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CBT for psychosis: effectiveness, diversity, dissemination, politics, the future and technology

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Cognitive behavior therapy for psychosis (CBTp) was always going to be controversial, given the backwash in the US from the failure of psychoanalysis, the influence of biological psychiatry and neuroscience, and the globalization of the pharmaceutical industry. Talking therapies will attract criticism in spite of the evidence for their efficacy, a consistent albeit small effect. The evidence is summarized in the paper by Thase et al (1), but a number of points are worth making.

There is considerable heterogeneity in the CBTp studies, in the nature of the treatment and in the populations recruited, which may well result in some confusion.

CBTp has developed mainly in the UK, with different centres proposing their own theoretical models and array of clinical techniques. There were a number of reasons for this. The British tradition of social psychiatry and the work of the Medical Research Council Social Psychiatry Unit over five decades or more in investigating the importance of social factors in the course of psychosis was a significant challenge to purely biological explanations. Associated with this was the development of stress-vulnerability models of psychosis. Later, family intervention studies demonstrated that psychosocial interventions could reduce relapse rates in schizophrenia.

The second important factor was the expansion of CBT in the treatment of anxiety and depression. This provided

the diversity of techniques, theoretical development and skills base that allowed expansion into the treatment of psychosis. As well as approaches to cognitive therapy developed by Beck, other cognitive and behavioral approaches were also influential, such as self-management, rational emotive therapy and applied behavioral analysis. In a systematic review (2), we classified the treatments used in 34 trials depending on the cognitive or behavioral focus of the intervention, and found that larger effect sizes were associated with more behavioral techniques. Cognitive therapy could, perhaps unkindly, be considered "the bastard child of the medical model", and the importance of social, familial and environmental factors emphasized in earlier more behavioral formulations were sidelined with the increased interest in internal (thinking) processes.

Finally, the expansion of clinical psychology in the UK National Health Service (NHS) resulted in a workforce, skills base and clinical and research opportunity that provided fertile ground for CBTp to develop. The NHS provided the infrastructure, opportunity and ideology for innovation.

Thus, there has been considerable variation in the theoretical and clinical developments of CBTp, which makes comparisons across trials problematic. It must also be accepted that trials are limited by practical, temporal and financial considerations, which means that questions such as the necessity or benefit of long-term and continuing treatment with CBTp are rarely answerable.

In addition, there is variation in the stage of illness, with inevitable confusion concerning therapeutic goals. Although the majority of studies have investigated drug resistant community based chronic patients, with a view to further reducing symptoms, and this was clearly the initial driver of CBTp, other later trials have had other goals. For example, attempting to speed recovery and influence course in acute recent onset patients, reduce relapse, prevent the development of psychosis in high risk patients, reduce substance abuse in dual diagnosis, treat the effects of trauma/post-traumatic stress disorder. All this has resulted in different patient populations, theoretical models, treatment approaches and therapeutic goals, making aggregated comparisons difficult.

It is worth noting that Wykes et al (2) found that generic CBTp did not reduce feelings of hopelessness, a risk factor for suicide, while a recent study with a theoretically based intervention was successful in reducing suicide behavior (3), indicating that specialist interventions are required for specific clinical problems. This has clearly become the focus of the second wave of studies, increasing the diversity of both cohorts and interventions, and increasing the difficulty in across study comparisons.

A related issue is the appropriateness of various outcome measures. Outcomes used by researchers are not necessarily those most important to patients. Thus, aggregation or single symptom measures in meta-analyses may miss important treatment effects or inflate them. One

example of this was the finding that CBTp did not perform significantly better than a control treatment of supportive counselling, although both did better than routine care, in the treatment of delusions. However, supportive counselling appeared to worsen auditory hallucinations, whilst CBTp resulted in their reduction (4).

Accepting that CBTp has a beneficial effect, how then to increase availability? The apparently simple solution to this is to train the workforce in these treatment techniques, thus an increasingly skilled workforce will increase access and availability of CBTp. This is based upon a number of assumptions which may not be accurate. First, it assumes that training is available. This is not always true. In the US there is a lack of training opportunities (5). In the UK, where training may be available, it is not clear to what level of training, experience or skills clinicians need to be able to deliver CBTp.

With the heterogeneity and variation in CBTp, it is not clear what should be taught. What are the necessary techniques and competencies, assuming it is possible to try and define these, a difficult task at the best. Given that psychotic disorders are notoriously difficult to treat, it might be expected that the most qualified and experienced practitioners would provide treatment, as would be the case, say, with complex heart surgery. But this is rarely the case in mental health services, where costs are the main driver. Thus, there is frequently a move to employ the cheapest staff and provide the minimum training necessary when rolling out new treatments, which could dilute treatment effects and be poor value for money.

Once trained staff return to their work place, they do not necessarily receive the management support and have the time to implement their training. Furthermore, having received training, staff may no longer be willing to work on the front line and, having become more qualified, they may prefer to take up teaching or research posts. Thus, training has the unanticipated effect of depleting the skilled workforce rather than enhancing it.

Lastly, what of the future? I would like to raise a few possibilities. First, an integration with neuroscience, so that investigations on brain plasticity effects of cognitive, behavioral and social interventions can be undertaken. Second, a greater focus on positive emotions and clinical methods which elicit and encourage these as part of a treatment strategy, from both a theoretical and clinical perspective. For example, broaden-and-build theories (6) and broad minded affective coping intervention (7,8). Third, the potential for the use of new technologies as a delivery platform for psychological interventions (9). This would include the use of mobile phone technology for real time assessment and interventions and the use of intelligent systems to individualize interventions and identify critical time points (10). The possibilities here for the widespread application of CBT in the developing world, where mobile phones are ubiquitous but health system infrastructure is undeveloped and prohibitively expensive, by “leap frogging” the normal pedestrian development (or lack of it) of mental health care, are exciting.

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The efficacy of CBT for severe mental illness and the challenge of dissemination in routine care

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Cognitive behavior therapy (CBT) for severe mental illness has acquired

a solid scientific status. Although the effect sizes are small to moderate, they are also quite robust and re-established in many meta-analyses over the last decade. Small to moderate effect sizes are common in adjunctive therapies, since the adjunctive intervention has

to add further effects to a treatment which is already efficacious.

The conclusion at this moment is that monotherapy with pharmacological agents such as antipsychotic medication and antidepressants does not constitute optimal treatment for severe