

A Narrative Literature Review of Internet-Based Cognitive Behavioral Therapy in comparison to In-Person Cognitive Behavioral Therapy on Obsessive Compulsive Disorder

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Traditionally intervention for Obsessive-Compulsive Disorder (OCD) has been Cognitive Behavioural Therapy (CBT), including specifically Exposure and Response Prevention (ERP), however with growing need for larger access to therapy, in-person therapy has been limited to geographical and logistical barriers. Internet – Based Cognitive Behavioural Therapy (ICBT) addresses these concerns therefore offering a more affordable and accessible option. In the last two decades, there have been pilot studies and randomized control trials to see the efficacy of ICBT. The studies have either focused mainly on Anxiety or Depression disorders, and not much on Obsessive Compulsive disorders. The aim of this research is to evaluate the available literature that assess the efficacy of Internet - Based Cognitive Behavioural Therapy (ICBT) on Obsessive- Compulsive Disorders. Research studies from recognized databases and related psychological research journals were selected specifically from the last decade. The overall result of the review states that ICBT has satisfactory efficacy as an intervention for OCD, when studied against in-person therapy. While, ICBT has seen randomized control trials and pilot trials, there is a need for studies with larger sample sizes. Special focus should be given to specific populations with differing demographic identities such as elder adults, co-morbid population. There is an increasing demand for research on the efficacy of ICBT for Obsessive-Compulsive Related Disorders (OCRD), share many overlapping features with OCD but also possess distinct diagnostic criteria and therapeutic needs that warrant their own directed research.

Keywords: Obsessive Compulsive Disorders, Internet – Based Cognitive Behavioral Therapy (ICBT), Compulsions, Obsessions, Systematic Literature Review, Literature Review, Analysis, Behavioral Therapy, Randomized Control Trials

1 INTRODUCTION

OCD is a crippling mental illness marked by recurring, intrusive thoughts (called obsessions) and repetitive actions or ideas (called compulsions) carried out to ease suffering. It significantly impacts individuals' quality of life, often interfering with daily functioning, relationships, and productivity. The lifetime prevalence of OCD is approximately 2-3% globally, making it a substantial public health concern. Despite its prevalence, access to effective treatment remains a persistent challenge for many individuals suffering from this disorder.

The standard treatment for OCD has long been **Cognitive Behavioral Therapy (CBT)**, especially **Exposure and Response Prevention (ERP)**, which is recognized as a gold-standard intervention. ERP includes systematic exposure to feared stimuli while preventing compulsive responses, enabling individuals to confront and reduce their anxiety over time. Although highly effective, traditional in-person CBT presents significant limitations, including geographical and logistical barriers, limited availability of trained therapists, high costs, and stigma connected with visiting psychiatric facilities. Particularly in underprivileged and rural areas, these problems frequently lead to delayed or insufficient treatment for individuals in need.

In recent years, the rise of technology has facilitated the development of **Internet-Based Cognitive Behavioral Therapy (ICBT)**, an innovative approach to addressing these barriers. ICBT delivers CBT interventions through digital platforms, such as web-based programs, mobile applications, and tele-therapy sessions. This modality allows for flexible, cost-effective, and geographically independent therapy, making it an attractive alternative to traditional in-person treatment. Studies on ICBT have demonstrated its efficacy in treating a range of mental health conditions, including anxiety disorders and depression, with evidence suggesting that it may be comparable to in-person therapy in certain contexts.

Despite these promising developments, research on the application of ICBT specifically for OCD remains limited. The existing body of literature has primarily focused on broader anxiety or depressive disorders, often excluding OCD or addressing it tangentially. Given the unique characteristics of OCD, including its chronic course, complex symptomatology, and high rates of treatment resistance, it is imperative to evaluate whether ICBT can match the efficacy of in-person CBT for this condition. Furthermore, the growing recognition of **Obsessive-Compulsive and Related Disorders (OCDs)**—such as Body Dysmorphic Disorder (BDD), Hoarding Disorder, and Trichotillomania—warrants exploration of ICBT's potential to address these overlapping but distinct disorders.

This narrative review seeks to bridge the gap in the current understanding of ICBT's efficacy for OCD by synthesizing the available literature on the subject. Over the past two decades, a number of pilot studies and randomized controlled trials (RCT) have been carried out to assess ICBT's viability as a treatment option. While these studies have offered valuable insights, they often suffer from limitations such as small sample sizes, lack of diversity in demographic representation, and limited exploration of long-term outcomes. This review aims to critically evaluate these studies, highlight their findings, and identify areas for future research.

In addition to addressing the question of efficacy, this review examines the broader implications of ICBT for OCD treatment. It explores the unique advantages and challenges associated with internet-based interventions, including issues of patient adherence, therapeutic alliance, and accessibility for marginalized populations. It also considers the potential for ICBT to complement rather than replace traditional in-person therapy, offering a hybrid model of care that maximizes the strengths of both approaches.

In sum, this narrative review not only evaluates the efficacy of ICBT as an alternative to in-person CBT for OCD but also positions it within the broader context of mental health care innovation. By shedding light on this emerging field, it aims to inform clinical practice and inspire further research to meet the evolving needs of individuals with OCD and related disorders.

2 OBJECTIVES

2.1 PRIMARY OBJECTIVE:

To assess the effectiveness of Internet-Based Cognitive Behavioural Therapy in comparison to In-Person Cognitive Behavioural Therapy (CBT) in improving prognosis of Obsessive-Compulsive Disorder (OCD)

2.2 SECONDARY OBJECTIVES:

- To identify research gaps in literature of the field
- To assess the patient satisfaction
- To assess the availability and affordability of both therapy approaches
- To identify unique challenges faced by the patients

3 RESEARCH METHODOLOGY

This review was conducted to summarize and analyze the available literature on internet- based cognitive behavioural therapy (ICBT) for Obsessive Compulsive Disorder (OCD). A narrative approach was taken due to its capacity to allow an in-depth analysis of diverse methodologies, special populations and contexts. In order to conduct said review, a search was done on online search engines such as Psych INFO, PubMed and Google Scholar. Keywords were used to ensure the inclusion of a wide range of studies. The main terms included:

- “Internet Based Cognitive Behavioural Therapy”, “ICBT”
- “In-person cognitive behavioural therapy” OR “CBT”
- “Obsessive Compulsive Disorder”, “OCD”
- “Effectiveness,” “efficacy”, “patient satisfaction,” AND “Effect”.

Only studies from the last decade – 2024 to 2013 were included to ensure relevant research is included, and it is focused on recent advancements and trends in the field(Rana & Tyagi, 2019a; Tyagi et al., 2017, 2019, 2020, 2021).

- **Inclusion Criteria:**

1. Studies that directly compared Internet Cognitive Behavioural Therapy with in-person Cognitive Behavioural Therapy in treatment Obsessive Compulsive Disorder.
2. Research focusing on therapeutic outcomes, patient experiences, or implementation challenges.
3. Qualitative, quantitative, and mixed-methods studies.

- **Exclusion Criteria:**

1. Studies focusing singularly on unrelated therapy approaches or other disorders.
2. Studies published in languages other than English.
3. Literature with insufficient methodological rigor or incomplete data.

Total of 14 relevant studies were selected and were analysed for two major themes: effectiveness of ICBT, Barriers of implementations of ICBT. The findings were critically evaluated to identify strengths, limitations and gaps in present literature.

4 DISCUSSION

In the 14 studies selected for this review. There were six Randomized Control Trials (RCT) that fulfilled the exclusion and inclusion criteria. The studies were conducted on both the adult and adolescents population. Both populations showed similar results. In the RCTs, it was observed that the trials resulted in similar efficacy for both CBT and ICBT groups. There is an important caveat to this statement. That being Unguided Internet Based Cognitive Therapy Versus Therapist Guided Internet Based Cognitive Behavioural Therapy. The latter has similar efficacy in OCD treatment, but not the former, although not a large difference but more significant than Therapy Guided Internet Based Cognitive Based Therapy results. Due to this, the studies suggest ICBT be used for Stepped Care Program.

Stepped Care program refers to a model of therapy, wherein clients are first provided a low-intensity therapy initially, they are then monitored regularly for their progress. According to their progress they are either ‘stepped up’ - which refers to more intensive treatment if they are unable to show improvements in their current level of treatment. Stepped Care Program approach can be helpful if implemented for those who do not have access to In person CBT. It additionally frees Face To Face CBT for more intense and severe OCD cases.

There was also lower patient satisfaction reported in ICBT compared to Face to Face CBT. This is a notable difference, as lower patient satisfaction can lead to high dropout rates which really hinders treatment and is very dangerous, as it can deter future patients as well.

There is a large need for RCTs to be conducted to see the effectiveness of ICBT in different demographics. Till now there have been only a handful of RCTs conducted on special populations, even those studies have been only geographic specific, for example there have been trials conducted in the Korean population. The trials have not been conducted on different genders, various socio-economic backgrounds. Although during the developmental course of OCD, it rarely changes during late adulthood, still elderly population needs to be tested for as well. This is due to the fact that they face unique challenges, such as not being familiar with new formats or therapy models, or reporting lower patient satisfaction rates (Rana & Tyagi, 2019b; Tyagi et al., 2021; Tyagi & Moses, 2017).

It is also important to have the elderly considered as ICBT shows promise as it offers an at-home option for those with disabilities or mobility issues, who cannot do Face to Face CBT. Hence the efficacy of ICBT as an intervention needs to be tested and evaluated.

Especially low socio-economic background as many studies suggest that ICBT is an affordable alternative, we need to then evaluate if it is a successful model on the population we plan to implement the treatment on. There needs to be large cohort studies conducted to fill these gaps in literature. RCTs also are limited in their capacity to test interventions, as they are unable to ascertain obstacles that go further than clinical trials that are highlighted in implemented routine healthcare.

Meta-analyses were selected as well for the review. The studies are even fewer than RCTs. They were conducted on present research available. They evaluated and observed that ICBT showed promise and had similar outcomes as the RCTs did. Therapy Guided or Assisted ICBT is superior to ICBT marginally. The results also indicated that individuals with co-morbid depression were not the improvement that other OCD patients were showing. This raises a concern as prevalence of comorbid depression and anxiety is high in OCD patients, around 41% for Major Depressive Disorder. This is a large section of the population and hence treatment needs to be altered for these patients. The meta-analysis concurred that further research and testing is required as with the present research, only a limited view and perspective is offered on the field.

Feasibility studies were chosen for the review as well. They offered an insight into acceptability, affordability and feasibility of ICBT. It was observed that ICBT has high acceptability, feasibility and affordability in the general population as well as the pediatric population.

5 CONCLUSION

to summarize, Internet-Based Cognitive Behavioral Therapy (ICBT) has high potential and shows great promise as a therapy model individually and as a substitute for In-Person Cognitive Behavioral Therapy for treatment of individuals with Obsessive-Compulsive Disorder (OCD). Due to its similar efficacy of Face to Face therapy, especially when it is Therapist-Guided or Assisted, ICBT helps with better access that is caused by geographical, financial, and social barriers. This makes it a viable and promising option for those in need of alternative treatment.

That said, there are some factors to be taken into consideration, such as Patient satisfaction is reported lower in ICBT when compared to Face to Face Therapy. This could lead to higher dropout rates. Moreover, current literature is limited in its scope, most studies and articles are focused on either small or specific populations, leaving literature gaps about

its effectiveness for diverse demographics like the Elder population, patients with comorbid conditions, and those from lower-income backgrounds.

Moving forward,, more large-scale studies and inclusive studies are needed to get a clear idea of ICBT's potential. This will also lead to refining the model to better fit the needs of the patients. Ultimately ICBT shows great promise, and in this growing technological world, its need will increase with time, it needs more research and at a larger scale.

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