Review and critical evaluation of the currently available approaches to treating OCD

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Obsessive-compulsive disorder (OCD) is a debilitating condition that seriously interferes with patients' lives. Currently used approaches to treatment of OCD include types of Cognitive-Behavioral Therapy (CBT) and pharmacological therapy.

Empirical evidences suggest that Exposure and Response Prevention therapy (ERP, EX/RP) is the most effective type of CBT in treating OCD (Foa, 2010). This approach involves continued exposure of patients to distressing stimuli and deliberate preclusion of compulsions that usually follow. Consequently, patients are able to face their obsessive thoughts and consequences they expect if rituals aren't performed as usual and learn that their anxiety would decrease even if they didn't yield to their compulsions (Foa, 2010).

Most common pharmacological treatment of OCD, on the other hand, involves prescription of selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs) or clomipramine. SSRIs selectively inhibit serotonin reuptake, leading to an increase of serotonin at synapses, while SNRIs are effective at both serotonin and norepinephrine synapses and clomipramine binds both to serotonin and other receptors. Combination therapy of SSRIs and clomipramine can be more effective than either of the monotherapies for certain age groups (Figueroa, Rosenberg, Birmaher, & Keshavan, 1998).

"Controlled trial of exposure and response prevention in obsessive-compulsive disorder" (Lindsay, Crino, & Andrews, 1997) describes an empirical study investigating effects of ERP on OCD. The aims of the article were to "replicate the seminal work of Rachman, Hodgson and Marks" (Rachman, Hodgson & Marks, 1975) using a more convincing placebo and to examine contributions of both specific (i.e. exposure and response prevention) and non-specific (e.g. therapist supportiveness) factors. No preliminary hypothesis is offered but is stated that previous

trials “have consistently shown exposure and response prevention to be superior to the control condition”.

The study involved 18 participants, none of whom dropped out. All participants met DSM-IV criteria for OCD and had a history of OCD symptoms. They were divided into two groups that received either ERP or placebo (anxiety management therapy). Analysis of severity of patients’ OCD, depression and anxiety symptoms measured before and after the experiment suggested that the treatment significantly reduced patients’ symptoms of OCD without having a significant effect on their depressive symptoms.

“Clomipramine in treatment of Obsessive-Compulsive Disorder” (The Clomipramine Collaborative Study Group, 1991) reports “two large multicenter clinical trials” that aimed “to evaluate the therapeutic efficacy, safety and tolerability of up to 300 mg/day of clomipramine hydrochloride” in treatment of OCD. Although the authors do not present a preliminary hypothesis, it is (in reference to clomipramine) stated that “numerous studies have demonstrated its effectiveness”.

All patients who were studied “met the diagnostic criteria for OCD described in DSM-III”. Before start of the “active treatment” phase, the participants underwent a washout period followed by 2 weeks of single-blind placebo treatment. Patients who (throughout this period) did not exhibit “substantial degree of concomitant depression” (quantified using Hamilton Depression Rating Scale), scored at least 7 on the National Institute of Mental Health (NIMH) Global Obsessive Compulsive scale and were not excluded on other medical grounds (clinically significant cardiac, glaucoma etc.) underwent a final 10-week “active treatment” period. Across all centers, 520 patients completed this final phase.

The "active treatment" phase was designed to compare the group of patients who were administered increasing doses of clomipramine with the control group that was asked to take placebo pills. The patient's scores on Yale-Brown Obsessive Compulsive Scale (Y-BOCS) was used as the primary efficacy variable in addition to secondary variables NIMH Global OC scale, Physician's Global Evaluation of Therapeutic Change and Patient Self Rating of Therapeutic Change. All four of these variables were measured weekly. Post-treatment statistical analysis revealed that the treatment group experienced statistically significant reduction in OCD symptoms and significantly more side effects. The authors then concluded that clomipramine is more effective than placebo in reducing symptoms of OCD.

A closer evaluation of the two studies suggests they accomplish their goals to varying degrees of success and have many similarities and differences. For example, a striking difference that should be noted is between the number of participants who completed the two experiments. 520 patients fully completed the clomipramine study and this large number of subjects is arguably one of the key strengths of the experiment. Combined with control for independent variables and repeated weekly measurements, it allowed the authors to conclude "once and for all" that clomipramine is effective in treating OCD by making errors due to chance and unrepresentative sample highly unlikely. The small sample size used in the ERT study (only 18 patients), on the other hand, is not surprising — in fact, the Rachman et al. (1975), whose results the study is trying to reproduce also had a relatively small sample size (14) — as administering ERT requires a number of qualified therapists and treatment time proportional to the number of patients, and thus is much more resource-intensive than administering clomipramine (or placebo) pills. It should also be stated that a small sample size doesn't invalidate the results of the ERT study. It does, however, make it harder to generalize them to the whole population.

The two studies also differ in the way they address the issue of concomitant depression which is known to be a common comorbid disorder of OCD (Tükel, Polat, Özdemir, Aksüt, & Türksoy (2002)). The clomipramine study addresses this issue by filtering out patients with significant depressive symptoms—implications of this approach are discussed below. The ERT study on the other hand, uses the post-treatment statistical analysis to conclude that there was no correlation between depression and reduction in patients' OCD symptoms. This approach makes it hard to generalize the experiment to large sample sizes as larger sample sizes might reveal such a correlation.

As mentioned above, the clomipramine study excludes patients with significant depression. This might be a necessity as clomipramine and related substances are also used to treat depression (McTavish, & Benfield, 1990). However, between the ERT the clomipramine study, the duration for which the subjects had had symptoms is very different - in case of the latter, 520-281=239 of the patients had had the symptoms only for less than a year, while in case of the latter the average duration was more than 9.0 years for both groups. It might be the case that people who have OCD for long time develop depressive symptoms and thus were not eligible to participate in the clomipramine study. This makes results of the clomipramine study not completely generalizable to the whole population, as many people have symptoms of both OCD and depression (Tükel et al., 2002).

Exclusion of patients with depression also affects the validity of the conclusions about safety and tolerability of clomipramine. Although the study did compile an extensive list of possible side effects, concomitant depression might result in more severe or different side effects that might potentially make clomipramine intolerable. Moreover, side effects patients developed

were not systematically followed up after the trials were concluded. Therefore, the possibility of patients developing more severe conditions over time cannot be excluded.

Both studies described above measure and analyse multiple variables throughout the corresponding trials. Use of both physician and self-rated measurements in both experiments can result in more dependable conclusions. The ERT study also recorded severity of patients' depressive symptoms. This helped to ensure that the control and the treatment groups were indeed sufficiently similar, as there was no significant difference in any of the 7 measurements between control and treatment groups in pre-testing phase. Moreover, it allowed the authors to check for interference by depression in the final statistical analysis which was vital for validity of the results as patients with depression were not excluded.

Use of a comprehensive anxiety management package as a more credible placebo in the ERT experiment can be regarded as one of its strength. However, the experiment didn't control for types of patients' obsessions and compulsions and used the same amount of therapy time (14 hours) for all of them. It should be noted that ERT might be less effective or require longer treatment for certain obsessions.

The clomipramine study successfully establishes efficacy of clomipramine in reducing OCD symptoms. However, prescription of clomipramine should take into account the fact that patients with depression were systematically excluded from the study. This applies to Pat Montgomery too as she had symptoms of both OCD and depression for at least 3 years. Hence Pat might experience more severe side effects from clomipramine. Moreover, as Pat had previously taken tricyclic antidepressants, clomipramine would be unlikely to work.

The ERT study successfully reproduces results of previous research regarding efficacy of ERT in treatment of symptoms of OCD. I believe it would be a more suitable treatment for Pat as

it doesn't have severe side effects and is something she hasn't tried. However, it might be the case that the particular kind of compulsions Pat experiences are unresponsive to the treatment or require substantially more time than 14 hours used in the study.

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