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Citation for published version (APA):

Garety, P. A. (2003). The future of psychological therapies for psychosis. *World Psychiatry*, 2(3), 147-152.

Citing this paper

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The future of psychological therapies for psychosis

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The need for psychological therapies for psychosis is increasingly recognised. In recent years, two psychological approaches, cognitive behavioural therapy (CBT) and family interventions (FI), have emerged from among a range of psychological approaches as effective therapies with the strongest evidence base. The theoretical basis of these approaches, within a broader biopsychosocial stress-vulnerability framework, is described. The evidence of effectiveness, drawn from the results of recent systematic reviews of CBT and FI, is summarised. CBT is found to reduce symptoms and FI to reduce relapse, with some evidence of improvement in other outcomes for both approaches. Future directions for these therapies are considered, with particular emphasis on their role in early intervention services and relapse prevention. Promising newer applications of these approaches are also discussed, for example in work with people with a dual diagnosis of psychosis and substance misuse disorder. Finally, training and dissemination issues are addressed. It is emphasised that the integration of psychological therapies within comprehensive service provision is important.

Key words: Psychosis, schizophrenia, psychological therapies, family interventions, cognitive behavioural therapy

The need for psychological therapies for psychosis is increasingly acknowledged. There are a number of reasons for this. First, while antipsychotic medication has been the mainstay of psychiatric treatment and shows considerable benefits, it does not guarantee good outcome, being only partially effective or minimally effective in approximately 40% of cases (1). Secondly, adherence to antipsychotic medication is frequently poor, with up to 70% of individuals failing to take medication as prescribed (2). Thirdly, even when long-term antipsychotic medication is taken, a substantial proportion of patients will relapse (approximately 20% in one year) (3), the probability of which will be influenced by the social context, such as the nature of the family environment or the experience of life events (4). Finally, although medication may improve certain symptoms, it typically does not impact on a wide range of individuals' other concerns about their illness or experiences and often fails to remediate a number of other disabling problems, particularly of a social or cognitive nature.

In recent years, two psychological treatment approaches have particularly emerged as potentially effective therapies to be considered in the treatment of people with schizophrenia: 'family interventions' (FI) and cognitive behavioural therapy (CBT) (5). Two other approaches have been the focus of research activity, particularly in the United States: social skills training and cognitive remediation. The evidence derived from randomised controlled trials for these four approaches has recently been systematically reviewed, using meta-analytic techniques (6,7). In the UK, an evidence-based treatment guideline for schizophrenia has also just been developed, which reviews the evidence for these four psychological treatments together with three other distinct psychological approaches: psychoeducation, psychoanalytic or psychodynamic therapies and supportive counselling (8). When examined together, the evidence clearly indicates that CBT and FI have the strongest evidence base for effectiveness (5-8). In

this paper, CBT and FI will be described and discussed; interested readers are referred to the foregoing references for detailed evaluations of the other approaches.

The rationale for psychological treatment approaches for psychosis does not only derive from the limitations of medication. Current conceptualisations of psychosis, within a stress-vulnerability framework (9), offer a positive rationale for their action (10). Here, psychosis is viewed as multi-factorial, and results from an interaction of a predisposing vulnerability (of biopsychosocial origin) with environmental stressors. The vulnerability factors include emotional difficulties, such as low self-esteem and social anxiety, cognitive biases or deficits, and biological factors of genetic and neuro-developmental origin (11). The stressors, such as stressful life events, hostile environments, psychoactive drugs or prolonged social isolation, affect both the cognitive and emotional processes of the vulnerable individual, causing changes such as anxiety or depression, and information processing difficulties and resulting anomalous experiences (e.g. hallucinatory experiences). These changes are disturbing and are actively interpreted by the individual; the resulting interpretations of the meaning of these changes to the self and of the triggering events lead to the fully formed psychotic symptoms. Similar processes then maintain the psychosis and, in addition, the experience and consequences of psychosis itself and its treatment may provide further maintaining factors, such as a reluctance to take medication or depressed mood and hopelessness.

It will be apparent how psychological therapies, whether aimed at the individual's ways of interpreting events and/or experiences and resulting beliefs and emotions (CBT), or at improving the atmosphere and coping of the family members (FI), are suited to addressing stress and vulnerability factors and may therefore be beneficial in the treatment of the psychosis. In this paper, I will describe CBT and FI approaches, discuss the current evidence for them and consider key future directions for psychological therapies.

THERAPEUTIC APPROACHES

Cognitive behavioural therapy

CBT for psychosis, which has been developed largely in the UK over the past decade, draws on two main sources: stress-vulnerability models of psychosis, as discussed above, and cognitive theory and therapy for emotional disorders (e.g. 12). CBT takes as its central focus the experiences of psychosis, that is, the symptoms and the individual's attempts to understand them. The main goal will be to help the individual to arrive at an understanding of the psychosis which is less distressing, and assist the individual in preventing reoccurrence or in managing any unwanted experiences and in developing as full and satisfying a life as possible (13).

The thoughts, beliefs and images experienced by people are the core material with which therapists work (14). The approach draws extensively on the cognitive therapy of Beck and colleagues, both in content and style. In style, the approach is collaborative and enquiring, aiming to work with the individual towards a new shared understanding. The content of therapy involves identifying key beliefs and thoughts, and reviewing evidence for these beliefs, identifying thinking biases and relating thoughts to mood and behaviour. The person with psychosis will be encouraged to try out new ways of behaving or thinking in 'homework' exercises between sessions. However, the standard cognitive therapy approach is modified to take account of the particular needs of people with psychosis and to be tailored to the cognitive model of psychosis and the stress-vulnerability framework. Modifications include taking longer over the early stages of therapy, so as to engage people who may be very suspicious or experience cognitive difficulties, and flexibility about session timing and length, to ensure that therapy sessions are not experienced as excessively stressful.

CBT for psychosis is delivered as a structured and time-limited therapy, although with considerable flexibility. Most studies have provided an average of about twenty sessions offered weekly to fortnightly over nine months, ranging from ten to thirty sessions over three months to two years. CBT is delivered alongside other services and medication, and is ideally integrated with the whole package of care, although it can be offered to people who do not engage in services or take medication. More detailed descriptions of the therapy are available (13,14).

Family interventions

FI also draw explicitly on the stress-vulnerability model of psychosis. The approach derives from the pioneering work of Brown, Leff and Vaughn in identifying the role of aspects of the emotional atmosphere in the family (criticism, hostility and emotional involvement - collectively termed 'expressed emotion', EE) in contributing to relapse (15). The first FI studies were published in the early 1980s (16,17) and the approach has been disseminated across

the world in the twenty years since. FI have been primarily aimed at reducing the risk of relapse in a vulnerable individual, by altering one possible source of stress - the emotional climate of the family environment. It should be noted that, in this context, 'family' includes people who have a significant emotional connection with the person with psychosis, such as parents, siblings and partners.

This FI approach is described in detail by Kuipers and colleagues, who specify five basic assumptions (18):

1. Schizophrenia is seen as an illness with a biological origin within a stress-vulnerability model. Stresses might bring on the illness or relapse.
2. Families are seen as invaluable allies in care, and the formation of a therapeutic alliance with the family is seen as essential. Families are not blamed but enlisted as therapeutic agents, in order to help the patients.
3. There is an emphasis on collaboration and openness. Information about the illness is discussed, and together therapists and family members, including the patient, agree goals, priorities and tasks.
4. Families are seen to have needs and strengths.
5. The FI approach is offered alongside other interventions, including medication.

Overall, the aim of FI is to improve the family atmosphere and to reduce relapse. It typically involves a number of components. These are: the provision of information about psychosis (sometimes called 'psychoeducation'), improving coping with the affected member's psychosis by identifying problems and agreeing solutions, and helping the family members to communicate in a positive fashion and to set appropriate boundaries within the family. There is some variety in the way FI are provided (6). Some FI aim explicitly also to reduce the distress felt by the carers, rather than keeping a main focus on just the patient's outcomes. In such cases families may be seen without the identified patient present or in groups of relatives. Some FI involve very explicit communication or skills training, and, more rarely, some employ systemic or psychodynamic principles or methods. There is also considerable variability in the duration and frequency with which FI are delivered. Typically, FI are offered for about one year, although this may range from a few months to three years, with sessions fortnightly to monthly. Two therapists will generally be present in family sessions.

EVIDENCE OF EFFECTIVENESS

Cognitive behavioural therapy

Randomised controlled trials of CBT were first reported in the early 1990s and the research evidence base is small but developing rapidly. Pilling et al (6) report a meta-analysis of eight randomised controlled trials. When this review was updated by the UK National Schizophrenia Guideline Group, recent publication of new trials enabled a total of thirteen trials to be reviewed, including data on a total of 1293 patients (8). All the patients in these trials

were prescribed antipsychotic medication and most of the trials were targeted at individuals with long-standing or medication-unresponsive symptoms. Most of the studies (10) were conducted in the UK, while two were from the USA and one was from Israel.

Symptoms

The Schizophrenia Guideline review found that CBT reduces symptoms, both during treatment and at 9-12 month follow-up. This finding applied both when CBT was compared with treatment as usual and when compared to other psychological interventions, such as supportive counselling.

Relapse and suicide

There was insufficient evidence to determine whether CBT reduced suicide, with very low numbers of suicide in total reported. There was also insufficient evidence to determine whether CBT reduces relapse; however, there was evidence that CBT of longer duration (more than 3 months) is effective at reducing relapse.

Other outcomes

CBT was found to improve 'medication adherence' and improve insight. There was some evidence for improvements in social functioning.

Methods of delivery

Some evidence was found that CBT of longer duration (6-12 months rather than less than three months) and/or of more sessions (at least ten planned sessions) was more effective in symptom reduction. The reviewers also noted that the evidence was stronger for the treatment of people with persisting symptoms than for short treatments in the acute phase of the first episode of schizophrenia.

Family interventions

Pilling et al (6) also report a meta-analysis of the outcome data from 18 randomised controlled trials of FI, which involved a total of 1467 patients with a diagnosis of schizophrenia. Studies were conducted in a wide range of countries, dating back two decades. The mean age of the patients included was 31.2 years, 31% of the patients were women, and the mean number of admissions, reported in 13 of the trials, was 2.7. There were a number of different outcomes targeted by the FI and reported in the studies. Pilling et al report on relapse, readmission, suicide, family outcomes and adherence to medication regimes. This review was also used as the basis for the UK National Schizophrenia Guideline, whose authors updated and conducted some additional analyses of the data (8).

Relapse and readmission

It was found that there is strong evidence that FI reduce relapse rates during the treatment and at follow-up, up to 15 months after the FI ended. They are also effective at reducing admission to hospital during treatment, although not when the FI had ended. There is also evidence that FI are effective in reducing relapse both for people who have persisting symptoms and for those who have recently relapsed.

Other outcomes

There were no differences in suicide rates between FI and control treatments. There was evidence that medication adherence is increased by FI and that the family members' 'burden of care' was decreased by FI, when these were delivered to single families rather than groups of families. There was insufficient evidence to indicate whether FI reduce psychotic symptoms; many studies did not report any symptom data.

Methods of delivery

The Schizophrenia Guideline (8) reports on analyses of different methods of delivery. Stronger evidence was found for relapse prevention with programmes of longer duration (6 months or longer) and a greater number of sessions (ten or more planned sessions). The evidence was also stronger for relapse prevention when the service user was included in the sessions.

Summary of evidence

These systematic reviews have demonstrated that both CBT and FI, under the conditions of research trials, are effective for certain key outcomes. Consistent with the stated key goals of these approaches, CBT reduces symptoms and FI reduce rates of relapse. Both approaches also show some evidence of benefits for certain other outcomes under certain conditions - CBT for insight, relapse, medication adherence and social functioning, and FI for medication adherence and relatives' 'burden of care'. The evidence concerning CBT is overwhelmingly UK based and predominantly relates to people with persisting symptoms, while the FI evidence base is more international and is drawn mainly from relapsing and persisting symptom groups. There is a great deal that is yet to be investigated. It is to the future of these psychological approaches that I now turn.

FUTURE DIRECTIONS

Early intervention

The evidence reviewed here raises further questions. First, there is the question of which patients are helped by these methods. Globally, there is currently considerable interest in the early identification and treatment of people

with psychosis. Stimulated by the pioneering work of McGorry and colleagues in Melbourne, Australia, a worldwide movement has developed for the establishment of services for early psychosis (19). This constitutes two elements - the early identification and (possible) treatment of people at high risk of developing psychosis, and the early identification and treatment of people who have a diagnosable psychosis. Interventions with 'high risk' groups, identified by being a first degree relative of a person with psychosis and/or the presence of prodromal symptoms or brief psychotic symptoms (20) are currently research based. A number of trials of CBT to prevent transition to psychosis, with or without low dose antipsychotic medication, are underway (21-23). The early reports suggest that a CBT intervention, alone or in combination with medication, may delay or prevent transition to psychosis in a proportion of people.

In the UK, the comprehensive first episode services which are being set up frequently incorporate psychological approaches, most commonly CBT and FI, alongside medication, and other psychosocial approaches, such as vocational and social programmes (24,25). It is not yet clear what the place of CBT and FI in such services should be. For example, should either or both psychological approaches be routinely offered to all or should they be targeted at certain groups, such as those with persistent symptoms or relapses? The evaluation of these specialised services for early psychosis is at an early stage, with no randomised controlled trial of an integrated comprehensive first episode service yet published, and teasing apart the different treatment components will prove difficult. There have, however, been a very small number of published trials (and even fewer randomised controlled trials) of CBT or FI in early psychosis in the context of more standard inpatient or community services. Those that have been published concerning first episode treatments have not yet yielded very strong positive findings. Two studies of a CBT approach, one focussed on the acute inpatient stay (26) and the other on community follow-up, where only some participants received specialised first episode services (27), show only modest and temporary benefits. However, we do have some data from a pilot study of CBT and FI for first episode patients in an adolescent inpatient unit, which suggests clear benefits in terms of symptom reductions from CBT and social functioning improvements with FI (28). Another study, which combined an individual psychosocial approach with FI, in both the inpatient and the community follow-up phases of care, did not find clear benefits of relapse reduction from the FI (29). One possible reason for the failure to find a specific benefit for the psychological intervention in these studies is that a high proportion of these first episode participants are improving considerably with medication and other interventions, and thus the additional benefits of specific psychological interventions are relatively small or subtle and difficult to detect; alternatively, they may not confer additional benefit

at this stage for most and, as a scarce resource, should be targeted at sub-groups with specific needs. However, we are at the early stages of this research effort and more evidence will help to determine the place of psychological interventions with this first episode group.

Relapse prevention

A second group to consider is those who experience repeated relapse. This is in contrast to the people with relatively stable persisting symptoms who have been included in many CBT and FI studies; the evidence suggests these patients with persisting symptoms are helped by both approaches, but with different outcomes - reducing symptoms and relapse, respectively. People at high risk of relapse have been selected for FI studies, but no CBT studies have yet been published with this group. However, Gumley et al (30) report one such study and demonstrate significant reductions in relapses with a CBT intervention designed for this purpose. This, together with the systematic review evidence suggesting relapse reduction benefits with CBT (8), raises the question as to the relative merits of FI and CBT in reducing relapse.

Other groups and targets for intervention

There are a number of other sub-groups of people with psychosis for whom psychological therapies may be beneficial. A variety of promising new applications of these therapies are being developed. Barrowclough et al (31) have shown benefits for the important group of people with 'dual diagnosis' (co-existing substance misuse and psychosis) from a combined motivational interviewing, CBT and FI approach. In contrast to a focus on particular sub-groups, some CBT approaches have been successfully targeted on certain specific outcomes. For example, Mueser et al (32) have documented high rates of trauma and post-traumatic stress disorder (PTSD) in people with psychosis. They have subsequently piloted a modified CBT approach for PTSD symptoms in people with psychosis, which was demonstrated to be feasible and promising. Other specific targets for which CBT has been shown beneficial include medication adherence (33) and insight (34). One further aspect which is under development is the treatment of low self esteem and depression in psychosis (28,35,36). In this rapidly developing field, we can expect new findings over the next five to ten years, from treatment studies and from theoretical and empirical research into aspects of psychosis, which will offer an impetus for the further refinement of CBT and FI.

Training and dissemination

In general, CBT and FI were originally developed by qualified clinical psychologists and psychiatrists, often with considerable experience of clinical practice, therapy

and research in psychosis. In the research trials which have established efficacy, interventions have followed therapeutic manuals and supervision has typically been intensive. As these approaches have been disseminated more widely, other mental health professionals, with a variety of training backgrounds, have taken on this work. Formal training courses have been developed in some countries, although there is not as yet a clear consensus on required training. Furthermore, there is evidence that training alone may not be sufficient to ensure effective implementation (37). In consequence, Tarrier has argued that the organisation and management of training and services need to be planned and evaluated to ensure that staff are adequately skilled to offer systematic therapeutic interventions. It is also important to ensure that they have time to see patients regularly and receive skilled supervision.

While CBT for psychosis is a relatively new approach, only recently expanding beyond the confines of research settings, FI have been established as effective for over a decade, and services in many countries have attempted to disseminate the FI approach into routine practice. There has been considerable difficulty with this, at least in UK (38). In addition to the practical difficulties of delivering interventions with a family group, as opposed to individuals, another reason for this may be the changing nature of family structures in some countries. In urban settings in Northern European countries, there is growing evidence of fragmentation of family ties and higher levels of separation and isolation. In one multi-centre European study of the care of people with serious mental illness, between two thirds and one half of the patients in the Northern European centres lived alone (39). FI can be conducted with family members not living together, if in close contact, but may not be applicable when contact and care-giving is less. For these reasons, in certain cultures, individual therapies such as CBT may be more practicable in many cases.

CONCLUSIONS

The current evidence confirms that FI are effective at reducing relapse in psychosis and that CBT is effective for symptom reduction. A variety of other benefits and new applications are suggested by current research, and thus both approaches are likely to play leading roles as psychotherapies for psychosis in the future. There are many potential areas for development, most notably, perhaps, in the treatment of co-existing substance misuse and in the growing field of early intervention. However, other targets for these approaches should not be neglected, such as relapse prevention or the treatment of depression and trauma. There is no suggestion, in most of their applications (except perhaps with 'high risk' groups - see 40), that these psychological therapies will stand alone. There are a number of other important therapeutic elements, medication certainly, but also the provision of a range of social

activity, leisure and work programmes. It is likely that CBT and FI will best meet the wider goals of improving outcomes for patients, in ways which are accessible and acceptable, when they are effectively integrated within comprehensive services.

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