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Therapist-assisted Internet-delivered cognitive behavior therapy for depression and anxiety: Translating evidence into clinical practice

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ABSTRACT

This dissemination study examined the effectiveness of therapist-assisted Internet-delivered Cognitive Behavior Therapy (ICBT) when offered in clinical practice. A centralized unit screened and coordinated ICBT delivered by newly trained therapists working in six geographically dispersed clinical settings. Using an open trial design, 221 patients were offered 12 modules of ICBT for symptoms of generalized anxiety ($n = 112$), depression ($n = 83$), or panic ($n = 26$). At baseline, midpoint and post-treatment, patients completed self-report measures. On average, patients completed 8 of 12 modules. Latent growth curve modeling identified significant reductions in depression, anxiety, stress and impairment ($d = .65–.78$), and improvements in quality of life ($d = .48–.66$). Improvements in primary symptoms were large ($d = .91–1.25$). Overall, therapist-assisted ICBT was effective when coordinated across settings in clinical practice, but further attention should be given to strategies to improve completion of treatment modules.

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1. Introduction

Depression and anxiety are highly prevalent and associated with significant morbidity for the individual and substantial burden for the health care system (Eaton et al., 2008). Internet-delivered cognitive behavior therapy (ICBT) represents a pragmatic approach that may address common treatment barriers such as limited access to mental health providers, unwillingness to disclose mental health concerns, and challenges seeking care due to limited time, rural or remote residence, and or mobility difficulties (Andersson, 2009). ICBT involves reviewing psychoeducational materials presented in modules over the Internet and is commonly paired with therapist-assistance provided by phone or secure messaging.

Over the past decade, research has demonstrated the efficacy of ICBT for the treatment of depression and anxiety disorders. In a meta-analysis of 22 controlled studies that compared ICBT for depression and anxiety with or without therapist assistance to a waiting list control condition, effect size superiority over the control group was 0.88 and symptom improvement was shown to be maintained after 26-weeks on average post-treatment (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010). Results also indicated high levels of accessibility, adherence, and satisfaction with this modality. Even more impressive is that several studies reported similar treatment outcomes when comparing therapist-assisted ICBT to face-to-face therapy for depression and anxiety disorders (Andersson, Cuijpers, Carlbring, Riper, & Hedman, in press).

Although the benefits of ICBT have been firmly established in controlled studies, the performance of this approach remains understudied when delivered in routine clinical practice. Efficacy trials are typically conducted using strict protocols and delivered by a small number of therapists within specialized treatment settings. These trials often utilize extensive and strict exclusion criteria that are not representative of conditions evident in routine clinical practice. For wide-scale dissemination to occur, it is critical to demonstrate the effectiveness of ICBT outside of highly controlled clinical trials (Streiner, 2002).

Preliminary evidence is encouraging regarding the effectiveness of ICBT in routine clinical practice. For example, in a large study, 1500 community patients were treated through a Dutch clinic offering therapist-assisted ICBT for depression, panic, post-traumatic stress, and burnout (Ruwaard, Lange, Schrieken, Dolan, & Emmelkamp, 2012). Results indicated that effect sizes and recovery rates were comparable to, or somewhat superior than, those observed in previous controlled trials, and similar to those of face-to-face CBT. Moreover, patients reported high satisfaction with the programs, with over 71% completing their programs, and symptom improvement sustained up to one year post-treatment. Ruwaard and colleagues (2012) noted the importance of examining ICBT in other clinical contexts. In a recent review of effectiveness studies, it was found that ICBT appears to be effective when delivered in clinical practice (Andersson & Hedman, 2013). The review included 4 controlled trials and 8 open studies, involving a total of 3888 patients. However, studies have only been conducted in Sweden, Australia, and the Netherlands, indicating a need to evaluate ICBT in other countries and settings.

In the present research, we describe the utilization and effectiveness of ICBT programs for depression, generalized anxiety, and panic disorder when delivered in clinical practice. The model of delivery was unique with a centralized unit responsible for developing and maintaining the ICBT web application, training and monitoring community therapists or supervised graduate students working in one of six geographically dispersed clinics, and screening and assigning self-referred or provider-referred patients to therapists (Hadjistavropoulos et al., 2011). A centralized model was implemented as this was considered more cost-efficient with a higher degree of oversight and quality control than if each clinic worked independently. ICBT represented a new model of service delivery in all clinics and hence the trial can be described as a dissemination project. The ICBT program content was licensed from an established virtual clinic in Australia (Klein, Meyer, Austin, & Kyrios, 2011). The objective of the study was to determine the external validity of the ICBT programs when delivered in clinical practice in this manner. We expected that the treatment programs would produce moderate to large effects (Andersson & Hedman, 2013). We also hypothesized that treatment satisfaction would be high. This research is likely to assist with the transfer of knowledge to clinical practice and may encourage other community clinics to consider implementing ICBT in clinical practice.

2. Methods

2.1. Design and ethics

This was an uncontrolled pre/post treatment study that was approved by all review boards of the institutions involved. All patients provided electronic informed consent that their pooled data could be used for research purposes.

2.2. Participants and recruitment

The current sample comprised patients who requested ICBT between October 2010 and April 2013. Patients were notified of ICBT gradually over this time period as therapists were trained and became available to provide services. Patients learned of the service by means of community mental health clinics, family physicians, media stories (e.g., radio, television, newspaper), online advertisements on various web pages, as well as word of mouth. In order to access services, patients first underwent a centralized pre-screening telephone interview regarding demographic details, computer and Internet access and use, and severity and chronicity of symptoms.

Patients who fulfilled the initial inclusion criteria were invited to participate in a full-clinical interview. This telephone interview consisted of the administration of the MINI International Neuropsychiatric Interview (MINI; Sheehan et al., 1998), a structured clinical interview assessing psychiatric disorders. The interviews, conducted by the Unit coordinator and five trained clinical psychology graduate students, determined whether patients met clinical or subclinical criteria for major depressive episode, generalized anxiety disorder, or panic disorder. As a clinical service, it was considered important to provide treatment to those with both clinical and subclinical symptoms. Interviews were also used to rule out exclusionary clinical problems where face-to-face services were deemed more appropriate, including psychotic disorders, manic episodes, alcohol or substance dependence or abuse, and suicide plan and or intent.

A total of 379 adult patients completed pre-screening, with 221 offered ICBT for symptoms of generalized anxiety ($n = 112$), depression ($n = 83$), or panic ($n = 26$). Criteria for inclusion were: (a) being at least 18 years of age; (b) residing in Saskatchewan, Canada; (c) self-reported access to, and comfort using, a computer and the Internet; (d) consent to notify a physician of their participation; (e) if taking medication, stable dose for more than a month; (f) not participating in other psychotherapy; (g) reporting no current or recent problems with psychotic disorders, manic episodes, alcohol or substance dependence or abuse, or suicide plan or intent; and (h) symptoms of depression, generalized anxiety, or panic (defined as a total Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) score above 5, Generalized Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) score above 5, or Panic Disorder Severity Scale-Self Report (PDSS-SR; Houck, Spiegel,