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Clinical Section

GROUP CBT FOR PEOPLE WITH SCHIZOPHRENIA: A PRELIMINARY EVALUATION

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Abstract. Individual cognitive behavioural interventions for psychosis are rapidly developing and are being shown to be effective. This paper examines the application of these interventions on a group basis. The nature of the group, treatment outcome and potential benefits of using this format are described. After the group intervention, all patients were less depressed, most had higher self-esteem and greater knowledge of schizophrenia, and half the group felt better able to cope with their symptoms. Patients reported feeling less isolated and two of the four group members stated a preference for group over individual treatment.

Keywords: CBT, psychosis, group, schizophrenia.

Introduction

There have been many attempts to apply the principles of cognitive behavioural therapy (CBT) to psychotic symptoms. These have been primarily individual or family interventions. The latter are aimed at decreasing "expressed emotion" in family members by providing families with personalized education regarding schizophrenia and by increasing the family's problem solving skills and ability to cope with problem behaviours and symptoms (Barrowclough & Tarrier, 1992). Individual interventions are aimed at reducing the occurrence of the positive symptoms, or the distress associated with them, by increasing the individual's coping strategies and understanding (Haddock & Slade, 1996).

There are a number of reasons for delivering CBT for positive psychotic symptoms in a group format. First, experience of applying coping strategy enhancement (Tarrier et al., 1993) by the first author (A.G.) suggested that some patients believe that certain psychotic phenomena are unique to them, which in turn can adversely affect their self-esteem and general functioning. Second, generalization and modelling of coping strategies might be improved. Social skills training is usually delivered to groups of

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patients for this reason (Wallace, Liberman, MacKain, Blackwell, & Eckman, 1992). In addition, peer pressure may positively influence compliance with homework tasks. Finally, group therapy may permit delivery of CBT to more patients in relation to therapist time, an important consideration in light of the continuing pressure on mental health services in the United Kingdom.

Greenwood (1984) has described the use of basic cognitive therapy techniques in a group setting. However, cognitive behavioural approaches to psychosis have been considerably refined since then. More recently group cognitive therapy has been used with patients to address remediation of cognitive deficits (Brenner et al., 1994). Despite potential advantages, group interventions based on current cognitive behavioural approaches to positive psychotic symptoms have not been evaluated (Kahn & Kahn, 1992). It was decided to evaluate the impact of providing group CBT for patients with persistent positive psychotic symptoms. It was predicted that members of this group would experience:

1. A reduction in persistent positive symptoms.
2. Increased self-esteem.
3. Reduced depression and hopelessness.
4. Increased perceived control over their experiences.
5. Increased perceived ability to cope with their experiences.
6. Increased knowledge, which would be maintained over at least six weeks (i.e. to the end of the intervention period).

Method

Subjects

Five patients with a primary diagnosis of schizophrenia, who met DSM III-R criteria (American Psychiatric Association, 1987) were invited to attend. One patient refused to take part and also refused individual therapy. All patients were referred to one of the authors (A.G.) either for individual psychological therapy or specifically to the group by the local multi-disciplinary psychiatric rehabilitation team. Subjects were the first three consecutive referrals that were received for individual therapy and the first two referrals for group therapy. Inclusion criteria were that patients must have a primary diagnosis of schizophrenia, persistent positive psychotic symptoms and were stabilized on neuroleptic medication.

There were two men and two women; their ages ranged between 31–62 years with a median age of 41 years. The median duration of illness was 12.5 years, ranging from 3 to 14 years. All members had been known to the service for at least two years, had had several previous admissions, median number of admissions 7 ranging from 2–9, median duration 32.5 days ranging from 28 to 106 days in duration, the time since last admission ranged from 1 week to 2 years and 5 months. All members were unable to work and in receipt of Disability Living Allowance. With respect to previous psychological involvement, one member had received no previous psychological input (subject 4), one person (subject 1) had refused individual psychological input on two separate occasions, one person (subject 3) had been seen on two separate occasions but attended only initial sessions before failing to attend; he was also seen at home for psychological

input but only an assessment was possible and he failed to complete any homework tasks. The other member (subject 2) had attended 16 individual sessions but made very little progress.

Measures

Symptoms were rated using the Psychiatric Assessment Scales (PAS) (Krawiecka, Goldberg, & Vaughan, 1977), which had been modified for use in another research project (Lancashire, 1994) and is an interview based tool. The following standardized questionnaires were used: the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) to assess depression, the Beck Hopelessness Scale to assess hopelessness and the Rosenberg Self-esteem Scale (Rosenberg, 1965) to assess self esteem. A Knowledge Scale (Birchwood, Smith, & Cochrane, 1992) was also administered. This is a multiple choice questionnaire aimed at assessing patient's knowledge of appropriate terminology, symptoms, course and prognosis and so on. Three questionnaires were designed specifically for the group: the symptom/problem rating scale (Appendix 1), which assesses characteristics for the target symptom or problem; a views about schizophrenia questionnaire (Appendix 2), which assesses satisfaction with having a diagnosis of schizophrenia and perceived understanding of schizophrenia; and a satisfaction questionnaire (Appendix 3), which assesses patient's satisfaction with the group.

Treatment

The group was held in a recently opened community resource centre. It ran for eight consecutive weeks with a follow-up session held one month later. Each session lasted for one hour with 20 minutes at the end for coffee/tea and biscuits (the latter to entice people to return the next week and to facilitate a convivial social atmosphere). No new members were allowed once the group had started. People were encouraged to attend all sessions. Three members missed one session each, one due to flu, one due to a court appearance and one due to inpatient admission. The group was devised and run by a clinical psychologist (A.G.) and clinical psychology trainee (F.L.).

The first four sessions focused on engagement, setting goals that they hoped to achieve as a result of attending the group, and addressing issues related to the stigma associated with being "schizophrenic". The views about schizophrenia rating scales were administered during these sessions. Relevant and accurate information was provided and an attempt made to normalize experiences by highlighting similar experiences within the non-psychotic population (Kingdon & Turkington, 1991).

In the final four sessions individuals identified and practised coping strategies relating to their target problem or symptom. Each patient was asked to identify a target symptom or problem, one which was causing them the greatest distress or concern and that they wished to change. These were: hearing voices, persecutory thoughts, poor concentration, and extensive pacing due to a feeling of restlessness. Each problem was then rated using the scale shown in Figure 2 and throughout subsequent sessions. Detailed assessment of the components of the symptom/problem along with specific antecedents and consequences, whether behavioural, cognitive or emotional, were carried out. The impact of negative automatic thoughts on mood and the relationship

between mood and the perceived ability to use coping strategies was identified and discussed. A formulation of the problem was discussed within the group, and ideas were shared as to how coping might be improved based on emphasizing and adapting current coping strategies. This part of the intervention was thus mainly based on coping strategy enhancement (Tarrier et al., 1993). The general model of symptoms that was presented was of delusions being beliefs that could be changed and of auditory hallucinations as internally generated. However, structured individual work using this model was not carried out and the emphasis was on coping with symptoms.

The final session was concerned with encouraging continued use of coping strategies. The gains that had been made by all members of the group were reiterated and specific goals were set for the future. All members then helped one another in making these goals realistic and in problem solving any potential difficulties that may arise.

One month post-intervention the group met again for a follow-up session. Results of assessments were fed back to each individual and feedback was sought as to what members had found helpful and unhelpful. The symptom/problem rating sheet was re-administered in order to assess maintenance of any gains. Progress on the goals that had been set was discussed and any particular problems addressed.

Procedure

Baseline questionnaire assessments were given to patients to complete at home and were brought to the assessment interview, which took place within the following week. The assessment interview consisted of introducing the patient to the group therapists (A.G. and F.L.), informing the patient about the group and assessing symptomatology. Symptom assessment interviews were carried out by one therapist, the other making independent ratings during the session. Both assessors were trained in using the PAS and no discrepancy in scoring was found. All assessment interviews and questionnaires were completed within the two weeks before the first group session. The views about schizophrenia and the problem rating, shown in Appendix 1 and 2, were given the week prior to the relevant topic being addressed and weekly whilst the topic was being addressed during the intervention (see below).

In order to allow feedback at the final follow-up session, patients were reassessed on all measures two weeks after the penultimate session. The target symptom/problem rating sheet was completed at this final follow-up session as well as in the interval between the penultimate and final follow-up session. Feedback from group members, both on the satisfaction questionnaire and comments during individual and group discussion throughout the intervention, were noted.

Results

Due to the very small sample size, it was not appropriate to analyse the data obtained statistically. Descriptive data are shown below.

There is mixed support for hypothesis one. As measured by the KGV, one person's auditory hallucinations became slightly worse, the others remained the same (see Table 1). Two people's delusions improved; for one person this was shown in the delusions

Table 1. Pre- and post-median scores and ranges for the KGV, BDI, BHS and RSE

Measure	Pre-median	Pre-range	Post-median	Post-range
KGV depression	2.5	2–3	2	0–3
KGV anxiety	1.5	1–2	1.5	0–4
KGV delusions	4	4	3.5	0–4
KGV hallucinations	3.5	2–4	4	2–4
KGV flat affect	1	1–2	1.5	0–2
KGV psychomotor	0	0–1	0	0–2
KGV incoherence	0	0–1	0	0–1
KGV poverty speech	0	0–1	0	0–1
KGV abnormal movements	0	0–3	0	0–3
KGV co-operation	0	0	0	0
KGV total	14	12–15	13	7–17
BDI	29	20–34	17	17–26
BHS	13	11–15	11.5	11–13
*RSE	20.5	15–31	26	21–36

* High score denotes high self esteem.

Table 2. Pre- and post-median scores and ranges for the Knowledge questionnaire and the Views about Schizophrenia rating scale and pre-, post- and follow-up medians and ranges for the Symptom/Problem rating scale

Measure	Pre-median	Pre-range	Post-median	Post-range	F-up median	F-up range
Knowledge	13	6–12	24	8–27		
Target symptom:						
Frequency	7	6–7	6	4–7	4.5	4–7
Distress	6.5	5–7	6	4–7	5	3–6
Preoccupation	6	4–7	5.5	5–7	4.5	3–6
*Control	1	1–2	3.5	1–5	4.5	1–6
*Coping	3.5	2–5	3.5	1–5	4	3–6
Views:						
How feel re diagnosis	1	1–3	2	1–3		
Understand schizophrenia	2	1–4	3.5	2–4		
Understand symptoms	2	1–3	3	2–4		

* High scores denote good coping and control.

going from being frequent and persistent to being non-existent (Table 1). At post-treatment the second hypothesis is supported. Three patients showed an increase in self-esteem, two of these crossing the threshold for positive self-esteem. The one patient who showed a decrease in self-esteem of 2 points (subject 2) still remained in the positive self-esteem band (see Table 1).

All patients showed a reduction in depression and two patients showed a decrease in hopelessness. However, two patients (subjects 1 and 2) showed an increase in hopelessness of 1 point each (see Table 1). Self-report at the final session identified all patients reporting a decrease in feelings of isolation and depression. These were both goals generated by patients at the initial session and reported back on at the follow-up session. Thus there is general support for hypothesis three. The results at follow-up also support hypothesis four (see Table 2 and Figure 1). There was an increase in perceived control over the problem/symptom for three of the subjects and no change for one (subject 4).

There was mixed support for hypothesis five. Two of the four patients felt more able to cope with this problem, one patient (subject 3) showed no change and one patient (subject 4) felt less able to cope, with a reduction of 2 points (see Table 2). At post-assessment three of the patients obtained a mean increase of 4.3 points on the Knowledge questionnaire, that is they answered approximately four more questions correct at post assessment, thus supporting hypothesis six. Unfortunately, despite several reminders, subject 1 failed to return the Knowledge questionnaire. Two of the patients reported understanding more about schizophrenia as a result of the group and two subjects (subjects 1 and 4) reported no change in their understanding about schizophrenia (see Table 2).

Frequency, distress, preoccupation and conviction concerning the target problem are reported in turn. Three patients showed a reduction in frequency of this problem/symptom and one patient (subject 3) showed no change (see Figure 2 and Table 2). Three patients showed a reduction in distress caused by the problem/symptom and one patient showed no change in distress (subject 4) (see Figure 3 and Table 2). Two patients were less preoccupied by their problem/symptom and two (subjects 3 and 4) showed no change in preoccupation (see Figure 4 and Table 2). The conviction rating was only relevant for delusions and the patient with this identified problem (subject 2) showed a reduction in conviction of one point.

Two of the patient's views about schizophrenia changed from feeling "extremely unhappy" about having a diagnosis of schizophrenia to being "not happy". One patient (subject 3) remained "neutral" and the other (subject 4) remained "extremely unhappy" (see Table 2). One patient's (subject 2) perception of their understanding of schizophrenia changed from understanding "a little" to understanding "a lot" and one (subject 3) went from understanding "nothing" to understanding "some". One subject (subject 4) remained unchanged at understanding "quite a lot" and another subject (subject 1) remained unchanged at understanding "a little" (see Table 2). Three patients (subjects 2, 3 and 4) believed their understanding of their illness to have improved and one showed no change in this variable (see Table 2).

In the final follow-up session all group members reported that they found meeting other individuals who had similar problems made them feel less alone, and less different from everyone else around them. Unfortunately, this dimension was not measured directly, but it is useful to examine some of the phrases that were used in the feedback:

- "I never knew that other people heard voices as well" (subjects 1 and 3).
- "No-one has ever spoken to me about my voices before". This was after 14 years of being known to psychiatric services (subject 3).

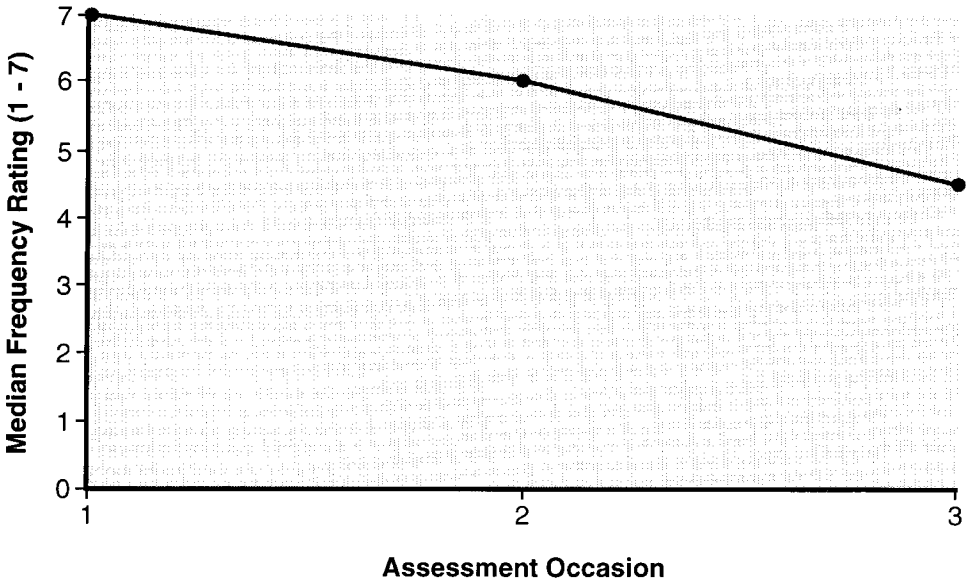

Figure 1. Changes in perceived control over target symptom/problem

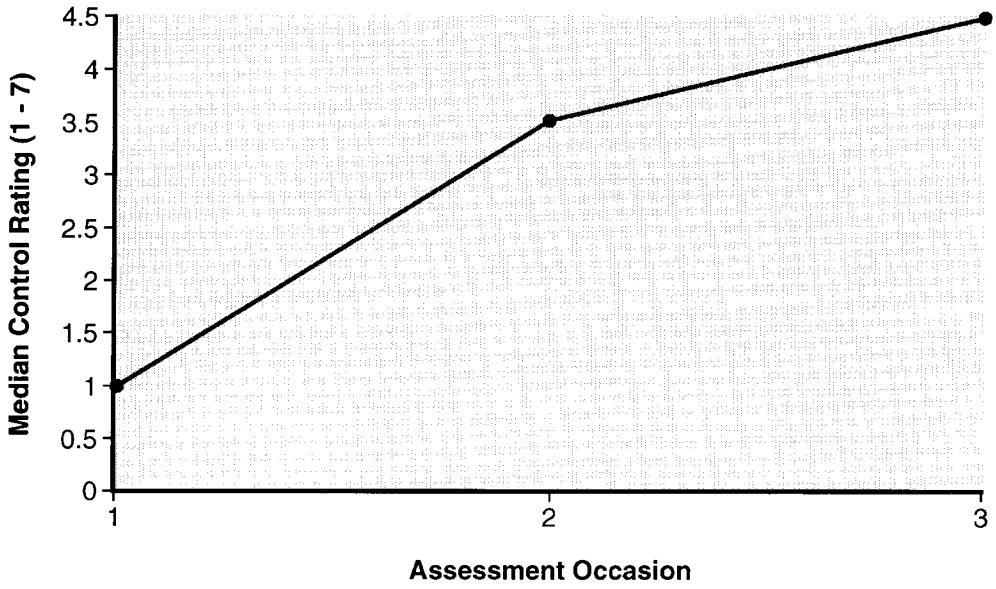

Figure 2. Changes in perceived frequency of the target symptom/problem

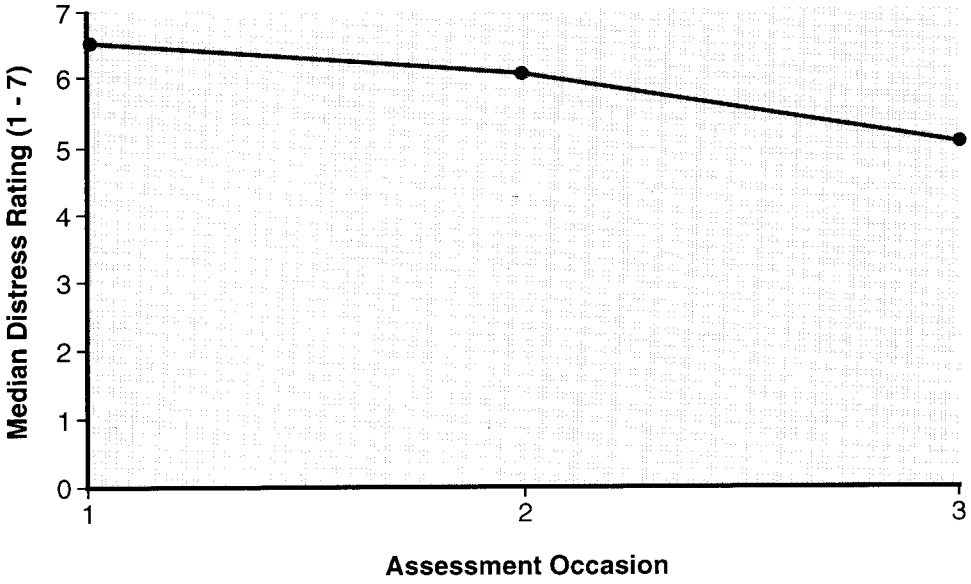

Figure 3. Changes in perceived distress caused by the target symptom/problem

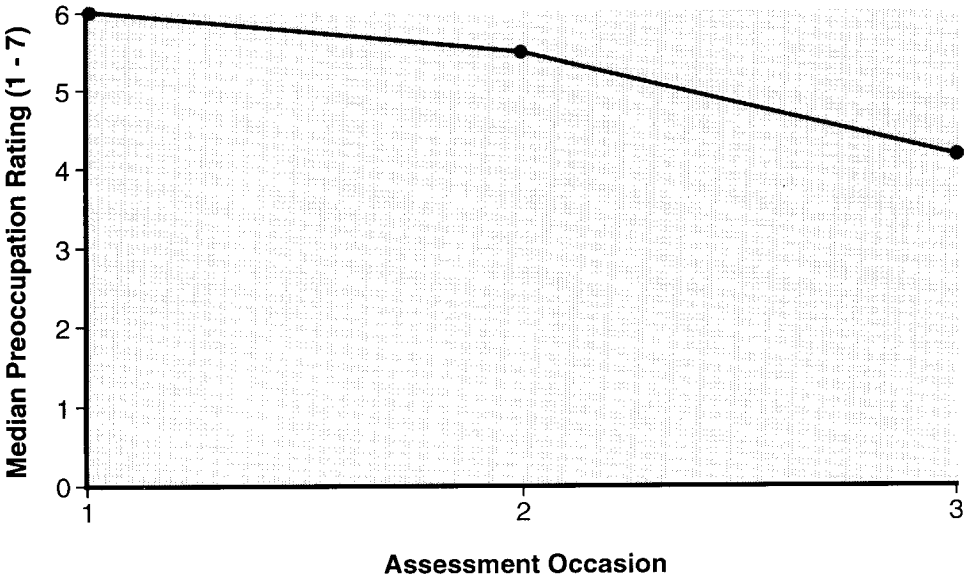

Figure 4. Changes in perceived preoccupation with the target symptom/problem

Subject 4, who according to psychometric measures benefited least from the group, reported that:

– "I did not find anything in particular useful, but I really enjoyed coming to meet other people who have similar experiences."

Discussion

In summary, the results show that a group approach to positive symptoms can have a beneficial effect on the impact of symptoms and on associated mood. It is important to note that during the course of the group, one patient (subject 2), suffered a major psychotic episode and from session two he became an inpatient. He remained acutely ill throughout the remaining sessions and remained in hospital for two months after the final group session. Despite this, he still showed a decrease in depression and an increase in perceived control over his target symptom and ability to cope with it. Further, after being admitted to hospital he still wished to attend the group, as he felt that it was helpful to him. If this subject is excluded from the results all patients show either a decrease or no change in symptomatology. All show a reduction in depression and an increase in self-esteem. With respect to hopelessness, two subjects show an increase in hopelessness of one point.

There are a number of criticisms that can be made about the design of this study, and also some difficulties with the concept of running a group for individuals with psychosis. Assessments were carried out by the group facilitators and so there is the possibility of bias. It was helpful to have facilitators carry out the initial assessments as it assisted in the engagement process and allowed the facilitators to be aware of patients' symptoms. It also gave patients permission to talk about their symptoms, which it was hoped would be continued in the group. However, subsequent studies should attempt to use an independent assessor.

In planning the content of the sessions, the facilitators were over ambitious and due to time constraints had to reduce the amount of material that was covered. Poor concentration is a common problem experienced by many individuals who suffer long-term mental health problems, and who are maintained on medication. If too much information is presented at once, it is more difficult for any of it to be processed or retained. This was anticipated to some extent by the introduction of reminders and handouts of the information discussed. Although relevant to all aspects of the group, this issue is perhaps particularly pertinent to the education sessions. It may be that the knowledge about schizophrenia, which showed an increase over the six week period, would have been greater if information had been presented more slowly and reiterated more often.

There are two clear disadvantages for a group approach as compared to receiving individual therapy. The first concerns the inevitable threat to confidentiality. This was taken very seriously and explicit rules were agreed by all members at the onset. It is always possible that this very problem may prevent group members feeling able to be open in their discussion, and this could prevent the group from being effective in addressing difficult issues. Some people may prefer an individual approach and this is a preference that must be respected. The second disadvantage of group therapy is the

lack of individualized formulation and intervention. Although this was compensated for to some extent by having a small number of patients in the group, there was inevitably a more general approach to problems. This may explain the negligible change in KGV scores.

Taking into account the above disadvantages, the data and comments that members made at the feedback session suggest that group CBT may be an effective treatment strategy for people with persistent psychotic symptoms. Most importantly, all members of the group fed back that one of the most valuable benefits they had gained was feeling less alone.

The authors' impression was that the most effective component of the group was the Coping Strategy Enhancement. This technique worked especially well in a group setting due to the variety of ideas offered. Suggested strategies had high face validity because often they were already being used effectively by an individual who had experienced the same problem in the past, or who was still experiencing it but had not chosen it as their target problem. In some cases, members were able to offer personal experience to highlight a point that may be difficult to address as a therapist. For example, when one of the members described thoughts of persecution that he was finding very distressing, another member recounted that "I used to get those kinds of thoughts but now I just think well, I'm not that important, so why would anyone want to be after me? Now I just think maybe I was lonely and it made me feel a bit more important." This was a helpful comment and led the patient to question his delusional beliefs.

Conclusions

The initial aims of the group have been achieved. The study demonstrated that a group format for this treatment is both viable and acceptable and some practical difficulties have been overcome. Further, we have shown that there are benefits from this approach on a number of outcome measures. The data show that the group produced improvements for two individuals, little change for one, and an increased sense of control and coping for one individual suffering a major relapse. All patients reported benefiting from discussing their experiences with others, feeling less isolated and less different to those around them. As such, a more rigorous examination of the efficacy of such groups is worthwhile. Ideally, the group intervention should be evaluated by means of a randomized controlled trial with a representative sample of patients, blind assessments with comprehensive baseline data collected. Patients were admitted to the group on the basis of order of referral but future groups might benefit from targeting patients with more homogeneous symptoms.

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References

American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorders (3rd edn. revised)*. Washington, DC: Author.

Barrowclough, C., & Tarrier, N. (1992). *Families of schizophrenic patients: Cognitive behavioural intervention*. London: Chapman and Hall.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *41*, 561–567.

Birchwood, M. J., Smith, J., & Cochrane, R. (1992). Specific and non-specific effects of educational intervention for families living with schizophrenia: A comparison of three methods. *British Journal of Psychiatry*, *160*, 806–814.

Brenner, H., Roder, V., Hodel, B., Kienzle, N., Reed, D., & Liberman, R. (1994). *Integrated psychological therapy for schizophrenic patients*. Toronto: Hogrefe and Huber.

Greenwood, V.B. (1984). Cognitive therapy with the young adult chronic patient. In A. Freeman & V. B. Greenwood (Eds.), *Cognitive therapy: Applications in psychiatric and medical settings*, (pp. 103–116). New York: Human Sciences Press.

Haddock, G., & Slade, P. D. (Eds.) (1996). *Cognitive-behavioural interventions with psychotic disorders*. London: Routledge.

Kahn, M. E., & Kahn, E. (1992). Group treatment assignment for outpatients with schizophrenia. *Community Mental Health Journal*, *28*, 539–548.

Kingdon, D. G., & Turkington, D. (1991). The use of cognitive behaviour therapy with a normalising rationale in schizophrenia. *Journal of Nervous and Mental Disease*, *179*, 207–211.

Kraweicka, M., Goldberg, D., & Vaughan, M. (1977). Standardised psychiatric assessment scale for chronic psychotic patients. *Acta Psychiatrica Scandinavia*, *36*, 25–31.

Lancashire, S. (1994). *KGV symptom scale* (*modified version*). Thorn Nurse Initiative, Manchester University.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princetown, NJ: Princetown University Press.

Tarrier, N., Beckett, R., Harwood, S., Baker, A., Yusupoff, L., & Ugarteburu, I. (1993). A trial of two cognitive-behavioural methods of treating drug-resistant residual psychotic symptoms in schizophrenic patients: I. Outcome. *British Journal of Psychiatry*, *162*, 524–532.

Wallace, C. J., Liberman, R. P., MacKain, S. J., Blackwell, G., & Eckman, T. A. (1992). Effectiveness and replicability of modules for teaching social and instrumental skills to the severely mentally ill. *American Journal of Psychiatry*, *149*, 654–658.

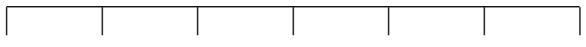
Appendix 1. Symptom/Problem Rating Scale

Name: For week starting: ending:

Main symptom/experience/problem: _____

With respect to your main symptom/experience/problem please rate the following:

Frequency: How often have you experienced it?

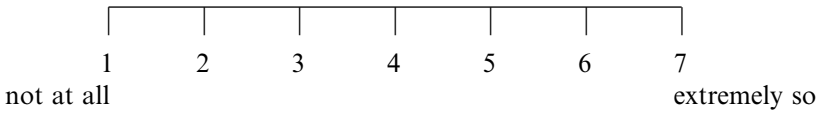


1 2 3 4 5 6 7

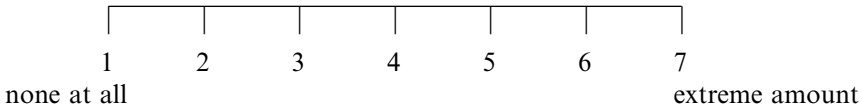
not at all all the time

What is your explanation for it?

Conviction: How much do you believe this?



Distress: How much distress does it cause you?

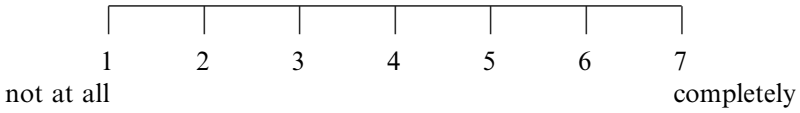


Preoccupation: How preoccupied by it are you?

NOTE THE FOLLOWING QUESTIONS RATE IN REVERSE

Control: How much control do you feel you have over it?

Coping: How much have you felt able to cope with it?



Appendix 2. Views about Schizophrenia

How do you feel about having a diagnosis of schizophrenia?

1. extremely unhappy
2. not happy
3. neutral
4. happy
5. very happy

How much do you understand about schizophrenia?

1. nothing
2. a little
3. some
4. quite a lot
5. a lot

Do you feel you understand *your* illness/symptoms/experiences

1. not at all
2. a little
3. some
4. quite a lot
5. a lot

Appendix 3. Satisfaction questionnaire

Thank you for attending the group at .....
As we explained at the onset, this was the first time that this group has been run, and therefore it would be most helpful if we could have some feedback on how you found it. Please complete the following questions by circling the appropriate answer. Please feel free to add my additional comments; they will be most welcome.

1. I found the group enjoyable. yes/no
2. I feel that I benefited in some way by attending the group. yes/no
3. There were some things about the way the group was run that I did *not* like. yes/no
4. I feel that I benefited from meeting people who had similar problems to my own. yes/no
5. I found it difficult to discuss my problems in the presence of others. yes/no
6. I would prefer to have been seen by a psychologist on my own. yes/no
7. I feel more able to cope with my problems since attending the group. yes/no
8. I would like to be involved in another group like this in the future. yes/no
9. Please make any additional comments. Use reverse side of this sheet. yes/no