

Internet-Delivered Cognitive Behavioural Therapy for Major Depressive Disorder and Anxiety Disorders

Key Messages

- It is recommended that guided internet-delivered cognitive behavioural therapy (iCBT) is offered to adults with mild-to-moderate major depressive disorder and/or anxiety disorders.
- The guidance of a therapist in iCBT may support tailoring of the intervention to reflect a patient's priorities and needs and facilitate adherence to treatment.
- It may be necessary to offer a variety of program options to ensure people who are referred to iCBT are able to find programs that are culturally and contextually appropriate and meet their individual needs.
- iCBT may offer a viable service option for people with mild-to-moderate major depression and/or anxiety disorders who have limited access to face-to-face therapy.
- Integration of iCBT into clinical care will facilitate further monitoring and evaluation of iCBT-related outcomes.

Context

For individuals with depression or anxiety disorders, cognitive behavioural therapy (CBT) is an effective psychological treatment and the most commonly used form of psychotherapy. While CBT is traditionally delivered in a face-to-face session between a patient and a therapist, an alternative option for CBT delivery over the internet (internet-delivered CBT; iCBT) is also available. iCBT may offer ways for some patients to overcome barriers to accessing timely and effective therapy.

Technology

iCBT involves the delivery of CBT via an online platform and requires the use of a computer, smartphone, or tablet with an internet connection. iCBT programs are typically comprised of a series of modules that include readings, activities, and messaging. iCBT can be guided (patients communicate with a regulated health care professional^a or a coach during treatment) or unguided (patients work through the program on their own). Access options, program structure, level of support, and cost vary between available programs.

Issue

A wide variety of programs are currently available in Canada. However, the effectiveness of iCBT is not well-established, it is not currently funded in a systematic way in Canada, and concrete frameworks for its implementation and integration into clinical practice have not yet been established.

Methods

CADTH collaborated with Health Quality Ontario (HQO) to conduct a health technology assessment that involved an evaluation of the following aspects of iCBT for the treatment of major depression and anxiety disorders: clinical effectiveness and safety, cost-effectiveness, patients' perspectives and experiences (qualitative evidence synthesis and direct consultation), and ethical and implementation considerations. The Health Technology Expert Review Panel (CADTH) and the Ontario Health Technology Advisory Committee (HQO), developed recommendations on the appropriate use (CADTH)¹ and public funding (HQO)² of guided iCBT.

Results

Based on a review of the clinical evidence, it was determined that compared with waiting list, guided iCBT improves symptoms of mild-to-moderate major depression and select anxiety disorders. Additionally, evidence of limited quality suggested that iCBT may lead to a larger reduction of symptom severity than treatment with usual care. Compared with waiting list or usual care, iCBT may also improve quality of life, satisfaction with treatment, and remission and recovery rates. It is not known whether iCBT is more effective than individual or group face-to-face CBT. Information regarding the safety of iCBT was unavailable in the reviewed clinical literature.

An economic model by HQO³ was adapted to incorporate additional findings from two CADTH rapid responses^{4,5} and to reflect a pan-Canadian context. The CADTH reanalyses found that guided iCBT was cost-effective over a one-year time horizon at willingness-to-pay thresholds under \$50,000 and \$100,000 per quality-adjusted life-year (QALY) gained in patients with major depression and anxiety disorders, respectively, when compared with usual care.^b Unguided iCBT was found to be more costly and less effective (in terms of QALYs) compared with usual care. The models assumed patients

would have full access to the psychotherapies and the potential cost-effectiveness of these interventions under situations of capacity constraints is unknown.

Most patients feel that despite some perceived limitations, iCBT provides greater control and flexibility over the time, pace, and location of therapy. Patients generally value therapist support; however, variable experiences with iCBT were reported. Given the variation of experiences and preferences of iCBT for program users, a tailored approach, in terms of content, level of support, and monitoring, may be considered to reflect a patient's priorities and needs.

iCBT provides a non-traditional therapist-client interaction. In this context, some aspects of treatment such as establishing a trusting therapist-client relationship or the capacity of therapists to adequately identify and manage client distress and risk may be challenging.

Some of the barriers to iCBT implementation include lack of awareness or training of practitioners in delivering care through the internet, gaps in technical capability, financial costs for establishing required infrastructure, and legal restrictions to offering cross-province service. Given the online mode of delivery of iCBT, multiple risks and concerns regarding data security, privacy, and confidentiality exist. Mechanisms to anticipate and mitigate relevant risks must be ensured. Engagement of multiple stakeholders in the development of strategies and standards for integrating iCBT into clinical care pathways may facilitate implementation and increase access to iCBT in Canada.

^a Regulated health professionals may include psychologists, psychotherapists, nurses, physicians, social workers, or occupational therapists.

^b Usual care is defined as any treatment prescribed by a general practitioner.

References

1. CADTH. Internet-delivered cognitive behavioural therapy for major depressive disorder and anxiety disorders: a health technology assessment. 2019; <http://www.cadth.ca/icbt>. Accessed 2019 Mar 14.
2. Health Quality Ontario. Internet-delivered cognitive behavioural therapy for major depression and anxiety disorders: Health Quality Ontario recommendation. Toronto (ON): Queen's Printer for Ontario; 2019: <https://www.hqontario.ca/Portals/0/documents/evidence/reports/recommendation-internet-delivered-cognitive-behavioural-therapy-en.pdf>. Accessed 2019 Mar 14.
3. Internet-delivered cognitive behavioural therapy for major depression and anxiety disorders: a health technology assessment. *Ont Health Technol Assess Ser*. 2019 Feb;19(6):1-199. <https://www.hqontario.ca/Portals/0/documents/evidence/reports/hta-internet-delivered-cognitive-behavioural-therapy.pdf>. Accessed 2019 Mar 1.
4. Internet-delivered cognitive behavioural therapy for major depression and anxiety disorders: a review of clinical effectiveness. (*CADTH Rapid response report: summary with critical appraisal*). Ottawa (ON): CADTH; 2018: <https://cadth.ca/internet-delivered-cognitive-behavioural-therapy-major-depression-and-anxiety-disorders-review>. Accessed 2019 Jan 29.
5. Guided versus unguided Internet-delivered cognitive behavioural therapy for major depressive disorder and anxiety disorders: comparative clinical effectiveness. (*CADTH Rapid response report: summary of abstracts*). Ottawa (ON): CADTH; 2018: <https://cadth.ca/guided-versus-unguided-internet-delivered-cognitive-behavioural-therapy-major-depressive-disorder>. Accessed 2019 Jan 29.

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