

Can recovery-focused multimodal psychotherapy facilitate symptom and function improvement in people with treatment-resistant psychotic illness? A comparison study

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Objective: To assess whether recovery-focused multimodal psychotherapy can facilitate symptom and function improvement in people with treatment-resistant psychotic illness.

Method: Nine people with treatment-resistant schizophrenia or schizoaffective disorder whose symptoms and level of functioning necessitated inpatient care were engaged in individual multimodal psychotherapy for up to 21 months. In addition to the multimodal therapy they also received standard inpatient care. Twelve people retrospectively matched for diagnosis, age, sex, and chronicity of illness, formed a comparison group. They also received standard inpatient care. The standard inpatient care for both experimental and comparative groups consisted of custodial care, predominantly atypical antipsychotic drug therapy, and ongoing care from a key worker.

Results: The treatment group showed clinically significant improvements in the overall Positive and Negative Symptom Scale (PANSS) scores which was significantly better than the changes found in the comparison group ($p = 0.037$). There was a 43% reduction in positive symptoms, a 30% reduction in negative symptoms, a 27.5% reduction in general psychopathology symptoms and a 30% reduction in overall scores on the PANSS. General behaviour scores on the Rehabilitation Evaluation of Hall and Baker were clinically improved, with a 32% reduction, as were deviant scores, with a 93.3% reduction. The change in the deviant scores was significantly better in the treatment group ($p = 0.025$).

Conclusion: Recovery-focused multimodal psychotherapy may facilitate symptom and function improvement in people with treatment-resistant psychotic illness.

Key words: multimodal psychotherapy, recovery, treatment resistant schizophrenia/schizoaffective disorder.

Australian and New Zealand Journal of Psychiatry 2003; 37:720–727

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Received 4 October 2002; revised 30 May 2003; accepted 27 July 2003.

In the past decade there has been increasing interest in disorder-specific supportive cognitive/behavioural therapies, which use specific talking techniques to address some of the core symptoms of psychosis such as delusional beliefs and hallucinations. The use of verbal challenge, planned reality testing, psychoeducation, stress management strategies, coping skills enhancement, social-skills training and destigmatization strategies has been investigated and researched in people with

some degree of treatment-resistant illness, as well as in early intervention [1–9]. None of these studies has specifically targeted people on atypical antipsychotics with treatment-refractory illness who cannot live independently because of disabling symptoms. Most studies have involved relatively short treatment duration (often 6–12 weeks).

It has long been known that problems with engagement are limiting factors when working psychotherapeutically with the most impaired psychotic individuals [10]. Often people with negative symptoms are unable to participate in cognitive behaviour therapy [11], and negative symptoms have been seen as intractable and rarely been focused on as a target for psychotherapy. Cognitive behavioural therapy tends to be problem-focused, so people who do not acknowledge or identify specific problems will tend to be less amenable to CBT techniques, even though to clinicians and family, they may suffer from severe, disabling positive or negative symptoms. Most studies have inevitably involved people with the capacity to give informed consent, which probably excludes the most severely impaired population.

In this paper we present the results of a small naturalistic comparison study which investigated the effectiveness of weekly sessions of a recovery-focused multimodal psychotherapy, with psychoeducational, cognitive-behavioural, interpersonal, supportive and spiritual components, in reducing positive, negative and general psychopathology symptoms, as well as improving general behaviour for people with severe treatment-resistant psychotic illness.

Method

Procedures

The study was conducted at a 36 bed inpatient rehabilitation unit. Admission criteria for the unit included severe, persisting psychotic symptoms with behavioural difficulties, which resulted in inability to live in the community. Average length of stay was 18 months. Twenty-five potentially eligible patients were identified in consultation with the responsible psychiatrist. They included voluntary and compulsorily admitted patients.

Inclusion criteria were: current residence at the unit at the commencement of the study; a diagnosis of schizophrenia or schizoaffective disorder with continued positive and/or negative psychotic symptoms despite optimum treatment with atypical antipsychotic drugs; ability to speak English and to give informed consent. Exclusion criteria were: major organic impairment (e.g. head injury, stroke, dementia); premorbid IQ below 75; psychopathy or history of major transference pathology; treatment responsiveness. Informed consent was obtained from residents to participate in the treatment group. Proxy consent was obtained from relatives for retrospective use of clinical data for the comparison group unless informed consent could be given.

Treatment condition

Nine people out of 25 who met the inclusion criteria were able and willing to give informed consent to be seen for regular psychotherapy sessions with the researcher/therapist. All these people already had some degree of therapeutic alliance with her because they had known her for up to 6 months prior to the commencement of the therapy.

This constituted the treatment group. They received up to 21 months of individual, flexible, recovery-focused multimodal therapy. In addition they received routine care from staff at the unit. Sessions were conducted up to twice weekly initially, for between 15 min and 1 h depending on the degree of engagement. Frequency was reduced to once weekly and then to fortnightly or monthly as recovery was achieved. Either home visits or telephone contact was used where necessary after discharge.

Comparison condition

A comparison group was assembled retrospectively from residents who fit the inclusion criteria, who were in the unit at the commencement of the trial, or who were admitted prior to the recruitment of the last participant. Of the original 25 residents who fit the inclusion criteria at the beginning of the trial, six were discharged from the unit over the time of the study and did not have sufficient assessments done to make a comparison possible. Only those remaining people who fit the inclusion criteria and had sequential assessments done were included in the comparison group. Eight were in the unit at the commencement of the study, and four were admitted prior to the recruitment of the last participant. This resulted in 12 people in the comparison group.

This group received routine care at the unit. At the commencement of the study, much of the care delivered in the unit was still based on a custodial-care model, with little if any concept of, or hope for significant recovery in this population. A key-worker system operated, in which each person had a nurse to whom they would go for advice, guidance and support.

Medication

All patients were routinely monitored by their responsible psychiatrist and medication changes were made as necessary depending on mental state assessment. Everyone who could tolerate clozapine was on the minimum dose of clozapine required to give the maximum benefit (seven in the treatment group: mean dose 426 mg daily [median 425 mg, range 175 – 600 mg]; and nine in the comparison group: mean dose 390 mg daily [median 400 mg, range 125 – 925 mg]). Prior to being treated with clozapine, all but two people had at least two adequate trials of traditional antipsychotics (a minimum of 6 weeks of doses equal to or above 600 mg daily chlorpromazine equivalents or the maximum tolerated dose). Two people, both in the comparison group were unable to tolerate clozapine and were on intramuscular haloperidol (150 mg fortnightly, and 200 mg every 3 weeks) because of non-compliance. The remaining three people were unable to tolerate clozapine or olanzapine, and were on risperidone (15 mg, 8 mg and 3 mg, respectively).

Researcher/therapist

The researcher/therapist was a senior psychiatry registrar with 12 years experience of working psychotherapeutically with severely psychotic and impaired people. She had basic psychotherapeutic training in psychodynamic, supportive, cognitive behavioural, interpersonal and psychoeducational approaches. She received weekly clinical supervision from the psychiatrist of the unit.

Non-specific elements of supportive therapy

Special attention was paid to the non-specific elements of supportive therapy, which was designed to maximize the therapeutic alliance by providing a context in which the person felt comfortable and motivated to attend regularly. The therapist would always go and find the person, rather than expecting them to come to her office. She was flexible about time and place, for example going out for a walk, coffee or a meal, and if necessary doing little other than 'being with' the person with an attitude of unconditional positive regard, genuine warmth and empathy. One session took place on a beach, the therapist waiting with some trepidation as the young woman went for a swim. Another took place in silence as the patient knitted and rummaged in her bag, allowing the therapist to sit on the end of her bed. One young man would only communicate in writing during a number of sessions, the therapist following suit, and so on.

The therapist explained that her intention was to 'build a bridge of trust' to the person, and to do her best to come over that bridge, into the person's reality, in order to understand and validate it as best she could. She explained that her hope was that eventually the person would also be able to cross the bridge, and also see more of the therapist's reality.

Recovery focus

The concept of 'recovery' was explained and discussed, and hope-inspiring examples were given in verbal and written form of personal experience of recovery. A general recovery-orientated stance was adopted, which included the following: the presentation of a pictorial model of 'the process of "re-covey"', which embodies the hopeful, empowering and destigmatizing notion that everyone is in a 're-covey' process (not just people with mental illness); that this person can recover, and that everything in the person's experience to date, and in the future can potentially be reframed as adding more useful information which can assist recovery, as the person "'re-covers" the same old ground'; the belief that empowerment was essential, and was achieved by treating the person as an equal; the encouragement of self-responsibility by providing choices (e.g. of where to go, what to do, etc.); and the reflection on purpose and meaning in the person's life – with an emphasis on making sense of the person's experiences, and encouraging their strengths.

Spiritual focus

The issue of the person's spiritual or religious beliefs was explored freely according to each person's need and preference, and spiritual practices (such as contact with an appropriate minister, prayer, scripture reading and church attendance) were encouraged if helpful. One

woman, who began therapy with the belief that God was far away from her, spoke of her relationship with God deepening significantly. She attributed her increased sense of wellbeing and confidence to God's faithfulness, which she saw as enabling her to move into supported accommodation, and start part-time work.

Cognitive-behavioural focus

In keeping with cognitive-behavioural principles, a non-confrontational approach was taken and when appropriate, Socratic questioning was used to explore delusional and other beliefs. A collaborative experimental stance facilitated exploration and reality testing. The content of the sessions was mainly driven by the person, although the therapist would ask questions to help clarify the person's perceptions and beliefs, and would make suggestions as to positive reframing of experiences in terms of their potential to assist in the process of recovery. For example, one man was convinced that he was suffering from a life-threatening illness. He frequently felt hot, and believed that the blotchiness on the palms of his hands demonstrated the degree of his ill health. He and the therapist determined together that if he had a fever, it would register on a thermometer, and he allowed the therapist on a number of occasions to take his temperature, thus proving to himself that his assumption of a fever when he felt hot, was not correct. Once he had been able to accept that he had made a wrong assumption on this count, he became willing to consider that other aspects of his beliefs might also be less valid. Frequent repetition and patient preparedness to go over the same issues again and again, helped to build trust.

Affective regulation

A reflective stance was taken in regard to affective expression, and strategies were developed for better affective regulation. For example, one woman described having 'panic attacks' when any demand was made on her to perform tasks, such as making dinner. She would retire to her room complaining of headaches, and subsequently hear indistinct voices. Gradually she became more able to name her anxiety, self-soothe by practising relaxation techniques, tell herself that with help she could learn to do things, and eventually, with support, mastered many tasks.

Psycho-educational focus

Once the trust was adequate, an attempt was made, where possible, to educate each person about the nature of their experiences (in terms of 'the other side of the bridge'), and the relationship with psychosocial stress factors and medication. For example, one man spent many hours talking of his memories of complex and detailed childhood exploits involving 'septillions' of dollars, and hidden treasures, as well as extreme dangers. The therapist explained that to her the descriptions reminded her of dream-like images, and that psychosis is like a waking dream, which generates memories and ideas that she could not share. She asked him if he noticed that now that he was on clozapine, he no longer found himself generating more of these experiences, but was simply remembering the dream-like psychotic imagery, and confusing this with reality. Gradually, after many repetitions, he became prepared to accept that what he remembered was not purely his childhood experience, but was a result of a psychotic illness which was now responding to clozapine.

Interpersonal focus

For some people, basic interpersonal skills including talking and listening skills, appropriate use of facial expression and eye contact were taught, and as the person then practised using these they were able to recognize improvements in relationships, with consequent improvement in confidence and self-esteem.

Symptom and functioning measures

Diagnosis was established by clinical diagnostic interview carried out by the unit psychiatrist and confirmed by consensus from the notes, according to DSM-IV.

The Positive and Negative Symptom Scale [12] was used to assess positive, negative and general psychopathology symptoms as well as overall mental state. The Rehabilitation Evaluation of Hall and Baker [13] was used to assess 'deviant' behaviour (including incontinence, physical violence, self-injury, sexual offensiveness, absence without arrangement, shouting at others, and talking to self), and general behaviour (including mixing with others, use of spare time, levels of activity and speech, self-care, and community integration). Satisfactory validity and reliability have been well documented.

These assessments were intended to be used every 3 months in the everyday clinical practice at the unit, which enabled the retrospective use of data for the comparison group. Efforts were made to collect baseline assessments prior to the commencement of the study, and subsequently data was to be compared at 6 months, 1 year and 18 months. All assessments were done by unit staff, external to the research team, and who had been specifically trained according to manual protocol on how to administer them.

Statistical analysis

SPSS (V. 11.5) was used for all statistical analysis. Paired t-tests were used to compare differences between initial and final assessments, with the exception of the REHAB-deviant behaviour assessments, for which the Wilcoxon signed ranks test was used. The non-parametric test was chosen because of the relative infrequency of the deviant behaviours. Independent t-tests were used to compare differences between the treatment and comparison groups at initial assessment, with the exception once again of the REHAB-deviant behaviour measures. The Mann-Whitney U-test was used in this case. Independent t-tests (and in the case of the REHAB-deviant behaviour, the Mann-Whitney U-test) were used to compare the changes between the initial and final assessment for the treatment and comparison groups. Independent t-tests were used to compare the quantitative demographic and other background variables for the treatment and comparison groups and Fisher's exact test to compare the categorical variables. Independent t-tests were used to compare the time differences between the first and final assessments for treatment and comparison groups.

Results

Baseline data

Table 1 shows there were no significant differences between the groups in terms of age, gender, age of onset of illness, duration of

illness, and diagnosis. There was, however, a difference between the groups in terms of ethnicity, with 100% European in the treatment group, and only 66.7% European (i.e. eight people) in the comparison group (three of the others were of Pacific and one of Asian origin). In order to control for this potentially biasing effect, a separate statistical analysis was also performed on the data using a comparison group of the eight Europeans compared with the nine Europeans in the treatment group.

There was no significant difference between the positive, negative and general psychopathology symptom scores for both treatment and comparison groups, respectively, at baseline (positive symptom means 18.9 and 17.0; negative symptom means 21.2 and 22.7 and general psychopathology means 40.3 and 39.3; mean total PANSS scores were 80.44 and 78.9). There was a numerical difference between the general behaviour scores of the Hall and Baker at baseline, being lower for the treatment group (means 44.0, SD 7.5 and 61.8, SD 27.3, $p = 0.051$) which marginally failed to achieve significance. This implies that the comparison group was more behaviourally disturbed at the beginning of the study than the treatment group. There was no significant difference between the deviant scores of the Hall and Baker at baseline (means 2.3 for the treatment group, and 0.9 for the comparison).

Withdrawals

Out of nine people who gave their consent to receive psychotherapy, two people withdrew after 15 months and 19 months, both having been discharged. One had received 51 and the other 63 sessions. Their last assessments are taken as the final rating, on an intention-to-treat basis.

Number of therapy sessions

The median number of psychotherapy sessions given was 67. The mean was 69.1 and the range was 51–105. Sessions usually lasted up to 1 h, although initially for some people they lasted 15 min or less. Scheduled sessions were attended 96.3% of the time.

Outcome measures

All the people in the treatment group provided baseline and follow-up measures. The comparison group was chosen on the basis of there being at least two scores. Because of the limitations of the treatment setting (i.e. routine clinical practice rather than a research facility), the time gap between first (T1) and final (T2) assessments was uneven, but not significantly different for the two groups, as shown in Table 2.

The means for the PANSS and REHAB scores at times 1 and 2 are shown in Table 3, as are the means for the changes in PANSS positive, negative and general psychopathology scores, and for the changes in REHAB scores.

Improvement in the overall PANSS score in the treatment group between time 1 and time 2 was significantly better ($p = 0.037$) than that in the comparison group. There was a numerically better improvement in the positive symptom score and general psychopathology score for the treatment group but these marginally failed to achieve significance ($p = 0.062$ and $p = 0.064$, respectively). Improvement in deviant behaviour (REHAB) between time 1 and time 2 was significantly better in the treatment group ($p = 0.025$) than the change in the comparison group (which actually got worse).

Table 1. Demographic data for treatment group (n = 9) and comparison group (n = 12)

		Treatment		Comparison		p for difference between groups
		Count	%	Count	%	
Sex	Male	6	66.7	7	58.3	Fisher's exact test p = 1.000
	Female	3	33.3	5	41.7	
Age (mean)		29.6		30.9		t = -0.314 df = 19 p = 0.757
Age of onset (mean)		18.9		19.3		t = -0.184 df = 19 p = 0.856
Duration of illness (mean months)		104.3		134.7		t = -0.704 df = 19 p = 0.490
Diagnosis	Schizophrenia	6	66.7	11	91.7	Fisher's exact test p = 0.272
	Schizoaffective	3	33.3	1	8.3	
Ethnicity	European	9	100.0	8	66.7	Fisher's exact test p = 0.104
	Non-European			4	33.3	
Mental Health Act	Under the MHA	4	44.4	10	83.3	Fisher's exact test p = 0.159
	Not under the MHA	5	55.6	2	16.7	
Marital status	Not married or equivalent	9	100.0	11	91.7	Fisher's exact test p = 1.000
	Currently married or equivalent			1	8.3	
Premorbid adjustment	No limitations	2	22.2	5	41.7	Fisher's exact test p = 0.642
	Limitations	7	77.8	7	58.3	
Education	Primary/secondary	9	100.0	10	83.3	Fisher's exact test p = 0.486
	University			2	16.7	
Family history	No history	4	66.7	2	20.0	Fisher's exact test p = 0.118
	Probable mental disorder	2	33.3	8	80.0	
Cannabis use	None	6	66.7	9	75.0	Fisher's exact test p = 1.000
	Some cannabis use	3	33.3	3	25.0	
Compliance	Always	3	33.3	9	75.0	Fisher's exact test p = 0.087
	Not always compliant	6	66.7	3	25.0	
Close friends	At least some close friends			1	8.3	Fisher's exact test p = 1.000
	No close friends	9	100.0	11	91.7	

Table 2. Time gaps (in days) between first (T1) and final (T2) assessments

		Treatment	Comparison	p for difference between groups
PANSS – Gap T1-T2 (days)	Mean	450.2	399.4	t = 1.072 df = 19 p = 0.297
	SD	125.3	92.4	
	Minimum	174.0	266.0	
	Maximum	574.0	541.0	
REHAB – Gap T1-T2 (days)	Mean	401.6	362.5	t = 0.698 df = 19 p = 0.493
	SD	113.1	136.0	
	Minimum	197.0	178.0	
	Maximum	576.0	539.0	

PANSS, Positive and Negative Symptom Scale; REHAB, Rehabilitation Evaluation of Hall and Baker.

Table 3 shows the results for both the treatment group of nine and comparison group of 12, as well as the comparison group of eight (matched also for ethnicity). It will be noted that the findings are essentially as above, but the statistical significance of the change differences is greater (suggesting that ethnicity was not a factor in determining the outcome in this study).

Hospital discharge rate

Eight (89%) of the nine study group participants and six (50%) of the 12 people in the comparison group were able to leave hospital by

the end of the study and are living in various types of supported accommodation. The therapist was not involved in decisions about discharge.

Discussion

The results of this trial show that a clinically significant improvement in positive, negative and general psychopathology symptoms as well as general behaviour (as measured by the Rehabilitation Evaluation of Hall and Baker) was achieved over a period of 21 months in

Table 3. Statistical analysis of PANSS and REHAB scores for treatment group (n = 9) and comparison groups (n = 12) and (n = 8, matched for ethnicity)

	Treatment (n = 9)		Comparison (n = 12)		p for difference between groups		Comparison (n = 8)		p for difference between groups	
	Mean	SD	Mean	SD			Mean	SD		
Positive symptoms										
T1	18.9	7.5	17.0	7.8	t = 0.560 df = 19 p = 0.582		15.4	7.5	t = 0.964 df = 15 p = 0.351	
T2	11.4	3.2	15.6	6.7			15.4	6.2		
Difference T1 – T2	-7.4	6.3	-1.4	7.3	t = 1.987 df = 19 p = 0.062		0.0	8.5	t = -2.069 df = 15 p = 0.056	
p for difference between T1 and T2	t = -3.530 df = 8 p = 0.008		t = -0.676 df = 11 p = 0.513				t = 0.000 df = 7 p = 1.000			
Negative symptoms										
T1	21.2	4.6	22.7	7.3	t = -0.517 df = 19 p = 0.611		20.9	8.2	t = 0.109 df = 15 p = 0.914	
T2	15.3	4.6	19.1	5.2			18.1	6.0		
Difference T1 – T2	-5.9	3.6	-3.6	6.4	t = -1.044 df = 17.804 p = 0.310		-2.8	6.9	t = -1.155 df = 10.246 p = 0.274	
p for difference between T1 and T2	t = -4.926 df = 8 p = 0.001		t = -1.930 df = 11 p = 0.080				t = -1.127 df = 7 p = 0.297			
General psychopathology										
T1	40.3	6.9	39.3	10.1	t = 0.276 df = 19 p = 0.786		35.9	9.4	t = 1.121 df = 15 p = 0.280	
T2	29.7	6.5	36.2	8.6			37.3	8.9		
Difference T1 – T2	-10.7	5.4	-3.1	11.7	t = -1.984 df = 16.355 p = 0.064		1.4	11.7	t = -2.671 df = 9.614 p = 0.024	
p for difference between T1 and T2	t = -5.917 df = 8 p < 0.001		t = -0.915 df = 11 p = 0.380				t = 0.330 df = 7 p = 0.749			
Overall PANSS										
T1	80.4	15.7	78.9	19.5	t = 0.193 df = 19 p = 0.849		72.1	18.6	t = 1.002 df = 15 p = 0.332	
T2	56.4	10.6	70.8	16.1			70.8	16.1		
Difference T1 – T2	-24.0	12.4	-8.1	19.9	t = -2.254 df = 18.513 p = 0.037		-1.4	20.0	t = -2.766 df = 11.420 p = 0.018	
p for difference between T1 and T2	t = -5.821 df = 8 p < 0.001		t = -1.410 df = 11 p = 0.186				t = -0.195 df = 7 p = 0.851			
Rehab – deviant behaviour										
T1	2.3	2.8	0.9	1.0	U = 45.000 p = 0.501		1.0	1.1	U = 31.000 p = 0.615	
T2	0.2	0.7	1.5	1.4			1.9	1.4		
Difference T1 – T2	-2.1	2.6	0.6	1.7	U = 23.000 p = 0.025		0.9	1.5	U = 11.000 p = 0.014	
p for difference between T1 and T2	Z = -2.032 p = 0.042		Z = -1.192 p = 0.233				Z = -1.552 p = 0.121			
Rehab – General Behaviour										
T1	44.0	7.5	61.8	27.3	t = -2.146 df = 13.161 p = 0.051		57.5	26.5	t = -1.391 df = 8.005 p = 0.202	
T2	30.1	16.3	48.6	26.6			49.9	27.6		
Difference T1 – T2	-13.9	16.0	-13.2	28.6	t = -0.073 df = 17.843 p = 0.942		-7.63	30.1	t = -0.526 df = 10.399 p = 0.610	
p for difference between T1 and T2	t = -2.597 df = 8 p = 0.032		t = -1.594 df = 11 p = 0.139				t = -0.716 df = 7 p = 0.497			

PANSS, Positive and Negative Symptom Scale; REHAB, Rehabilitation Evaluation of Hall and Baker.

a small group of people with previously treatment-resistant psychotic illness who received recovery-focused multimodal psychotherapy. Several of the elements of this approach are arguably lacking from traditional rehabilitation approaches (e.g. the focus on empowerment and recovery and consideration of spiritual needs and their role in recovery), but it is clearly difficult to tell to what extent these are the specifically therapeutic elements, compared with the more recognized approaches contained within the other multimodal elements of the therapy, which have much in common with supportive, psychoeducational, cognitive-behavioural, interpersonal and personal therapy approaches (for which there is a growing body of evidence).

It should be noted that some improvement in general behaviour also occurred in the comparison group.

Therapeutic alliance

These results indicate that it is possible to engage and work psychotherapeutically with people who are deemed treatment refractory and have not responded well even to atypical antipsychotics. It is notable that 96.3% of all scheduled appointments were kept, and although two people withdrew from the study before being finally assessed, this was after 15 and 19 months of therapy, after both had been discharged (because, one said, the therapy was now 'superfluous'). This is in a group of people who were assessed as having no close friends and either no, or only occasional, superficial social contact. It is not possible to say at present exactly which factors encouraged this level of engagement, or whether attention to the spiritual dimension contributed to the outcome. The importance of addressing religious and spiritual needs of this population has often been neglected [14–17]. Fallot [18] suggests that spirituality and religion play an important role in recovery from serious mental illness, and Kehoe [19] suggests that group work focusing on religious issues can provide even seriously mentally ill people with valuable therapeutic experiences. It is equally possible that those people who had consented to receive the psychotherapy were more motivated to recover than those in the comparison group. It remains unclear what factors might have contributed to this greater motivation, if so, and to what extent the pre-existing therapeutic alliance might have played a part.

It is important to acknowledge that to some extent the effectiveness of the multimodal psychotherapy was dependant on the skill and attitudes of the therapist, who was able to be 'consistent, direct, respectful, active and assertive, persistent, patient, tolerant, available, committed and versatile' [20]. These are characteristics which not all therapists display, and which arguably can only

be taught to a limited extent. However, in creating a new, recovery-focused, person-centred environment, it is possible to actively recruit staff who possess these attitudes.

Limitations

This is a small study, and results must be interpreted cautiously. Our initial intention was to randomly assign to treatment and control groups, but patients as psychotic as these were unable to adequately understand that consent to enter the study might not result in their receiving treatment. We therefore abandoned the randomised design and decided to use retrospective clinical information, which was gathered for clinical rather than research use. This is therefore only a comparison, rather than a true control, and this may tend to accentuate the benefits of the therapy.

Another potentially confounding factor is the finding that although there was no statistically significant difference in PANSS symptomatology between the treatment and the comparison groups at the commencement of the study, the comparison group showed a higher mean score for REHAB general behaviour, implying that they were more behaviourally disturbed. Whether and how this apparent difference may have contributed to the outcome is difficult to evaluate.

Another problem, which besets any research involving psychological treatments, is the issue of blindness to the treatment condition, which was clearly impossible. The assessments were carried out routinely by clinical staff not involved in the study.

The question of true treatment resistance also needs to be addressed. Two people in the treatment group were treated again with clozapine, which had previously failed to facilitate improvement despite an adequate first trial. It is possible that subsequent improvement was attributable to the combination of this and the multimodal psychotherapy, indeed, that psychotherapy facilitated the possibility of the successful treatment with clozapine.

The numerical improvements in functioning (as assessed by the REHAB scale) seen in the comparison group, though not statistically significant, are worthy of note. During the course of the research, the unit was undergoing major changes in philosophy and clinical approach. There was an active retraining program in place, including 'recovery workshops' and a cognitive-behaviour therapy course for some staff, and new staff were being appointed who specifically possessed many of those qualities referred to earlier. Whereas at the start the general modus operandi was based on a custodial care model, by the time of writing, many staff were beginning to adopt a person-centred, recovery-focused

approach. The presence of the researcher/therapist in the unit may itself have facilitated change in this direction. Therefore by the time of the final assessments, the comparison group was receiving care closer to the study group than it had done at the beginning. It is interesting, in the light of this confounding factor, that the comparison group did not improve much in terms of PANSS scores, whereas the treatment group did. Perhaps this reflects the fact that the multimodal psychotherapy specifically dealt with strategies for symptom reduction as described.

Conclusion

The study suggests that forming a therapeutic partnership with people deemed treatment-resistant, and talking with them about issues related to their experience, their spirituality, their concerns, illness and potential for recovery, using cognitive behavioural, psycho-educational and interpersonal skills in a safe and flexible context of their choice, can result in clinically significant reduction in symptomatology and improvement in general behavioural functioning.

This study suggests that psychotherapy may specifically benefit an even more disabled patient group than those investigated in previously published studies.

Acknowledgement

We thank Grant Paton-Simpson for statistical advice.

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