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SHORT TERM DURABILITY OF A COGNITIVE BEHAVIOURAL INTERVENTION IN PSYCHOSIS: EFFECTS FROM A PILOT STUDY

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Abstract. Low self-esteem in psychosis is common and has been found to be significantly related to a number of clinical variables and to symptom severity. This report describes the follow-up evaluation of a simple time-limited cognitive behavioural intervention aimed to improve feelings of low self-worth in the treatment of psychotic symptoms. A previous small scale pilot project found encouraging results for the efficacy of the novel intervention following its delivery and at 3-month follow-up. This report examines the benefits of the technique at 12 months following delivery of the intervention. These preliminary results suggest that the intervention may promote improved levels of self-esteem, psychotic symptomatology and social functioning over the longer term. Implications for practice and future research are discussed.

Keywords: CBT, intervention, self-esteem, psychosis.

Introduction

Recent studies examining cognitive behaviour therapy (CBT) in the treatment of psychosis have shown it to be effective in reducing residual positive symptoms in out-patients, with gains maintained at follow-up (e.g. Tarrier et al., 2000). A pilot study to evaluate the effects of a novel cognitive behavioural intervention aimed at increasing self-esteem in the treatment of psychosis also found encouraging results (Hall & Tarrier, 2003). Participants who received the treatment intervention showed significantly greater improvements in terms of self-esteem, psychotic symptoms and social functioning when compared to those who received routine care alone. This paper reports results found at 12 months following delivery of the intervention.

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Method

Participants were randomly allocated to receive the treatment or control condition. The individual self-esteem intervention consisted of 7 sessions of one hour duration, usually delivered weekly. This entailed working with participants to identify 10 positive self-attributes and record supporting evidence. One session was also directed towards challenging negative self-beliefs. For example, a patient gave as evidence that she was *Determined* the following: "I insisted that I needed to see the doctor on Thursday to get my medication"; "I'm determined to stay well"; and "I'm going to the women's group at the centre; I'm determined to keep it up". Evidence that she was thoughtful included: "I invited my elderly neighbour up for a meal"; "When I was at the shop, I bought some throat sweets to help my friend with a cold"; and "I sent a letter to my mum because I wanted her to feel good". Examples of challenges to negative thoughts were also elicited. For example, the evidence against the thought that "I won't be able to cope when I go home" included "My family situation is different now. My sister understands my problem"; "My family are there to support me now but not to smother me"; "I feel much better than I did before I came out of hospital"; "I've started getting my bills sorted out"; "I'll be getting more support at home this time".

The time-limited brief intervention did not address the individual's appraisal of their psychotic experience per se. The control group received routine care, usually including case management and antipsychotic medication. Assessments were administered to each participant post intervention (or equivalent time) and at 3 and 12 months follow-up.

Measures

A range of assessments, all with acceptable psychometric properties, were administered to participants at each phase of study. Assessment consisted of: Robson Self Concept Questionnaire (SCQ, Robson, 1989); the Positive and Negative Syndrome Scale for Schizophrenia (PANSS, Kay, Fiszbein, & Opler, 1987); the Social Functioning Scale (SFS, Birchwood, Smith, Cochrane, Wetton, & Copestake, 1990); and the Hospital Anxiety and Depression Scale (HAD, Zigmond & Snaith, 1983). Although most of the scales were self-administered, the PANSS and SFS relied on interviewer ratings conducted by the principal investigator. This may have led to interviewer bias and so objectivity of ratings was checked via audiotapes by an independent rater blind to group allocation. See Hall and Tarrier (2003) for a detailed description of assessments.

Results

Participants were all inpatients in an acute NHS hospital psychiatric unit at the time of recruitment. All were prescribed antipsychotic medication. All had been discharged from hospital at the time of the 12-month follow-up assessments. Results were obtained for 7 people in the treatment group and 5 in the control group. All of the sample were unemployed and had experienced three or more admissions to hospital. The mean age of participants who remained in the intervention group at the 12-month follow-up assessment phase was 44.4 years (*SD* 8.0; median 44, range 34–53). This group consisted of 2 males and 5 females; 3 participants had a diagnosis of schizophrenia and 4 bipolar disorder. The mean duration of

illness was 21.86 years (*SD* 5.49; median 25, range 12–25). In the control group, 2 participants had a diagnosis of schizophrenia and 3 bipolar disorder; 3 participants were male. The mean age was 32.4 years (*SD* 10.24; median 35, range 19–44) and the mean duration of illness 12.8 years (*SD* 8.79; median 13, range 3–25).

Although the initial randomization employed in the study design attempted to control for the effects of many of the threats to internal validity, a high attrition rate meant that the final sample were not representative of the objective randomization process. However, attrition rates and reasons were similar for both groups and the remaining participants did not differ greatly from the original sample on any of the characteristics measured (e.g. age, duration of illness, diagnosis, gender or level of clinical symptomatology). Baseline means on the scales administered are shown in Table 1.

The results were analysed using SPSS for Windows (version 11.0). Due to the small sample size and ordinal properties of the data, non-parametric statistical tests enabling required sensitivity were conducted using the Wilcoxon Signed Ranks Test. Results showed significant improvements for the treatment group but not the control on all measures administered (with the exception of the depression subset of the HAD scale). The results are displayed in Table 1.

Discussion

It remains difficult to predict what would have happened to the scores if the sample had remained intact. The generalizability of the study is also limited as the population studied was from only one NHS geographical locality and the intervention delivered by only one therapist. Additionally, although an improvement in self-esteem of any magnitude is positive, it is notable that the mean score at 12-month follow-up for those in the treatment group fell below the range of "normal" self-esteem scores.

However, given that a previous validated treatment for self-esteem did not exist, the results are generally positive. The sustained improvement in social functioning following the treatment intervention is particularly encouraging as other trials that have assessed social functioning using the SFS as an outcome measure have found results to be non-significant. The significant improvement may be because individuals felt more able to socialize with others and engage in activities or interests as self-esteem and confidence increased. Finally, results from the HAD scale may not represent a valid measure of depression and anxiety in individuals with psychosis as the scale was standardized using a non-psychotic population and some of the items may be easily confused with side effects of antipsychotic medication. Additionally, the range of scores on each subscale is fairly small (0–21); thus the scale may have lacked the sensitivity required to measure changes from the sample size assessed.

The process by which improvements were made remains uncertain. The technique involved an element of thought challenging and thus it is possible that improvements were achieved due to this factor as opposed to, or in addition to, enhanced self-esteem. It is also possible that the seven additional sessions of individual therapy contributed to the gains made by those who received the intervention. However, this seems unlikely as all patients received considerable input from professionals due to the severity of their illness. Therefore, despite possible confounding factors, the pilot study described offers an illustration of the utility of a novel concept applied to individuals with a long standing history of psychoses.

Table 1. Results of assessments

	Intervention group ($n = 7$)			Control group ($n = 5$)				
Measure	Baseline: mean & *SD*	Baseline: median & interquartile range	12-month follow-up: median & interquartile range	Baseline: mean & *SD*	Baseline: median & interquartile range	12-month follow-up: median & interquartile range	Control group: Wilcoxon signed ranks $p =$	Intervention group: Wilcoxon signed ranks $p =$
Robson SCQ	80.29 23.63	85.00 81.00–92.00	114.00 102.00–140.00	85.60 30.64	98.00 56.00–109.00	119. 45.50–142.00	0.345	0.028*
PANSS total	63.43 16.9	65.00 52.00–83.00	47.00 34.00–58.00	63.80 17.11	64.00 50.50–77.00	62.00 38.50–79.00	0.500	0.018*
SFS total	103.78 7.99	100.29 99.07–112.20	116.86 108.07–121.36	105.56 15.84	101.60 92.22–20.90	109.07 105.72–114.86	0.500	0.018*
HAD depression	9.14 3.67	10.00 6.00–12.00	3.00 1.00–9.00	12.20 5.26	11.00 8.50–16.50	8.00 2.50–11.50	0.080	0.080
HAD anxiety	13.00 4.08	12.00 10.00–17.00	9.00 5.00–13.00	12.40 6.47	15.00 6.50–17.00	7.00 6.50–16.50	0.416	0.034*

* $p < 0.05$

Conclusions and recommendations

The findings of the present study may allow tentative conclusions to be drawn. That is, it appears that the cognitive behavioural treatment for self-esteem, used as an adjunct to routine care in psychosis, may yield benefits in terms of increased self-esteem, decreased psychotic symptomatology and improved social functioning at 12 months following delivery of the intervention. However, due to limitations, particularly associated with the small sample size and high attrition rate, further investigation should be conducted to offer more substantive conclusions. The study would now benefit from replication using a larger trial. Incorporation of a greater sample size and delivery of the treatment by more than one therapist would clearly extend the generalizability of the findings. Additionally, inclusion of booster sessions would help determine whether the initial improvements in self-esteem can be maintained at a similar magnitude over the longer term. It would be beneficial also to investigate whether the intervention is best used as a stand alone treatment or more effectively combined within formulation-driven psychological work.

Nevertheless, it is proposed the observed success of the treatment is in part due to its simplicity and structure combined with a focus on "positives". Such characteristics should allow the technique to be easily taught to clinicians and, with minimal resource implications, be accessible to patients who may benefit from directly addressing low self-esteem.

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