrate clear treatment preferences, with most participants preferring psychotherapy to medications.[6–13] Treatment preferences have also been shown to affect treatment adherence. For example, in depressed primary care patients, receiving treatment of one's preference is associated with the likelihood of entering and adhering to treatment,[14,15] the receipt of guideline-concordant care, and the resolution of depressive symptoms.[16] Patient preferences also predict outcome in randomized antidepressant trials, particularly when both medication and psychotherapy are involved. In particular, patients tend to drop out when randomly assigned against their preferences.[17–20]

We are unaware of any studies that have systematically examined treatment preference in OCD. However, in a randomized controlled trial comparing SRI medication, EX/RP, their combination, and pill placebo in OCD, 27 of 149 (18%) patients dropped out after learning which treatment they had been randomly assigned to and before entering treatment.[21] Dropout rate for those who were randomly assigned to monotherapy (SRI, pill placebo, or EX/RP) was higher (22%) than for those who were randomly assigned to combination treatment (6%). Anecdotally, some patients expressed not wanting the monotherapy to which they were randomly assigned. Thus, treatment preferences appeared to play a role in who entered OCD treatment. Given the potential for treatment preferences to affect outcome both in routine clinical practice and in randomized controlled trials, it is important to better understand the treatment preferences of OCD patients.

To begin to examine this issue, we studied a convenience sample of people with OCD seeking treatment at an OCD research clinic. We elicited treatment preferences using 2 methods: the choice experiment (termed *forced choice*) and the contingent ranking method (termed *rank-ordered preference*).

For Clinical Use

- Patients with OCD have identifiable treatment preferences.
- Clinicians treating individuals with OCD may facilitate treatment alliance and uptake if they not only offer their treatment recommendation but also discuss with patients their treatment preferences.

These methods are similar to those used in the treatment-preference studies reviewed above[7,9,10] and are standard in social sciences and health economic research.[22–25] In the forced choice, we asked patients to choose between empirically supported treatments for OCD available in mainstream clinical mental health care (ie, SRIs, EX/RP, or their combination). In the rank-ordered preference, we asked participants to rank their preference for novel treatments that are being developed and tested in research settings. On the basis of literature reviewed above, we hypothesized that OCD patients will have strong preferences about SRIs and EX/RP and will select combination treatment (where they receive at least 1 of their preferred treatments) as their most preferred choice overall. We also explored demographic, clinical, and qualitative factors that influenced forced choice and rank-ordered preferences.

METHOD

Participants

Individuals with OCD who called the Anxiety Disorders Clinic (ADC) at the New York State Psychiatric Institute/Columbia University between July 2008 and January 2009 were asked to participate in this study. Callers were responding to newspaper or internet-based advertisements about various OCD studies (including a brain imaging study, medication and psychotherapy clinical trials, mindfulness meditation, and transcranial magnetic stimulation, all modalities they were being asked about in the survey), word-of-mouth referral, or a recruitment mailing (ie, they had previously received treatment in the ADC and gave permission to be recontacted regarding future treatment opportunities). All participants met criteria for OCD based on the telephone screening evaluation adapted from the Structured Clinical Interview for *DSM-IV* Axis I Disorders.[26] Reliability for OCD screening diagnosis by telephone and for OCD diagnosis made by an MD- or PhD-level clinician in a face-to-face interview was assessed in over 50% of the sample and yielded 100% agreement.

Procedure

All callers, with their consent, underwent a telephone evaluation by trained OCD screeners. This evaluation included questions about current symptoms, medical history, and treatment history. Before discussing treatment opportunities in the ADC, the screener asked callers if they would like to participate in a study about treatment preferences for OCD. If they provided verbal consent, participants were then administered the treatment preference survey. This Institutional Review Board of the New York State Psychiatric Institute approved the study.

Survey Instrument

Developed by the authors (S.R.P. and H.B.S.), the survey elicited treatment preferences using forced choice and rank-ordered methods (see eAppendix 1). In the forced-choice section, the interviewer reads written descriptions of the treatments to the participant. Descriptions of SRI medication, EX/RP, and their combination were derived from practice guidelines[1] and adapted to emulate how a clinician might present these treatment options for OCD in clinical practice. Each description provided background information along with procedures, typical duration, efficacy information, and possible side effects for each treatment. Serotonin reuptake inhibitor, EX/RP, and combination treatment rationales were matched when possible with respect to sentence structure, wording and word count, grade level, and reading ease as determined by a readability formula commonly used to assess health education materials, the Simplified Measure of Gobbledygook (SMOG).[27,28] After providing these treatment descriptions, screeners asked participants to choose the treatment they most preferred. In an open-ended format, participants were also asked the reason for their choice: "What factors influenced your choice?"

In the rank-ordered section, interviewers presented participants with 5 types of treatments currently under development and investigation for OCD. These treatments were investigational medication, investigational psychotherapy, alternative treatments (eg, meditation, yoga, or herbal remedies), deep brain stimulation, and transcranial magnetic stimulation. Following each type of investigational treatment, the interviewer provided a general lay description (developed by authors) of each treatment. Participants were then asked to rank them in order of preference, with #1 being most preferred and #5 the least preferred. In an open-ended format, participants were also asked, "What makes [patient's #1 preference] your most preferred treatment and [patient's #5 preference] your least preferred treatment?"

Lastly, in an open-ended format, participants were asked, "I would like to ask you if you have any comments or suggestions on how to improve treatment and services for people with OCD. We are very interested in learning from you about this."

Quantitative Analysis

Data analyses employed the Statistical Package Social Sciences, version 16.0 (SPSS Inc, Chicago, Illinois). Descriptive statistics were used to describe demographics, treatment

Table 1. Demographic and Treatment Status Variables for Sample (N = 89)

Patient Characteristic	Value[a]
Sex	
Male	38 (43)
Female	51 (57)
Age, mean (SD), y	41 (13.7)
Race	
Caucasian	68 (77)
African American	10 (11)
Asian	3 (3)
Other	7 (8)
Ethnicity	
Hispanic	9 (10)
Non-Hispanic	80 (90)
Marital status	
Single/never married	61 (73)
Married/living with partner	13 (15)
Divorced/separated/widowed	10 (12)
Religion	
Protestant	19 (23)
Catholic	32 (39)
Jewish	23 (28)
Muslim	1 (1)
Other	7 (8)
Income per year	
$9,999–$19,999	10 (12)
$20,000–$59,999	27 (33)
$60,000–$99,999	9 (11)
≥ $100,000	11 (13)
Education, mean (SD), y	15.7 (2.4)
Employment status	
Employed	34 (40)
Student/homemaker/retired	22 (26)
Unemployed	22 (26)
Disabled	6 (7)
Treatment status	
Treatment naive	12 (13)
Received treatment in the past	77 (87)
Currently in treatment	58 (65)
Medications	31 (35)
Psychotherapy	7 (8)
Combination	20 (22)
Currently not in treatment	31 (35)

[a]Values are shown as n (%) unless stated otherwise.

status (treatment naive, treatment experienced), treatment type (currently receiving medication, psychotherapy, combination treatment, or no current treatment) as well as forced-choice and rank-ordered preferences. Chi-square analyses using collapsed dichotomous variables for employment (not working vs working), race (white vs other), and marital status (single/never married vs married) and Pearson correlations were used to examine associations between demographic and treatment variables and forced-choice and rank-ordered preferences. Due to the exploratory nature of the study, an $\alpha = .05$ was used as a measure of significance.

Qualitative Analysis

Qualitative data were abstracted using an inductive process similar to that suggested by Hill et al.[25] Two coders (S.R.P. and H.B.S.) each developed a preliminary list of domains by independently reviewing the qualitative reasons for preferences given by all participants. The coders then met and iteratively modified these domains by comparing the data and the derived domains and discussing to consensus until core domains emerged. For the forced-choice and rank-ordered open-ended questions, we present the domains that were reported by at least 10% of the sample.

RESULTS

Of 148 telephone evaluations, 89 individuals (60%) gave verbal consent and participated in the treatment preferences study. Reasons most often cited for refusing were lack of time and lack of interest. Table 1 presents demographic and treatment status and type for the study sample. Most participants were middle-aged white women who were single/never married, equally employed or unemployed, with a mean education of 16 years, earning up to $60,000 a year. Of the sample, 13% were treatment naive, 87% reported a history of some form of treatment, and 65% were currently receiving treatment (any type of medication [35%], any type of psychotherapy [8%], or their combination [22%]).

Forced Choice

When forced to choose among SRI medication, EX/RP, or combination treatment, 43% (n = 38) chose combination treatment; 42% (n = 37), EX/RP; and 16% (n = 14), SRI medication (Table 2). No significant associations were found between forced-choice and demographic (including age, gender, marital status, education, income, employment, and race), treatment status (treatment naive, treatment experienced), or treatment-type variables (currently receiving medication, psychotherapy, combination treatment, or no current treatment); all P values > .30). As shown in Table 2, participants who were not currently receiving treatment and those who are naive to treatment endorsed similar patterns of forced-choice preference as those with previous or current experience with treatment with 1 exception: the former chose psychotherapy more frequently than combined treatment as their forced choice, although this was not a statistically significant difference, (not currently receiving treatment: $r = -0.21$, $P = .052$; treatment naive: $\chi^2_{2,89} = 5.29$, $P = .767$).

Qualitative Analysis of Reasons

Of the 38 participants who preferred combination treatment, about 40% reported that a prior positive experience with combination treatment influenced their choice (eg, "the medicine helps me get through the therapy"). Some (24%) believed that combination treatment would optimize their outcome (eg, "hammering it from both angles is most effective"). A smaller group (11%) had the impression that scientific evidence proved combination treatment was the most effective treatment for OCD (eg, "medical research shows that the combo is most effective").

Prior treatment experience also influenced participants who chose EX/RP, although in the opposite direction. Specifically, of the 37 participants who chose EX/RP, 33% reported that a negative experience with medications (eg, weight gain, sexual side effects, lack of efficacy, increased symptoms, and anxiety) influenced their choice (eg, "Having taken medication in the past, I know that the physical side effects are

Table 2. Forced Choice and Rank Ordered Preferences by Treatment Variables

	Forced Choice			Rank Ordered	
Sample, n (%)	EX/RP	SRI	Combination	Investigational Psychotherapy Ranked #1	Deep Brain Stimulation Ranked #5
Entire sample (N = 89)	37 (42)	14 (16)	38 (43)	42 (48)	68 (77)
Treatment naive (n = 12)	6 (54)	2 (18)	4 (33)	7 (58)	11 (92)
Treatment experienced (n = 77)	31 (40)	12 (16)	34 (44)	39 (51)	19 (25)
Currently not receiving treatment (n = 31)	18 (58)	5 (16)	8 (26)	15 (48)	25 (81)
Currently on medication (n = 31)	10 (32)	5 (16)	16 (52)	15 (48)	28 (90)
Currently in psychotherapy (n = 7)	3 (43)	1 (14)	3 (43)	3 (43)	4 (57)
Currently in combination treatment (n = 20)	6 (30)	3 (15)	11 (55)	10 (50)	12 (60)

Abbreviations: EX/RP = exposure and response prevention, SRI = serotonin reuptake inhibitor.

pretty extreme"; "I've been on a lot of medications and none of them seemed to really work, my experience is that medication makes my symptoms worse"). Others (30%) expressed a lack of belief in medication as an acceptable treatment (eg, "I just do not believe in taking medication for psychological problems"; "I am really uncomfortable with putting a pill in my body to fix my head"). Some (17%) who chose psychotherapy did so based on reading about treatment for OCD (eg, "I have read Edna Foa's book that has really helped me").

Of the 14 participants who chose SRI medication, 23% cited lack of time for other treatment (eg, "If I take medication, I'll have more time for my own life"). Some (23%) also believed that treatment course is easier with medications (eg, "If I had a choice—I want a magic pill! It would be easiest to take a pill and know I'll get better").

Rank-Ordered Preferences

Among investigational treatments (Table 2), a new psychotherapy was the preferred treatment, ranked first by 48% (n = 42) of participants. Deep brain stimulation was endorsed as least preferred by 77% (n = 68) of the participants. The modal rank number for each investigational treatment was investigational psychotherapy (mode = 1), alternative treatments (mode = 2), investigational medication (mode = 3), transcranial magnetic stimulation (mode = 4), and deep brain stimulation (mode = 5).

We examined associations between demographic and treatment variables and participants' most- and least-preferred treatments among the 5 rank-ordered options. This procedure avoids a tendency to overinterpret middle ranking positions.[9,29] Results indicate that younger participants were more likely than older patients to rank psychotherapy as their most preferred treatment ($r = -0.28$, $P = .008$) and women were more likely than men to rank deep brain stimulation as their least preferred treatment ($\chi^2_{1,89} = 5.24$, $P = .02$). Participants who were on medications ($\chi^2_{1,89} = 4.47$, $P = .03$) and combination treatment ($\chi^2_{1,89} = 4.55$, $P = .03$) at the time of the survey were less likely than those who were not on medication or combination treatment to rank deep brain stimulation as their least-preferred treatment. All other comparisons were not significant (all P values > .20), with the exception of women ranking psychotherapy ($\chi^2_{1,89} = 3.49$, $P = .06$) as their most preferred treatment more often than men.

Qualitative Analysis of Reasons

Of the 42 participants who ranked investigational psychotherapy as their preferred treatment, 42% reported that a prior positive experience with therapy influenced their ranking (eg, "therapy I have had in the past has been helpful [more so than medication]"). Some participants (27%) believed that the process of talking is most helpful (eg, "I think that talking it out is better than just taking a pill that is going to dissolve in your body and magically cure you"). Some (14%) opined that psychotherapy is safest and least invasive, while others (11%) expressed specific concerns about medication (eg, "I don't want to be on medication my whole life and therapy would be the best way to help me"; "I would prefer to be as free from medication and surgery as possible").

Of the 68 participants who ranked deep brain stimulation as their least-preferred treatment, 58% felt that surgery was too extreme (eg, "Putting a stick in my brain is the last resort") or undesirable (eg, "It's super scary! There could be side effects, also irreversible and permanent"). Others (16%) noted that not knowing much about the procedure influenced their rank-ordered preference (eg, "Just because I'm scared of it and don't know anything about it.")

Improving Treatment and Services for OCD

Fifty-one percent (n = 45) of the sample made recommendations for improving services and treatment for OCD. Examples of domains and quotes are presented in Table 3. These included improving treatments currently available such as tailoring treatments to individual needs and developing medications with fewer side effects and creating more awareness about OCD, forums for group support, and accessibility to treatments.

DISCUSSION

Our data demonstrate that patients with OCD have identifiable treatment preferences. Confirming our hypothesis, most participants chose combination treatment over SRI medication alone. However, participants chose EX/RP almost as often as combination treatment, and many fewer were interested in SRI medication alone. We thought that this finding may, in part, reflect that 35% of this convenience sample was already taking SRI medications alone (n = 31), whereas only 8% (n = 7) was already receiving

Table 3. Qualitative Data on Improving Treatment and Services for Obsessive-Compulsive Disorder (OCD) (n = 45)

Domain	Quote
Treatment	
Tailoring treatments to individual patient needs	"You know, everyone is different and should be treated based on their specific symptoms"
Developing medications with fewer side effects	"I'd like a medication without the side effects, like the sleepiness, overeating, and irregular periods"
Exploring the biologic basis for OCD	"If I were a researcher, I would try to find the OCD gene. I'm not a doctor, but if there is an OCD gene or way to learn about the physical part of OCD, I would love that"
Services	
Educating the public about the disorder and its treatment	"I don't know much about OCD, but I think that there should be more focus on educating the public about the disorder and possible avenues for treatment"
Improving accessibility of qualified OCD specialists familiar with cutting-edge treatments	"There should be more doctors and therapists available who know how to treat OCD. Psychiatrists just experiment and most therapists don't know how to do cognitive-behavioral therapy. And none of them take insurance"
Providing group forums where patients can share their experiences with each other	"I'm glad there is a name for the condition, but it's not cocktail-party conversation. I'd like to discuss it with other people with OCD and read about what other people have gone through"

psychotherapy alone (and only 2 of these 7 were receiving EX/RP). However, current treatment type was not associated with treatment preference in our analyses. Future research in a larger random sample is warranted to confirm this finding and examine if those currently receiving EX/RP endorse a reverse preference for SRIs.

Our results are consistent with the literature on treatment preferences for posttraumatic stress disorder in clinical and nonclinical samples[6–11] and major depression,[12,13] in which most participants prefer treatment with psychotherapy over medications, although these other studies did not include combination treatment as an option. Exploratory analyses suggested that treatment-naive participants were more likely to choose EX/RP than combined treatment, and younger age was associated with ranking psychotherapy as the preferred treatment, although the small subsample renders these findings tentative.

Qualitative analyses suggest several factors that may influence participant preferences. One is prior experience. Participants chose combination treatment if they had had a positive experience with combination treatment in the past. Those with a prior negative experience with medications (eg, due to side effects or lack of efficacy) chose psychotherapy. Another factor is the complexity of the treatment procedures: those who chose medications were influenced by the logistical ease of medications compared to EX/RP. Lastly, self-education appeared to be an important factor that influenced preferences for combination treatment and psychotherapy. However, it was notable that knowledge about the treatments was not always accurate (eg, that combination treatment is clearly superior to monotherapy, that EX/RP is a type of therapy in which you "talk it out," that medications can magically cure OCD, that OCD is a psychological problem and thus can't be helped by medication).

Several studies found that discussing treatment preferences facilitates treatment negotiation and better uptake of treatment recommendations.[14–16] Thus, it is reasonable to hypothesize that clinicians who treat OCD will likewise facilitate treatment alliance and uptake if they not only offer their treatment recommendation but also discuss with their OCD patients their treatment preferences.[30,31] Our data suggest that important areas for discussion include (1) past and current treatment experiences, including existing knowledge about OCD treatments; (2) beliefs or concerns about treatments, especially with medications; and (3) logistical and practical concerns about treatment regimens such as time commitment, availability, and access to trained OCD providers. Future studies will need to examine whether such discussions facilitate treatment negotiation and better adherence to treatment recommendations in OCD.

Participants' preferences and opinions about novel treatments can also help to inform and guide the OCD treatment research community. This sample of patients articulated a desire for medications with an improved side effect profile. In addition, they stressed the difficulty of finding trained OCD specialists, underscoring the need to disseminate evidence-based treatments for OCD and to expand opportunities for clinicians to train in EX/RP. Of interest to patient advocacy groups, several participants underscored the importance of educating the public about OCD and its treatment.

This study is the first to assess systematically stated treatment preferences for both mainstream and investigational treatments in a sample of people diagnosed with OCD. Borrowing methods commonly used in health economics research, we used the choice experiment and the contingent ranking procedure and collected qualitative data on participants' reasons for choosing treatments and ranking preferences. Future development of the survey will address existing limitations, including vetting the investigational treatment descriptions through experts in each area of treatment development[7,9,10] and more rigorous matching of SMOG readability grades for all treatment descriptions. Unlike previous studies assessing treatment preferences, we explored the relationship between treatment status and type on choice and preferences.

However, our study should be viewed as preliminary given several limitations. First, our sample consisted of a convenience sample of primarily treatment-seeking patients; therefore, we do not know whether the results generalize to all individuals with OCD. The sample is biased by the likely exclusion of patients who are satisfied with their current treatment. Second, our sample size limited our ability to fully examine demographic (eg, racial and ethnic differences) and treatment status variables and their influence on treatment preferences. Third, we elicited treatment preferences and reasons for choices at a single time. Preferences could change with passage of time, education about treatment options, cost of treatments, access to care, therapeutic discussion with a clinician, and actual treatment experience. Understanding

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the impact of preferences on the treatment process and learning what affect these preferences have is important because the data will have implications for educational campaigns about OCD treatment, patient-provider communication in the clinical encounter, and the design and conduct of OCD clinical trials.

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REFERENCES

1. American Psychiatric Association. *American Psychiatric Association Practice Guidelines for the Treatment of Psychiatric Disorders: Compendium 2006*. Arlington, VA: American Psychiatric Publishing; 2006.
2. Benbassat J, Pilpel D, Tidhar M. Patients' preferences for participation in clinical decision making: a review of published surveys. *Behav Med*. 1998;24(2):81–88.
3. Kennelly C, Bowling A. Suffering in deference: a focus group study of older cardiac patients' preferences for treatment and perceptions of risk. *Qual Health Care*. 2001;10(suppl 1):i23–i28.
4. Ryan M, Bate A, Eastmond CJ, et al. Use of discrete choice experiments to elicit preferences. *Qual Health Care*. 2001;10(suppl 1):i55–i60.
5. Robinson A, Thomson R. Variability in patient preferences for participating in medical decision making: implication for the use of decision support tools. *Qual Health Care*. 2001;10(suppl 1):i34–i38.
6. Roy-Byrne P, Berliner L, Russo J, et al. Treatment preferences and determinants in victims of sexual and physical assault. *J Nerv Ment Dis*. 2003;191(3):161–165.
7. Zoellner LA, Feeny NC, Cochran B, et al. Treatment choice for PTSD. *Behav Res Ther*. 2003;41(8):879–886.
8. Angelo FN, Miller HE, Zoellner LA, et al. "I need to talk about it:" a qualitative analysis of trauma-exposed women's reasons for treatment choice. *Behav Ther*. 2008;39(1):13–21.
9. Becker CB, Darius E, Schaumberg K. An analog study of patient preferences for exposure versus alternative treatments for posttraumatic stress disorder. *Behav Res Ther*. 2007;45(12):2861–2873.
10. Tarrier N, Liversidge T, Gregg L. The acceptability and preference for the psychological treatment of PTSD. *Behav Res Ther*. 2006;44(11):1643–1656.
11. Cochran BN, Pruitt L, Fukuda S, et al. Reasons underlying treatment preference: an exploratory study. *J Interpers Violence*. 2008;23(2):276–291.
12. Cooper-Patrick L, Powe NR, Jenckes MW, et al. Identification of patient attitudes and preferences regarding treatment of depression. *J Gen Intern Med*. 1997;12(7):431–438.
13. Dwight-Johnson M, Sherbourne CD, Liao D, et al. Treatment preferences among depressed primary care patients. *J Gen Intern Med*. 2000;15(8):527–534.
14. Dwight-Johnson M, Unutzer J, Sherbourne C, et al. Can quality improvement programs for depression in primary care address patient preferences for treatment? *Med Care*. 2001;39(9):934–944.
15. Raue PJ, Schulberg HC, Heo M, et al. Patients' depression treatment preferences and initiation, adherence, and outcome: a randomized primary care study. *Psychiatr Serv*. 2009;60(3):337–343.
16. Clever SL, Ford DE, Rubenstein LV, et al. Primary care patients' involvement in decision-making is associated with improvement in depression. *Med Care*. 2006;44(5):398–405.
17. Kocsis JH, Leon AC, Markowitz JC, et al. Patient preference as a moderator of outcome for chronic depression treated with nefazodone, cognitive behavioral analysis system of psychotherapy, or their combination. *J Clin Psychiatry*. 2009;70(3):354–361.
18. Sotsky SM, Glass DR, Shea MT, et al. Patient predictors of response to psychotherapy and pharmacotherapy: findings in the NIMH Treatment of Depression Collaborative Research Program. *Am J Psychiatry*. 1991;148(8):997–1008.
19. Lin P, Campbell DG, Chaney EF, et al. The influence of patient preference on depression treatment in primary care. *Ann Behav Med*. 2005;30(2):164–173.
20. Chilvers C, Dewey M, Fielding K, et al. Counseling vs Antidepressants in Primary Care Study Group. Antidepressant drugs and generic counseling for treatment of major depression in primary care: randomized trial with patient preference arms. *BMJ*. 2001;322(7289):772–775.
21. Foa EB, Liebowitz MR, Kozak MJ, et al. Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. *Am J Psychiatry*. 2005;162(1):151–161.
22. Diener A, O'Brien B, Gafni A. Health care contingent valuation studies: a review and classification of the literature. *Health Econ*. 1998;7(4):313–326.
23. Hausman J, Ruud R. Specifying and testing econometric models for rank-ordered data. *J Econom*. 1987;34(1-2):83–104.
24. Louviere JJ, Hensher DA, Swait JD. *Stated Choice Methods, Analysis and Application*. Cambridge, UK: Cambridge University Press; 2000.
25. Hill CE, Thompson BJ, Williams EN. A guide to conducting consensual qualitative research. *Couns Psychol*. 1997;25(4):517–572.
26. First MB, Spitzer RL, Gibbon M. *Structured Clinical Interview for DSM-IV Axis I Disorders: Non-Patient Edition (SCID-IP, v2.0)*. New York, NY: NY State Psychiatric Institute; 1996.
27. Hedman AS. Using the SMOG formula to revise a health-related document. *Am J Health Educ*. 2008;39(1):61–64.
28. Ley P, Florio T. The use of readability formulas in health care. *Psychol Health Med*. 1996;1(1):7–28.
29. Becker CB, Meyer G, Price JS, et al. Law enforcement preferences for PTSD treatment and crisis management alternatives. *Behav Res Ther*. 2009;47(3):245–253.
30. Krupnick JL, Sotsky SM, Simmens S, et al. The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: findings in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *J Consult Clin Psychol*. 1996;64(3):532–539.
31. Iacoviello BM, McCarthy KS, Barrett MS, et al. Treatment preferences affect the therapeutic alliance: implications for randomized controlled trials. *J Consult Clin Psychol*. 2007;75(1):194–198.

For the CME Posttest for this article, see pages 1558–1559.

eAppendix 1 is available at PSYCHIATRIST.COM.

eAppendix 1. Treatment Preferences for Obsessive-Compulsive Disorder (OCD) Patients

"If you are interested and available, I would like to also ask you some questions about treatments for OCD and your preferences for treatment. The purpose of this survey is to learn about how improve treatments and services for people who have OCD. These questions will take approximately 10–15 minutes. Please keep in mind that you are not actually choosing a treatment at this time; we only want to know what treatment you would prefer if you had to choose. This does not influence the type of treatment you could potentially receive if you are eligible for treatment here at our clinic. If YES, first I would like to get some basic information from you":

1. Name: _____ DOB:_____
2. Years of education: _____
3. Are you currently receiving treatment of any kind?
   Current treatment status: _____Receiving treatment _____Not receiving treatment
   Medications? **Y N**
   Names of medications (have the person spell the name of all the medications he/she is on):_____
   _____
   Psychotherapy? **Y N**
   Type of psychotherapy (ie, exposure, cognitive, dynamic, or other type of therapy):_____
   _____
   Other: _____
4. Have you ever received treatment in the past?
   Past treatment status: _____Received treatment _____Never received treatment
   Medications? **Y N**
   Names of medications (have the person spell the name of all the medications he/she is on):_____
   _____
   Psychotherapy? **Y N**
   Type of psychotherapy (ie, exposure, cognitive, dynamic, or other type of therapy): _____
   _____
   Other: _____

I. FORCED-CHOICE METHOD: "To begin, out of the typical OCD treatments available in mainstream medical care, we are interested in knowing what kind of OCD treatment patients would prefer the most. I would first like to tell you about some of the treatments available for OCD. Then I will ask you to choose the type that you would like most."
Treatments: "There are two types of treatments for OCD: psychotherapy or medication."

Psychotherapy
"One of the treatments for OCD is a specific type of cognitive-behavioral therapy known as exposure and response prevention. In this treatment, a person meets with a trained therapist once or twice a week for about 2–3 months. In therapy, the person learns to expose himself/herself to the thoughts and situations that trigger anxiety while not responding or ritualizing. It is thought that, over time, repeated exposure and resisting rituals will lead to less and less anxiety. Between sessions, patients practice exposure and response prevention on their own. This treatment usually takes a few weeks before people start to feel better.

Medication
"Another treatment for OCD is taking medications that are called serotonin reuptake inhibitors. These medicines are thought to adjust chemicals in the brain to reduce symptoms of OCD. A psychiatrist can prescribe the medicine during visits that are usually weeks to months apart. The visits are thus less frequent than those for psychotherapy. These medications are not addictive but can have some physical side effects. Sometimes, these side effects go away on their own, but if they do not, the medication can be adjusted. These medications have to be taken once or twice each day. It can take a few weeks for a person to feel better. Once the person is well, it is recommended that the medicine be continued for at least one year to prevent relapse."

Combination
"Some people combine taking a medication with psychotherapy. Usually this means receiving medication from a doctor and seeing a separate therapist for psychotherapy."

Summary: "Now that we have talked about the different types of treatments, including medication or psychotherapy, or combination of medication and psychotherapy, I would like to ask you to choose one you prefer the most. Please keep in mind that you are not actually choosing a treatment at this time; we only want to know what treatment you would prefer if you had to choose. This does not influence the type of treatment you could potentially receive if you are eligible for treatment here at our clinic."

Choice: _____

What factors influenced your choice? Verbatim: _____
_____

(continued)

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eAppendix 1(continued). Treatment Preferences for Obsessive-Compulsive Disorder (OCD) Patients

II. RANK METHOD: "In addition to the treatments available in mainstream medical care, there are other treatments that are in development and under investigation at OCD research clinics such as our clinic. I am going to read through a list of types of treatments, and would like you to put them in order of preference, with #1 being the most preferred and #5 being the least preferred. Again, please remember your responses will not influence the type of treatment you could potentially receive if you are eligible for treatment here at our clinic."

___Investigational medication (medications that target brain chemicals that are thought to reduce symptoms of OCD)
___Investigational psychotherapy (therapy that encourages acceptance of unwanted thoughts and feelings and commitment/action toward values)
___Alternative treatments (mindfulness meditation, yoga, or herbal remedies)
___Deep brain stimulation (a surgical procedure in which doctors put a device into your brain that can stimulate specific brain pathways thought to underlie OCD symptoms)
___Transcranial magnetic stimulation (a noninvasive procedure in which doctors use a large magnet to alter the electrical activity of your brain in specific brain regions)

"What makes [their #1 preference] your #1 most-preferred treatment and [their #5 preference] your #5 least-preferred treatment?" Verbatim: _____

"Lastly, I would like to ask you if you have any comments or suggestions on how to improve treatment and services for people with OCD. We are very interested in learning from you about this." Verbatim: _____

"Thank you very much for your patience and time in answering these questions."

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