



Obsessive–compulsive disorder: how should we manage treatment nonadherence?



Juliana B Diniz¹



Leonardo F Fontenelle^{*2}

“...obsessive–compulsive disorder frequently results in significant costs and reduced quality of life for those affected and their families.”

Obsessive–compulsive disorder (OCD) is characterized by recurrent and persistent thoughts, urges or images that are difficult to resist and cause marked anxiety or distress, and/or repetitive behaviors or mental acts that are performed to reduce the anxiety or according to specific rules [1]. According to a review on the epidemiological studies reporting OCD related data, the 1-month prevalence of OCD ranges from 0.3 to 3.1% of the general population [2]. Importantly, OCD frequently results in significant costs and reduced quality of life for those affected and their families [1,3]. In a recent study, OCD ranked 10th on the Global Burden of Mental, Neurological and Substance-Use Disorders, a position based on the number of future years of healthy life that are lost as a result of the premature deaths or disability occurring in a particular year [4]. Pathophysiological models of OCD involve a complex interaction between genetic diathesis and environmental factors (e.g., birth complications, traumatic

events and infections) leading to neurochemical abnormalities (involving serotonin and dopamine) and increased activity of brain corticostriatal circuits [5,6]. In OCD, treatment entails administration of serotonin-reuptake inhibitors (SRIs) and/or cognitive-behavioral techniques, including psychoeducation, exposure and response prevention (ERP), and cognitive restructuring [1].

The first question in the treatment of OCD is which treatment should be tried first, SRIs or ERP? Although some have suggested that ERP should be tried first, there is conflicting evidence on its efficacy for depressed patients with OCD [7]. Since many patients with OCD exhibit comorbid major depression, particularly those who seek treatment in specialized services [8], SRIs are frequently the treatment of choice, especially among patients with severe OCD and multiple comorbid conditions. Different SRIs were tested and proved effective in the treatment of OCD, including clomipramine, fluoxetine,

“...serotonin-reuptake inhibitors are frequently the treatment of choice, especially among patients with severe obsessive–compulsive disorder and multiple comorbid conditions.”

¹Department & Institute of Psychiatry, Hospital das Clínicas, Universidade de São Paulo, Medical School, São Paulo, Brazil

²Anxiety & Depression Research Program, Institute of Psychiatry, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

*Author for correspondence: lfontenelle@gmail.com

“In obsessive-compulsive disorder, as in other medical conditions or psychiatric disorders, working to improve patients’ compliance with professionals’ advice is, to say the least, challenging.”

fluvoxamine, paroxetine, sertraline, citalopram and escitalopram [9]. It is now known that these drugs should be administered in high doses for at least 3 months before any judgment on treatment resistance is made [9]. If patients show no response, a trial with a second SRI should be performed. If there is partial response, augmentation strategies, such as atypical antipsychotics, can help some patients. Whether ERP can be added, if needed, in later stages of treatment is an interesting question. Controlled studies suggest that ERP is superior to stress management therapy for the first 2 years of SRI-resistant OCD [10]. Conversely, SRIs (fluvoxamine) have also been proven to be superior to cognitive therapy among patients who did not respond favorably to ERP [11].

Although it is reasonable to speculate that poor treatment adherence in OCD prolongs suffering and increases economic costs, no clear information on the clinical, functional and economic impact of treatment nonadherence is currently available [12]. Identifying the correlates and/or risk factors for treatment nonadherence in patients with OCD would help guide clinicians to develop more effective strategies to maintain patients on an established therapeutic plan. Nevertheless, treatment adherence has only been investigated rarely. Regarding ERP, which is the main psychotherapeutic intervention for OCD, there are only a few studies but they have consistently shown that better adherence to assignments between sessions is associated with better outcome in both the short and long term [13,14]. Although it is highly intuitive that compliance with pharmacological treatment might have the same effect in regards to outcome, this has not been systematically assessed.

As expected, in OCD, predictors of better adherence to psychotherapeutic treatment include better therapeutic alliance and higher treatment readiness [15]. Hoarding symptoms have been associated with poor adherence to ERP [15] and to greater chance of refusing ERP [16]. Poor insight and greater severity have been associated with higher medication refusal [16]. Regarding the chance of abandonment of pharmacological treatment, comorbid major depression has been described to diminish the chance of abandonment [17]. While another study has shown that comorbid agoraphobia, social phobia, generalized anxiety disorder and somatization disorder increase the chance of abandonment [18].

In OCD, as in other medical conditions or psychiatric disorders, working to improve patients’ compliance with professionals’ advice is, to say the least, challenging. Some work has been carried out to evaluate if motivational interviewing techniques adapted from the drug and alcohol dependence protocols could help to better engage OCD patients with treatment. Simpson *et al.* were unable to show that adding motivational interviewing to an ERP protocol yielded better adherence or outcome than when the ERP protocol was applied alone [19]. Several factors may have contributed to these negative results, including the small sample size ($n = 30$, 15 in each intervention group) and good baseline adherence to ERP assignments in both groups. Consequently, there was not much room for improvement of adherence to start with, this is also called a ceiling effect. On the other hand, previous studies have shown that adding motivational interview to ERP protocols could yield better treatment acceptance among patients who have refused ERP before [20] and accelerate improvement [21]. Therefore, motivational interviewing is still a promising intervention to improve adherence in OCD for those who show poor baseline adherence. The efficacy of this intervention should be further investigated in controlled trials.

Regarding pharmacological intervention, there is some evidence that reducing the length of intervals between medical appointments (seeing patients every 2 weeks instead of every month) might be helpful to prevent early treatment abandonment [18]. Likewise, as OCD patients with comorbid generalized anxiety and somatization disorder are more prone to abandon treatment due to medications’ side effects, it might be helpful to assign these patients to psychotherapy whenever possible and to carefully choose drugs with better side-effect profiles for each specific patient [18]. There is also evidence that selective SRIs are associated with better treatment adherence than clomipramine due to the side-effect profile of the later [22].

In summary, OCD patients may not respond to treatment as a consequence of poor adherence at least as frequently as in other psychiatric disorders. Some factors have been shown to predict higher chance of low adherence, treatment refusal or abandonment. Add-on motivational interviewing and reduced intervals between consultations are the most promising interventions for improving adherence, and decreasing refusal and abandonment.

Financial & competing interests disclosure

The authors have no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript. This includes

employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

No writing assistance was utilized in the production of this manuscript.

References

- Abramowitz JS, Taylor S, McKay D. Obsessive-compulsive disorder. *Lancet* 374, 491–499 (2009).
- Fontenelle LF, Mendlowicz MV, Versiani M. The descriptive epidemiology of obsessive-compulsive disorder. *Prog. Neuropsychopharmacol. Biol. Psychiatry* 30, 327–337 (2006).
- DuPont RL, Rice DP, Shiraki S, Rowland CR. Economic costs of obsessive-compulsive disorder. *Med. Interface* 8, 102–109 (1995).
- Collins PY, Patel V, Joestl SS *et al.* Grand challenges in global mental health. *Nature* 475, 27–30 (2011).
- Miguel EC, Leckman JF, Rauch S *et al.* Obsessive-compulsive disorder phenotypes: implications for genetic studies. *Mol. Psychiatry* 10, 258–275 (2005).
- Harrison BJ, Soriano-Mas C, Pujol J *et al.* Altered corticostriatal functional connectivity in obsessive-compulsive disorder. *Arch. Gen. Psychiatry* 66, 1189–1200 (2009).
- Kempe PT, van Oppen P, de Haan E *et al.* Predictors of course in obsessive-compulsive disorder: logistic regression versus Cox regression for recurrent events. *Acta Psychiatr. Scand.* 116, 201–210 (2007).
- Quarantini LC, Torres AR, Sampaio AS *et al.* Comorbid major depression in obsessive-compulsive disorder patients. *Compr. Psychiatry* 52, 386–393 (2011).
- Fontenelle LF, Nascimento AL, Mendlowicz MV, Shavitt RG, Versiani M. An update on the pharmacological treatment of obsessive-compulsive disorder. *Expert Opin. Pharmacother.* 8, 563–583 (2007).
- Foa EB, Simpson HB, Liebowitz MR *et al.* Six-month follow-up of a randomized controlled trial augmenting serotonin reuptake inhibitor treatment with exposure and ritual prevention for obsessive-compulsive disorder. *J. Clin. Psychiatry* 74, 464–469 (2013).
- van Balkom AJ, Emmelkamp PM, Eikelenboom M, Hoogendoorn AW, Smit JH, van Oppen P. Cognitive therapy versus fluvoxamine as a second-step treatment in obsessive-compulsive disorder nonresponsive to first-step behavior therapy. *Psychother. Psychosom.* 81, 366–374 (2012).
- Santana L, Fontenelle LF. A review of studies concerning treatment adherence of patients with anxiety disorders. *Patient Prefer. Adherence* 5, 427–439 (2011).
- Simpson HB, Maher MJ, Wang Y, Bao Y, Foa EB, Franklin M. Patient adherence predicts outcome from cognitive behavioral therapy in obsessive-compulsive disorder. *J. Consult. Clin. Psychol.* 79, 247–252 (2011).
- Simpson HB, Marcus SM, Zuckoff A, Franklin M, Foa EB. Patient adherence to cognitive-behavioral therapy predicts long-term outcome in obsessive-compulsive disorder. *J. Clin. Psychiatry* 73, 1265–1266 (2012).
- Maher MJ, Wang Y, Zuckoff A *et al.* Predictors of patient adherence to cognitive-behavioral therapy for obsessive-compulsive disorder. *Psychother. Psychosom.* 81, 124–126 (2012).
- Santana L, Fontenelle JM, Yücel M, Fontenelle LF. Rates and correlates of nonadherence to treatment in obsessive-compulsive disorder. *J. Psychiatr. Pract.* 19, 42–53 (2013).
- Santana L, Versiani M, Mendlowicz MV, Fontenelle LF. Predictors of adherence among patients with obsessive-compulsive disorder undergoing naturalistic pharmacotherapy. *J. Clin. Psychopharmacol.* 30, 86–88 (2010).
- Diniz JB, Malavazzi DM, Fossaluza V *et al.* Risk factors for early treatment discontinuation in patients with obsessive-compulsive disorder. *Clinics* 66, 387–393 (2011).
- Simpson HB, Zuckoff AM, Maher MJ *et al.* Challenges using motivational interviewing as an adjunct to exposure therapy for obsessive-compulsive disorder. *Behav. Res. Ther.* 48, 941–948 (2010).
- Maltby N, Tolin DF. A brief motivational intervention for treatment-refusing OCD patients. *Cogn. Behav. Ther.* 34, 176–184 (2005).
- Merlo LJ, Storch EA, Lehmkuhl HD *et al.* Cognitive behavioral therapy plus motivational interviewing improves outcome for pediatric obsessive-compulsive disorder: a preliminary study. *Cogn. Behav. Ther.* 39, 24–27 (2010).
- Choi YJ. Efficacy of treatments for patients with obsessive-compulsive disorder: a systematic review. *J. Am. Acad. Nurse Pract.* 21, 207–213 (2009).