

Cognitive behaviour therapy for schizophrenia

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Abstract

Schizophrenia is one of the major and potentially severe mental illnesses. Even with best practices, there are limitations to the effectiveness of treatments that include medications for this disorder. Relapse rates are high and often those with the illness remain symptomatic and functionally impaired. All the evidence suggests that individuals with schizophrenia do best with a combination of pharmacological and psychosocial intervention. One psychosocial treatment that has received much attention is cognitive behaviour therapy (CBT). This brief review will address what we know about the use and effectiveness of CBT at all phases of schizophrenia and its strengths, weaknesses and its future.

Introduction

Schizophrenia is among the most economically costly and severe medical conditions. Because onset is in young adulthood and disability can last a lifetime, this illness creates tremendous distress, pain and impoverished quality of life for the affected individual and their family. These additional "costs" are not measurable in monetary terms but provide compelling reasons for developing treatments that alleviate such suffering. Even with best practices, there are limitations to the effectiveness of medications in the treatment of schizophrenia. Relapse rates are high and some individuals remain symptomatic and, despite treatment, functional recovery (i.e. social relationships, making friends, finishing school, or attending work) remains a major challenge. All the evidence suggests that individuals with schizophrenia do best with a combination of pharmacological and psychosocial intervention [1]. Thus, it is critical that we have effective psychological treatment approaches to complement pharmacology. In the treatment of psychiatric problems, one of the most widely used and effective psychological treatments is cognitive behaviour therapy (CBT). Traditionally, CBT has been used to treat depression and anxiety, but over the last twenty years it has been adapted to treat psychosis and is gaining recognition as a potentially

effective treatment in schizophrenia at all stages of the illness, including the pre-psychotic phase. CBT aims at modifying the person's non-adaptive thoughts and beliefs in the context of a collaborative working alliance by teaching the link between perceptions, beliefs and emotional or behavioral reactions, questioning the apparent evidence supporting abnormal beliefs, encouraging self-monitoring of thoughts and, teaching effective coping strategies for dealing with distressing symptoms. In fact, most schizophrenia treatment guidelines have specific recommendations about including CBT as an intervention [2-4].

However, important questions remain. The first is how effective is CBT for psychosis. The second is that, since it is unlikely that CBT could be implemented in regular mental health centers, how can it be implemented so that patients can benefit. Most work has been carried out in academic research centers where highly trained therapists are available. CBT was first used with individuals who had a more chronic course of schizophrenia. Later it was tested in those at their first episode, and current research has a focus on whether CBT may be the treatment to prevent transition from an at-risk state to full blown psychosis.

CBT for schizophrenia

To date, over 30 randomized controlled trials of CBT for schizophrenia have been published, demonstrating (on average) moderate benefits [5]. Some of these trials did have design problems; however, the main finding by Wykes and colleagues was that the more rigorous the study, the weaker the effect of CBT [5]. Though most have used a more general CBT for psychosis model, focusing on all positive symptoms (delusions, hallucinations, thought disorder, bizarre behaviour), some have specifically targeted a single symptom (e.g. voices, or paranoid delusions), whereas others have still focused on modifying other symptoms linked to schizophrenia, namely negative symptoms (i.e. apathy, avolition, poverty of content and thought, flat affect) [6] and psychological distress such as depression or anxiety. Several studies in the meta-analysis by Wykes et al. [5] have begun to address functional outcome (that is the ability to develop and maintain relationships and to work or attend school) but only as a secondary outcome to symptoms. Some excellent work has demonstrated that CBT can be used successfully to prevent relapse [7] and to reduce command hallucinations (i.e. hallucinations that command the patient to perform certain acts), which are among the most distressing and high-risk symptoms, and may be dangerous to the patient and others [8].

CBT for a first episode of psychosis

Despite advocating CBT as a valuable treatment for young people experiencing their first episode of psychosis [9,10], there are very few published random clinical trials of CBT with a first episode sample. One of the most methodologically sound and rigorous trials, the SoCRATES trial in the UK [11-13], demonstrated that both CBT and supportive therapy produced improved symptoms compared with treatment as usual. Unfortunately, this trial attempted to deliver the treatment over a 5-week period during the acute phase of the illness. In the acute phase it is difficult to determine the effectiveness of CBT relative to that of medications. Similarly, the ACE trial from Australia [14] demonstrated that although those receiving CBT showed more rapid improvement, this difference was not sustained. However, a group trial comparing CBT for psychosis with social skills training for symptom management and with a wait-list control for individuals with early psychosis discharged from the hospital did demonstrate superior improvements for CBT on overall symptoms, as well as on self-esteem, coping strategies and social support [15]. This suggests that, possibly with these young patients, a group format may be more effective.

CBT in the pre-psychotic or prodromal phase of the illness

A large body of recent research has identified individuals who may be at risk for psychosis [16] based on the presence of attenuated psychotic symptoms that are often accompanied by a significant decline in social functioning. There are concerns with using medications in this young group, which make a case for CBT as a treatment for emergent psychotic symptoms as a more acceptable, and presumably safer, first step in preventive intervention. Thus, it is possible that CBT might reduce or avoid the need for drug treatment [17]. Although CBT seems a logical treatment for those at clinical high risk of developing psychosis, there are actually very few studies examining its effectiveness. Early studies had the goal of using CBT to prevent conversion to a full-blown psychotic illness, but later studies began to focus on improving the presenting symptoms and poor functional outcome. In all current studies to date, both the CBT and the control treatment groups appeared to demonstrate some improvement in symptoms. Although the control group also improved, the EDIE trial in Manchester did demonstrate that CBT was effective in reducing conversion [18]. However, the German Network study [19] reported improvement in both groups in terms of social functioning. The ADAPT trial in Canada was the first to compare two psychological treatments, but the number of conversions was very low [20] and both groups improved. These results have been replicated in recent trials from Australia [21,22]. Overall interpretation of effectiveness of CBT is difficult in these groups as there are some unique issues studying CBT with this population. Firstly, the number of trials is limited and secondly, the numbers converting are low at times and thus many studies are underpowered.

More questions than answers?

Several issues remain unanswered. First, in examining current studies, CBT seems to offer better results when it is offered at specific stages of recovery and when the treatment delivery is adjusted to the stage. For instance, acute psychosis is not ideal for self-reflection, but following stabilization, individuals with early psychosis might benefit more – initially from group CBT that could help normalize their experience by meeting peers with similar issues [23]. Multiple studies have shown that individuals with more experience with the illness, and who have some degree of realization of their goals and problems, will benefit from individual CBT for psychosis. Older individuals with stabilized psychotic symptoms, who are more likely to be socially isolated with few goal-oriented activities, appear to benefit from a group approach integrating CBT principles with social skills training [24].

The question is no longer whether CBT for psychosis is effective or not, but rather when should it be offered, to who, and which modality.

In terms of who should receive CBT for psychosis, currently, it seems to be somewhat random for those who have the opportunity. Yet to obtain results above and beyond what, for example, supportive therapy could offer, a certain level of cognitive functioning (memory, attention, problem solving) and of social cognitive functioning (insight, emotion recognition) might be necessary. In terms of modalities, even within the individual and group approaches, several variants exist, making study comparisons at times difficult. Even though most CBT therapists agree on the essential elements that should be included in CBT for psychosis [25], there are a range of treatment manuals available with a variety of techniques and philosophies. For instance, some might be more goal-oriented, whereas others might be problem-focused. Individual formulation (i.e. developing a shared comprehension of the person's cognitive biases and problems based on their past experiences) is the basis for some CBT therapists, but not for all. Furthermore, there are no guidelines as to what may be an adequate dose of CBT. Many studies offer over 9 months of weekly sessions, whereas others offer a few months. In some studies it has been suggested that those in the CBT groups did not receive an adequate dose of CBT [20].

Finally, the ability to deliver in the real world is a concern. The majority of the trials have been conducted in controlled settings, using highly trained expert CBT therapists. There is emerging evidence suggesting the effectiveness of CBT using "non-expert" CBT therapists, for example, psychiatrists [26], community nurses [27], or other mental health professionals [15]. Given the paucity of expert CBT therapists in many mental health settings, training and supervising non-experts in delivering the intervention, albeit perhaps using a structured manual, could be a viable option [28].

What next?

There appears to be a need for a typology of CBT approaches and modalities used in studies, in order to ensure replicability of the results by clinicians in real-world settings. CBT for psychosis is currently being adapted according to recovery stages and treatment needs. As such, studies underway are investigating combining CBT with other evidence-based approaches such as supported employment, family psychoeducation, motivational interviewing, social skills training, and third-wave cognitive behaviour therapies, such as acceptance and commitment therapy. More studies are warranted in order to better understand the best moment to offer CBT

for psychosis, to whom, and using which modality. Several "CBT for psychosis" researchers are also investigating process issues in real-world settings, and will perhaps help us understand which aspects of the treatment are essential. Overall, little is known about the moderators of CBT for psychosis, i.e. for whom or under which conditions CBT may work or about the mediators, that is, how CBT might achieve its effects. Baseline patient characteristics, such as cognitive functioning, provide valuable information to help identify which patients might be responsive to a given treatment. Understanding the mechanisms through which treatments work is likely to lead to more effective therapies. To date, there is no single treatment (including medication) for schizophrenia that helps 100% of those receiving it. In the meantime, CBT for psychosis helps many, and has no documented side-effects.

Abbreviation

CBT, cognitive behaviour therapy.

Competing interests

The authors declare that they have no competing interests.

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