Towards an international expert consensus for defining treatment response, remission, recovery and relapse in obsessive-compulsive disorder

Marked inconsistencies exist in how treatment response, remission, recovery and relapse are defined in clinical trials for obsessive-compulsive disorder (OCD). This impairs the comparability of results and communication in the field. Empirical methods (e.g., signal detection analyses) have been used to calculate the optimal amount of symptom improvement to classify an individual as a "responder" or "remitter", both in adults[1-4] and children[5] with OCD. Unfortunately, this has led to different recommendations.

The concept of "recovery", used in other mental disorders such as depression[6], is rarely used in the OCD literature. "Relapse" has been defined in some OCD studies as a return to pre-treatment symptom levels and in others as a worsening of symptoms to a certain degree[7]. These inconsistent definitions make comparisons across studies and treatment modalities challenging, and have led to different estimates of treatment efficacy and relapse risk[8]. The Reliable Change Index[9], a scale-standardized metric often used to alleviate this issue, also has limitations, including the inability to use relevant normative samples across studies, leading to different severity cut-off scores[10].

Since these constructs are man-made rather than natural entities, expert consensus may be a more appropriate approach to their definition. However, previous proposals[7] have not been met with wide acceptance. A broader, international, multidisciplinary consensus can create investment in standardization and motivate field-wide adoption of the resulting definitions. Here we describe the results of a multiround, web-based Delphi survey[11], the aim of which was to facilitate a global, expert consensus regarding the conceptual and operational definitions of treatment response, remission, recovery and relapse for use in clinical trials of OCD.

First, second, last and corresponding authors of international peer-reviewed OCD papers published between 2007 and 2013 were invited to participate. Participants included mainly psychologists and psychiatrists with expertise in pediatric and/or adult OCD. In a first round, participants were presented with conceptual definitions of treatment response, remission, recovery and relapse adapted from the depression literature[6] and different ways to operationalize them, and were asked with which they agreed.

Analysis of the responses obtained in Round 1 (N=468) showed that there was broad consensus regarding the conceptual definitions (>88% for all), but disagreement regarding their operationalization. In Round 2, participants (N=326) received Round 1 results, and new questions were asked to facilitate consensus on the operational definitions. Analysis of the response showed continued consensus for all conceptual definitions (>95%), and acceptable consensus (>82%) for all operational definitions, with one exception that is noted below. The consensus definitions are the following:

- *Treatment response*. Conceptual: A clinically meaningful reduction in symptoms (time, distress and interference associated with obsessions, compulsions and avoidance) relative to baseline severity in an individual who meets diagnostic criteria for OCD. Operational: A ≥35% reduction in (Children's) Yale-Brown Obsessive Compulsive Scale ((C)Y-BOCS) scores plus Clinical Global Impression – Improvement (CGI-I) rating of 1 ("very much improved") or 2 ("much improved"), lasting for at least one week.
- *Partial response*. Conceptual: Defined as in *treatment response* above. Operational: A ≥25% but <35% reduction in (C)Y-BOCS scores plus CGI-I rating of at least 3 ("minimally improved"), lasting for at least one week.
- *Remission*. Conceptual: The patient no longer meets syndromal criteria for the disorder and has no more than minimal symptoms. Residual obsessions, compulsions and avoidance may be present, but are not time consuming and do not interfere with the person's everyday life. Operational: If a structured diagnostic interview is feasible, the person no longer meets diagnostic criteria for OCD for at least one week. If a structured diagnostic interview is not feasible, a score of ≤12 on the (C)Y-BOCS plus Clinical Global Impression - Severity (CGI-S) rating of 1 ("normal, not at all ill") or 2 ("borderline mentally ill"), lasting for at least one week.
- *Recovery*. Conceptual: The patient no longer meets syndromal criteria for the disorder and has had no more than minimal symptoms. Residual obsessions, compulsions and avoidance may be present and slightly fluctuate in severity over time but, overall, they are not time consuming and do not interfere with the person's everyday life and therefore require no further treatment. The clinician may begin to consider discontinuation of treatment or, if the treatment continues, the aim is to prevent relapse. Operational: As in *remission* above, but lasting at least one year.
- *Relapse*. Conceptual: After response or remission or recovery was achieved, the patient experiences a return of symptoms. For patients who were in remission or recovered, obsessions, compulsions and avoidance are again sufficiently time consuming, distressing and impairing for the individual to meet diagnostic criteria for OCD. Operational (for responders who did not necessarily remit/recover): The person no longer meets the definition of ≥35% reduction on (C)Y-BOCS scores (relative to pre-treatment) plus CGI-I rating of 6 ("much worse") or higher for at least one month. Operational (for remitters/recovered): OCD criteria are met

again, according to a structured interview (if feasible). Alternatively, the person no longer meets the definition of remission/recovery (i.e., the person again scores 13 or above on the (C)Y-BOCS plus CGI-I rating of 6 ("much worse") or higher for at least one month, or needs to be withdrawn prematurely from the trial before one month has elapsed due to a severe worsening of OCD symptoms. Discontinuation of the trial due to reasons other than worsening in OCD symptoms (e.g. suicide risk) is not considered a relapse.

Two comments are worth adding. First, in Round 1, to consider a patient a treatment responder or remitter, many experts (56% and 58%, respectively) thought that sustained improvement should be present for at least one month. However, this proposed duration clashes with the (C)Y-BOCS, which asks about symptoms during the "previous week". In addition, response has been defined in most prior OCD trials at the end of treatment. In Round 2, despite explicating this, only 64% and 46% of experts agreed with the proposal of "at least one week" for the duration of response and remission, respectively. To accommodate this disagreement in the field, the duration for response and remission above allows for "at least one week" and we recommend additional follow-up assessments where possible to assess whether response/remission status has been maintained over longer periods.

Second, to judge that a patient relapsed, many experts (Round 1: 48%; Round 2: 87%) thought that worsening of symptoms should be present for at least one month to protect against transient flares in symptoms. However, some patients acutely deteriorate and require immediate clinical intervention[12]. For this reason, the relapse definition above indicates that patients who need to be removed from treatment protocols before one month because of worsening of OCD symptoms should also be considered to have relapsed.

In summary, agreement was reached on how to define response, remission, recovery and relapse across a range of international professionals with expertise in OCD. We recommend that researchers report their results using these definitions whenever possible. As outlined by Frank et al[6], doing so will lead to: a) improved design, interpretation and comparison of clinical trials of various modalities; b) improved communication of research findings between professionals and to the general public; c) improved guidelines for evaluation of clinical efficacy of various treatments by regulatory agencies; and d) development of improved treatment guidelines for clinical practice.

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Sustaining Individual Placement and Support (IPS) services: the IPS Learning Community

Worldwide, the deficiencies in community mental health services are well known: despite the development of many evidence-based practices, few clients with severe mental illness actually receive effective, recovery-oriented services[1]. Evidence-based practices are often implemented poorly and rarely endure beyond initial enthusiasm and grant funding. We examined two-year sustainment rates for a network of programs implementing Individual Placement and Support (IPS), an evidence-based practice to help people achieve competitive employment[2]. IPS is spreading in the U.S. and internationally[3], including in Europe, Australia, Asia, and North America. Yet, long-term continuation of these services has been uncertain.

Because multiple factors influence a program's long-term survival, a comprehensive international learning community has been developed to ensure sustainability of IPS. Beginning in the U.S. in 2001, the Dartmouth Psychiatric Research Center and the Johnson & Johnson Office of Corporate Contributions partnered to develop a multifaceted program to strengthen state and local infrastructures to promote access to IPS through broad dissemination, high-quality implementation, and long-term sustainment. After starting as a small demonstration in three states, the program has evolved internationally into a network of 19 states and 3 European countries known as the IPS Learning Community[4].

Historically, the term *learning collaborative* has been used to define a network of organizations with a shared goal of improving treatment for a specific medical condition, facilitated by regular communication and collection and dissemination of