Aim

The objective of this Health Technology Assessment (HTA) was to inform decisions about whether internet-delivered cognitive behavioural therapy (iCBT) should be offered as a treatment option for chronic non-cancer pain as part of a multidisciplinary approach when in-person cognitive behavioural therapy (CBT) would otherwise be provided. Additionally, if evidence demonstrated that iCBT should be offered, the HTA aimed to inform whether there are criteria to guide decision-making regarding the suitability of iCBT for various pain conditions and people experiencing chronic pain, or other factors that should guide its implementation.

Conclusions and Results

The clinical evidence examined in this HTA suggested that there was little to no difference between iCBT and in-person CBT post-treatment and at longest follow-up for most outcomes, such as pain control, health-related quality of life or overall well-being, physical function, psychological symptoms, and satisfaction with care. However, the evidence was very uncertain due to concerns related to risk of bias, inconsistency across studies, indirectness, and imprecision of effects, meaning it does not provide a reliable indication of how effective iCBT is compared to in-person CBT. Additionally, we identified no relevant clinical studies that provided outcome data on the comparative safety of iCBT versus in-person CBT. The limitations of the available evidence do not allow for drawing an evidence-based conclusion on whether iCBT represents a comparable alternative to in-person CBT when CBT would otherwise be provided to address the psychological care needs of individuals with chronic non-cancer pain.

The women interviewed as part of the interview study felt iCBT has the potential to be a supportive treatment option if offered as part of comprehensive, multidisciplinary pain care. Based on their experiences, the women interviewed reported that multidisciplinary pain care does not always happen in practice, and they described potential concerns of offering iCBT in the absence of other treatments. They also indicated that determining a patient’s readiness for iCBT is important. If iCBT is determined to be appropriate, the women emphasized that a tailored treatment approach and a strong therapeutic relationship between the patient and iCBT provider might improve the success of iCBT treatment for chronic pain.

The Environmental Scan identified 16 iCBT programs for chronic pain in Canada. Many potential facilitators (e.g., improving access, improving treatment experience, efficiency, and convenience) and barriers (e.g., preference for in-person treatment, privacy concerns, technology issues, and no access to a device or internet connection) for iCBT programs in Canada were identified.

Based on the findings across this HTA, decision-makers who decide to implement iCBT for chronic pain as part of their multidisciplinary care approach may wish to consider offering programs that are guided by therapists specifically trained in chronic pain, foster strong therapeutic relationships, encourage shared decision-making practices, can be tailored to the needs of the person living with chronic pain, consider the readiness and suitability of the person living with chronic pain before offering iCBT, and consider privacy and technological concerns or challenges that may arise.

Recommendations

This report did not result in any recommendations.

Methods

The HTA included an assessment of the clinical effectiveness and safety of iCBT, an interview study, and an Environmental Scan related to the operational aspects associated with the use of iCBT in the management of chronic non-cancer pain. Patient engagement activities informed the conduct of all components of the HTA.

The clinical review comprised a systematic review of primary studies on the comparative clinical effectiveness and safety of iCBT compared to in-person CBT for the management of chronic non-cancer pain.

The interview study was conducted to explore people’s expectations or experiences with iCBT for chronic pain. Five women in Canada living with chronic non-cancer pain participated in semi-structured interviews. Interview transcripts were analyzed with a modified framework analysis approach using thematic categories identified in CADTH’s previous 2 qualitative reviews on iCBT (i.e., iCBT for major depressive disorder and...
anxiety disorders and iCBT for post-traumatic stress disorder).

The Environmental Scan was informed by a limited literature search and an online survey that was distributed to stakeholders involved in iCBT for chronic non-cancer pain, such as regulated health professionals (e.g., physicians, nurses, psychotherapists, psychologists, other mental health professionals, and program managers) policy-makers, decision-makers involved in program or practice development, and online CBT platform developers. A descriptive analysis was conducted to respond directly to the research questions and produce a narrative summary that reflected data from the literature search and the survey.

Further Research and Reviews Required

The limited and uncertain nature of the available clinical evidence suggests that further research is needed on the comparative clinical effectiveness and safety of iCBT versus in-person CBT. Future clinical studies that use more rigorous methodological approaches, deliberately collect safety data, make direct comparisons of iCBT and in-person CBT without other differences in treatment groups, recruit participants across heterogeneous populations (including children and underrepresented populations), and strive to lower participant dropout rates would permit more conclusive findings in future systematic reviews and assessments of iCBT for chronic non-cancer pain.

Written by

CADTH, Canada.