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PSYCHOTHERAPY: EVIDENCE FOR ITS IMPORTANCE IN RECOVERY FROM SCHIZOPHRENIA

By

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SUMMARY
Clients with schizophrenia should be offered multimodal treatment programmes which integrate effective pharmacological and psychotherapeutic interventions. In this paper evidence is reviewed which shows, unequivocally, that psychotherapeutic and psychological interventions improve recovery from schizophrenia. These interventions include psychoeducational family therapy to promote family support, medication adherence and prevent relapse; cognitive behaviour therapy to help clients manage residual positive symptoms; social skills training to enhance social competence and reduce social isolation; cognitive rehabilitation to help clients overcome or compensate for cognitive deficits; and individual placement and support or supported employment to promote vocational adjustment. Where service users have difficulty retaining contact with routine outpatient services, treatment should be offered by an assertive community treatment team. These conclusions are broadly consistent with the importance accorded to psychological interventions for schizophrenia in international best practice guidelines.

INTRODUCTION
The devastating effect of psychosis on a person’s whole life first hit me 30 years ago. In 1978 when I was working in Jervis Street Hospital, I met a young man who was tortured by frightening, commanding voices, which he could hear, but no one else could, and by the conviction that there was an elaborate conspiracy to kill him. His psychosis began after a summer during which he frequently dropped acid, which was the slang for taking LSD back in those days. Before his psychotic breakdown, this very popular and gifted young man had a bright future ahead of him. But all that changed when he became psychotic. He was treated with chlorpromazine and supportive counselling, but he still heard voices some of
the time, was suspicious of other people, dropped out of college and lost many of his friends. He reminded me of Syd Barrett, the founder member of the famous rock band, Pink Floyd. Syd was a gifted musician, but developed schizophrenia, and never shared in the phenomenal success of Pink Floyd who are recognized as one of the most creative rock bands in the world. Since the 1970s I’ve worked in mental health services in Canada, the UK and Ireland. I have met many men and women, who have struggled for recovery from psychosis, and I continue to be humbled by their courage, and saddened by the way psychosis can devastate lives. During the last 30 years there have been important advances in the way schizophrenia is understood and treated. In this paper, some of these are summarised.

Schizophrenia is currently conceptualized as a recurrent episodic psychotic disorder characterized by positive and negative symptoms and disorganization (American Psychiatric Association, 2000; World Health Organization, 1992). Delusions and hallucinations are the main positive symptoms of schizophrenia. Negative symptoms include poverty of speech, flat affect and passivity. While genetic and neurodevelopmental factors associated with pre- and perinatal adversity play a central role in the aetiology of schizophrenia, its course is affected by exposure to intra- and extrafamilial support and stress, individual and family coping strategies, and medication adherence (Kuipers et al., 2006; Walker, 2004). The primary treatment for schizophrenia is pharmacological. It involves the initial treatment of acute psychotic episodes, and the subsequent prevention of further episodes with antipsychotic medication which targets the dopamine system - a system which is thought to be dysregulated in people with schizophrenia (Sharif et al., 2007). A distinction is made between older typical antipsychotic medications, such as chlorpromazine, which mainly alleviate positive symptoms, and newer atypical antipsychotic drugs, such as clozapine, which are now the treatments of choice because
they have fewer side effects than typical antipsychotics and alleviate negative, as well as positive symptoms. The primary aim of adjunctive psychotherapy and psychological interventions in schizophrenia is to reduce relapse and rehospitalization rates and improve psychological functioning and quality of life.

In a large meta-analysis of 106 studies of interventions for schizophrenia, Mojtabai et al. (1998) found that compared with medication alone, multimodal programmes which included both psychological and pharmacological interventions yielded an effect size of .39, which is approximately equivalent to a comparative success rate of 60%. They also found that, after an average of 17 months, the relapse rate for service users with schizophrenia who received psychotherapy plus medication was 20% lower than that of those who received medication only. The relapse rate for medication only was 52% and that for medication combined with psychotherapy was 32%.

Pfammatter et al. (2006) conducted an extensive review of 21 meta-analyses of psychological therapies for schizophrenia involving thousands of clients, and conducted further meta-analyses of the most methodologically robust randomized controlled trials for four distinct types of psychological interventions: psychoeducational family therapy, cognitive behaviour therapy, social skills training, and cognitive rehabilitation. They found that each of the four classes of interventions had a positive impact on specific aspects of adjustment. What follows is a summary of key findings from Pfammatter et al.’s (2006) review.

**PSYCHOEDUCATIONAL FAMILY THERAPY**

About half of medicated clients with schizophrenia relapse, and relapse rates are higher in unsupportive or stressful family environments, characterized by high levels of criticism, hostility or overinvolvement (Kuipers, 2006). The aim of psychoeducational family therapy
is to reduce family stress and enhance family support so as to delay or prevent relapse and rehospitalization. In their review of three meta-analyses of psychoeducational family therapy (Pharoah et al., 2005; Pilling et al., 2002a; Pitschel-Walz et al., 2001) and a new meta-analysis of 31 randomized controlled trials involving over 3,500 clients, Pfammatter et al. (2006) found that compared with medication alone, a multimodal programme including psychoeducational family therapy and medication led to lower relapse and rehospitalization rates, and improved medication adherence. One to two years after treatment, the average effect sizes across these four meta-analyses for relapse and rehospitalization rates were .32 and .48 which are equivalent to approximate success rates of 57 and 61%. The effect size for medication adherence was .30 which is equivalent to an approximate success rate of 57%. In a review of 18 studies containing over 1,400 cases, the authors of the UK NICE guidelines for schizophrenia concluded that, to be effective, psychoeducational family therapy must span at least 6 months and include at least 10 sessions (NICE, 2003). In a meta-analysis of 18 studies, Lincon et al. (2007) concluded that psychoeducation directed at service users without family involvement has no significant impact on relapse rate or adherence.

Psychoeducational family therapy may take a number of formats including therapy sessions with single families; therapy sessions with multiple families; group therapy sessions for relatives; or parallel group therapy sessions for relative and patient groups. Therapy involves psychoeducation based on the stress-vulnerability or bio-psycho-social models of schizophrenia with a view to helping families understand and manage the condition, the medication, related stresses, and early warning signs of relapse. Psychoeducational family therapy also helps families develop communication and problem-solving skills. Useful treatment manuals for this approach include Family Work for
Schizophrenia (Kuipers et al., 2002), Managing Stress in Families (Falloon, 1993) and Multifamily Groups in the Treatment of Severe Psychiatric Disorders (McFarlane, 2004).

COGNITIVE BEHAVIOUR THERAPY

Positive symptoms, notably delusions and hallucinations, persist for about a quarter, to a half of medicated service users with schizophrenia (Fowler et al., 1995). The aim of cognitive behaviour therapy is to help service users manage these residual positive symptoms. In their review of four meta-analyses of cognitive behaviour therapy (Gould, 2001; Rector & Beck, 2001; Tarrier, 2005; Tarrier & Wykes, 2004; Zimmermann et al., 2005) and a new meta-analysis of 17 randomized controlled trials involving over 480 clients, Pfammatter et al. (2006) found that compared with medication alone, a multimodal programme including cognitive behaviour therapy and medication led to a significant reduction in positive symptoms in clients with schizophrenia. For positive symptoms, the average effect sizes across these five meta-analyses was .54 after treatment and .64 at follow-up. These effect sizes are equivalent to approximate success rates of 62 and 65%.

Cognitive behaviour therapy may be offered on an individual or group basis. It involves a collaborative therapeutic alliance within which service users develop self-monitoring and stress management skills. They are also helped to develop strategies for managing positive symptoms, particularly re-evaluating problematic perceptions and beliefs associated with delusions and hallucinations. Useful treatment manuals for this approach include Cognitive Therapy for Delusions, Voices and Paranoia (Chadwick et al., 1996) and Cognitive Therapy of Schizophrenia (Kingdom & Turkington, 2005).

SOCIAL SKILLS TRAINING
People with schizophrenia typically show deficits in social competence, which in turn render them vulnerable to engaging in stressful social interactions, and to social isolation (Walker et al., 2004). The aim of social skills training is to enhance social competence, and so prevent social isolation or interpersonal stress. In their review of two meta-analyses of social skills training (Benton & Schroeder, 1990; Corrigan, 1991) and a new meta-analysis of 19 randomized controlled trials involving over 680 clients, Pfammatter et al. (2006) found that compared with medication alone, a multimodal programme including social skills training and medication led to significant improvements in social skills in service users with schizophrenia. For social skills, the average effect sizes across these four meta-analyses was .99 after treatment and 1.02 at follow-up. These effect sizes are equivalent to an approximate success rate of 72%. In contrast to these positive effects on the acquisition of social skills, Pilling et al. (2002b) in a meta-analysis of 9 randomized controlled trials found that social skills training had no significant impact or relapse rates, global adjustment, or quality of life.

Social skills training is usually offered within a group therapy context, and involves the development of communication, conversation, assertiveness, medication management and social problem-solving skills. Modelling, rehearsal, shaping and reinforcement are used during the training process. Useful treatment manuals for this approach include *Social Skill Training for Schizophrenia: A Step-by-Step Guide* (Bellack et al., 2004) and *Social Skills Training for Psychiatric Patients* (Liberman et al., 1989).

**COGNITIVE REMEDIATION**

Cognitive impairment is common in schizophrenia and may involve deficits in executive functioning, social cognition, attention and memory (Kurtz & Nichols, 2007). These deficits compromise the capacity of clients to benefit from other psychological interventions and
rehabilitation programmes. The aim of cognitive remediation is to improve cognitive functioning and help clients develop strategies to compensate for their cognitive deficits. In their review of four meta-analyses of social skills training (Krabbendam & Aleman, 2003; Kurtz et al., 2001; Pilling et al., 2002b; Twamley et al., 2003) and a new meta-analysis of 19 randomized controlled trials involving over 700 clients, Pfammatter et al. (2006) found that compared with medication alone, a multimodal programme including cognitive remediation training and medication led to significant improvements in cognitive functioning for service users with schizophrenia. Across a range of measures of cognitive functioning including general cognitive functioning, social cognition, executive functioning, attention, general memory, visual memory and verbal memory, the average effect sizes from these five meta-analyses and was .37. This is equivalent to an approximate success rate of 59%. However, not all meta-analyses found significant effects (e.g., Pilling et al., 2002b)

Cognitive remediation is a highly structured set of interventions which involves service users engaging in repetitive paper and pencil or computerized exercises which help them improve their attention, memory, executive functioning or social cognition. A useful treatment manual is *Cognitive Remediation Therapy for Schizophrenia: Theory and Practice* (Wykes & Reeder, 2005).

Brenner et al’s (1994) *Integrated Psychological Therapy for Schizophrenic Patients* describes a programme that combines preliminary cognitive remediation with later social skills training in a staged group training model. In a meta-analysis of 21 studies involving over 900 service users with schizophrenia, Roder et al. (2006) found that typical treatment involved an average of 44 sessions over 17 weeks, at a rate of about 3 session per week. In comparing integrated psychological therapy with control conditions on overall functioning, Roder et al. (2006) found weighted effect sizes of .36 after treatment and .45
at 8 months follow-up, These effect sizes are approximately equivalent to success rates of 58 and 61%. In specific domains, the post-treatment effect sizes were .41 for cognitive functioning and .31 for social functioning which shows the cognitive remediation and social skills components of the programme had desired effects in the domains they targeted.

PROMOTING MEDICATION ADHERENCE

Relapse in schizophrenia is often associated with non-adherence to medication regimes. A variety of interventions have been developed to address this problem. In a systematic review of 39 studies, Zygmunt et al. (2002) found that only 13 of the interventions evaluated significantly improved adherence. Effective interventions specifically targeted adherence; offered motivational interviewing to address service user’s ambivalence about taking medication; provided service users with behavioural problem-solving skills training to address difficulties in taking medication; and involved family members in promoting adherence. Broad based programmes, programmes that involved service user psychoeducation, but which did not include service users’ families were ineffective.

VOCATIONAL REHABILITATION

Unemployment is a highly prevalent problem in schizophrenia, which vocational interventions aim to address (Cook & Razzano, 2005). In a systematic review of 11 randomized controlled trials of vocational rehabilitation for people with severe psychological disorders, Twamley et al. (2003), found that individual placement and support and supported employment were both effective in promoting engagement in work. The weighted mean effect size for days at work was .66, which is approximately equivalent to a success rate of 65%. In the 5 studies that compared individual placement and support or supported employment with conventional vocational rehabilitation services, 51% of the
service users in individual placement and support or supported employment worked competitively compared with 18% of those in the comparison groups. The weighted mean effect size was .79. In a review of 4 studies of the conversion of day treatment to supported employment, and 9 randomized controlled trials comparing supported employment to alternative approaches, Bond (2004) found that between 40% and 60% of service users in supported employment obtained competitive employment compared with less than 20% of controls. Employed service users showed improved self-esteem and better symptom control. Effective vocational rehabilitation involves assessment, rapid placement in competitive employment (rather than a sheltered workshop), and the provision of individualized vocational support and training while service users are in employment (rather than beforehand) (Cook & Razzano, 2005).

**ASSERTIVE COMMUNITY TREATMENT**

People with chronic relapsing schizophrenia have difficulty maintaining contact with community services, and so may either become disconnected from such services or become chronically hospitalized. With assertive community treatment, service users receive intensive, continuous individualized treatment, rehabilitation, and support services from a community-based multidisciplinary team in which team members carry small case loads (Allness & Knoedler, 1998; Burns & Fim, 2002). In a meta-analysis of 6 randomized controlled trials, Coldwell and Bender, (2007) found that assertive community treatment led to a 37% reduction in homelessness and a 26% improvement in psychiatric symptom severity compared with standard case management. In a systematic review of 25 randomized controlled trials, Bond et al. (2001) concluded that assertive community treatment substantially reduces psychiatric hospital use, increases housing stability, and moderately improves symptoms and subjective quality of life. It is highly successful in
engaging service users in treatment. Bond et al. (2001) found that the more closely case management programs followed assertive community treatment principles, the better the outcomes. While assertive community treatment services are costly, these costs are offset by a reduction in hospital use by service users with a history of extensive hospital use. In meta-analysis of 44 studies involving over 6,000 service users, Ziguras and Stuart (2000) found that assertive community treatment was more effective than treatment as usual in reducing care costs and family burden, and in improving family satisfaction with services.

PRACTICE IMPLICATIONS

Clients with schizophrenia should be offered multimodal treatment programmes which integrate pharmacological and psychological interventions. Pharmacological interventions include initial treatment of acute psychotic episodes, and later maintenance therapy with atypical antipsychotic medication. Psychological interventions include psychoeducational family therapy to promote family support, medication adherence and prevent relapse; cognitive behaviour therapy to help clients manage residual positive symptoms; social skills training to enhance social competence and reduce social isolation; cognitive rehabilitation to help clients overcome or compensate for cognitive deficits; and individual placement and support or supported employment to promote vocational adjustment.

Where service users have difficulty retaining contact with routine outpatient services, treatment should be offered by an assertive community treatment team. These conclusions are broadly consistent with the important role accorded to psychotherapy and psychological interventions in international guidelines for best practice (American Psychiatric Association, 2004; Lehman et al., 2004; McEvoy et al., 1999; NICE, 2003).

FURTHER READING
For Clients and families - self-help for schizophrenia

For professionals – psychoeducational family therapy manuals for schizophrenia


**For professionals - cognitive behaviour therapy manuals for schizophrenia**


**For professionals - social skills training manuals for schizophrenia**


**For professionals - cognitive remediation guides for schizophrenia**


**For professionals - assertive community treatment manuals**


REFERENCES


