Clinical and Cost-Effectiveness of Therapist-Guided Internet-Delivered Cognitive Behavior Therapy for Older Adults With Symptoms of Depression: A Randomized Controlled Trial

Nickolai Titov
Blake F. Dear
Macquarie University

Shehzad Ali
University of York

Judy B. Zou
Carolyn N. Lorian
Luke Johnston
Matthew D. Terides
Rony Kayrouz
Macquarie University

Britt Klein
Federation University Australia, The Australian National University, and Swinburne University of Technology

Milena Gandy
Vincent J. Fogliati
Macquarie University

Depression is a common and significant health problem among older adults. Unfortunately, while effective psychological treatments exist, few older adults access treatment. The aim of the present randomized controlled trial (RCT) was to examine the efficacy, long-term outcomes, and cost-effectiveness of a therapist-guided internet-delivered cognitive behavior therapy (iCBT) intervention for Australian adults over 60 years of age with symptoms of depression. Participants were randomly allocated to either a treatment group (n = 29) or a delayed-treatment waitlist control group (n = 25). Twenty-seven treatment group participants started the iCBT treatment and 70% completed the treatment within the 8-week course, with 85% of participants providing data at posttreatment. Treatment comprised an online 5-lesson iCBT...
course with brief weekly contact with a clinical psychologist, delivered over 8 weeks. The primary outcome measure was the Patient Health Questionnaire-9 Item (PHQ-9), a measure of symptoms and severity of depression. Significantly lower scores on the PHQ-9 (Cohen’s d = 2.08; 95% CI: 1.38 – 2.72) and on a measure of anxiety (Generalized Anxiety Disorder-7 Item) (Cohen’s d = 1.22; 95% CI: 0.61 – 1.79) were observed in the treatment group compared to the control group at posttreatment. The treatment group maintained these lower scores at the 3-month and 12-month follow-up time points and the iCBT treatment was rated as acceptable by participants. The treatment group had slightly higher Quality-Adjusted Life-Years (QALYs) than the control group at posttreatment (estimate: 0.012; 95% CI: 0.004 to 0.020) and, while being a higher cost (estimate $52.9 ± 95% CI: −23.8 to 128.2), the intervention was cost-effective according to commonly used willingness-to-pay thresholds in Australia. The results support the potential efficacy and cost-effectiveness of therapist-guided iCBT as a treatment for older adults with symptoms of depression.


Keywords: depression; older adults; internet; cognitive behavior therapy (CBT); cost-effectiveness

Depression is a major health issue among older adults. Research indicates that 8% to 10% of people over 60 years of age experience clinically significant symptoms (Pirkis et al., 2009) but that depression is often undiagnosed in older adults (Byers, Yaffe, Covinsky, Friedman, & Bruce, 2010; Gum, King-Kallimanis, & Kohn, 2009). This is significant because depression in older adults is associated with poorer physical health (Brenes et al., 2008; Cockayne et al., 2011) and an increased risk of suicide (Grek, 2007). Unfortunately, despite the availability of effective treatments (Ayers, Sorrell, Thorp, & Wetherell, 2007; Gould, Coulson, & Howard, 2012; Nordhus & Pallesen, 2003; Scogin, Welsh, Hanson, Stump, & Coates, 2005), research indicates that the number of older adults seeking and receiving evidence-based treatment is low (Beekman et al., 2002; Wetherell, Lenze & Stanley, 2005). There are numerous barriers to traditional face-to-face psychological treatments and the most significant to older adults include stigma, mobility limitations, costs of treatment, and the limited number of trained therapists. Thus, there is considerable need for treatment approaches that overcome barriers and increase access to evidence-based treatment for older adults.

Internet-delivered cognitive behavior therapy (iCBT) is one approach that may reduce barriers to psychological treatments (Andersson & Cuijpers, 2009; Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010; Cuijpers et al., 2009). iCBT treatments provide the same information and teach similar skills as traditional face-to-face CBT treatments, but do so via the internet using structured materials. iCBT may be administered as a self-guided intervention, or may include therapist support provided via email and telephone (Titov, 2011). There is now considerable meta-analytic data supporting the efficacy of iCBT in treating adults with anxiety and depression (Andersson & Cuijpers, 2009; Andrews et al., 2010; Cuijpers et al., 2009). Evidence is also emerging indicating that the results of iCBT are comparable to those obtained in traditional face-to-face CBT (Cuijpers Donker, van Straten, Li, & Andersson, 2010; Kiropoulos et al., 2008) and that iCBT is cost-effective (Hedman, Ljotsson, & Lindfors, 2012).

Clinical trials of computer-delivered CBT and iCBT have, however, focussed on adults aged 20 to 60 years to date (Crabb et al., 2012). However, the promising results of this research and the increasing use of the internet by older adults in many countries, including Australia (Ewing & Thomas, 2012), has triggered targeted research focusing on the efficacy of iCBT with older adults (e.g., adults 60 years and older) (Dear et al., 2013; Spek et al., 2007; Zou et al., 2012). For example, a randomized controlled trial (RCT; n = 301) targeting adults over the age of 50 (M = 55; SD = 4.6) with subclinical symptoms of depression revealed an iCBT intervention was at least as effective as group CBT in reducing symptoms of depression, and that both treatments were superior to a waitlist control group (Spek et al., 2007). More recently, a feasibility open trial evaluated an iCBT intervention for adults over the age of 60 (M = 63.4; SD = 5.08) with depression and found a large within-group effect size (Cohen’s d > 1.0) (Dear et al., 2013). While the results of this open trial are encouraging, a controlled research trial is needed to explore the efficacy and cost-effectiveness of iCBT for older adults with symptoms of depression.

The present study was designed to examine the efficacy, longer-term outcomes, and cost-effectiveness of a new iCBT intervention, the Managing Your Mood Course, for older adults with symptoms of depression, using an RCT design comparing a treatment and a waitlist control group. The Managing Your Mood Course is a five-lesson intervention delivered over 8 weeks with telephone and email support from a therapist. It was hypothesized that: (a) the treatment group would report significantly reduced symptoms of depression at posttreatment compared with the waitlist-control group, (b) symptom reductions of the treatment group would be sustained at 3-month and 12-month follow-up, and (c) the iCBT treatment would be cost-effective based
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات