The effectiveness of individual therapy and group therapy in the treatment of schizophrenia

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Authors' objectives
To present the best available information on the use of group therapy (GT) and individual therapy (IT) in the treatment of schizophrenia. This review summarises the findings of all relevant studies relating to these interventions.

Searching
The search sought to find both published and unpublished studies. CINAHL, MEDLINE, EMBASE, PsycLIT, Current Contents, Science Citation Index, Cochrane Library, DARE, Dissertation Abstracts International, Conference Proceedings Index databases were searched (dates not provided) using the following terms: 'systematic review', 'clinical trial' 'randomised control trial or RCT or randomized control trial', 'schizophrenia', 'psychosis', 'psychotic', 'individual therapy', 'group psychotherapy'. Bibliographies of all identified studies and review papers were searched, and key researchers and key organisations in the area were contacted.

Study selection
Study designs of evaluations included in the review
Randomised or pseudo-randomised controlled trials (RCTs) that addressed the use or comparison of these treatment modalities.

Specific interventions included in the review
Group and individual therapy aimed at lessening the symptoms of schizophrenia. Specific interventions in the included studies were: individual cognitive behavioural therapy versus standard care; individual therapy plus family therapy versus individual therapy alone; individual therapy versus group therapy; personal therapy versus supportive therapy; group psychotherapy versus control; interactive behavioural training versus waiting list, group psychotherapy versus modular skills training, coping skills training versus problem solving group training; rotating leaders in group therapy, and group therapy for specific behavioural problems.

Participants included in the review
Adult patients suffering from schizophrenia. Some of the included studies focused on patients with schizophrenia who had specific behavioural problems.

Outcomes assessed in the review
Improvement in mental state, quality of life and social functioning.

How were decisions on the relevance of primary studies made?
Two reviewers assessed all identified abstracts and full reports were retrieved for all studies that related to the inclusion criteria of the review. Studies identified from bibliography searches were assessed on the study title and retrieved for further assessment.

Assessment of study quality
The validity of primary studies was assessed using a checklist that was designed and trialed by the Joanna Briggs Institute for Evidence Based Nursing and Midwifery (JBIEBNW). The criteria were: random allocation; blinding of participants, allocator and outcome assessor, description of people who withdrew, comparability of groups on entry, groups treated identically other than for the named interventions; outcome measured in same way for both groups, and in a reliable way; and appropriate statistical analysis used. Methodological quality was assessed by two reviewers. Disagreements between reviewers were resolved by discussion with a third reviewer.

Data extraction
Data were extracted independently by two reviewers using a data extraction tool that was developed and tested prior to use by JBI EBNW. A third reviewer dealt with disagreements. Data were extracted on study design, populations, setting, interventions, outcome measures, numbers in study, results, conclusions and level of evidence.

**Methods of synthesis**

How were the studies combined?

In all studies percentages of patients in each category and/or change in group mean score for schizophrenia were reported. If appropriate with available data, results from comparable groups of studies were pooled in statistical meta-analysis. Odds ratio (for categorical outcome data) or weighted mean differences (for continuous data) and their 95% confidence intervals were calculated for each analysis. Where possible, intent to treat (ITT) and/or completer analysis were performed. Where statistical pooling was not appropriate or possible, the findings were summarised in narrative form.

How were differences between studies investigated?

Heterogeneity between combined studies were tested using a standard chi-squared test.

**Results of the review**

Eighteen studies and one systematic review (total number of participants not stated). Two studies were initially included, but then excluded by the review panel.

1. Individual cognitive behavioural therapy versus standard care (n=1 review of 4 RCTs).

   This intervention has been reported in more detail in a Cochrane review (see Other Publications of Related Interest no.1). For relapse rates the Peto Odds Ratios (OR) for short term therapy was 0.3 (95% CI: 0.1, 0.98); for medium term therapy 0.4 (95% CI: 0.2, 0.8) and for long term therapy 0.5 (95% CI: 0.3, 0.8). For global functioning the Weighted Mean Difference (WMD) for short term therapy was 0.05 (95% CI: 0.9, 0.04); for medium term therapy -1.7 (95% CI: -5.4, 2.0) and for long term therapy -4.7 (95% CI: -9.2, -0.2).

2. Individual therapy plus family therapy versus individual therapy alone (n=1 study).

   There were no statistically significant differences between the two interventions for any of the outcomes.

3. Individual therapy versus group therapy (n=1 study).

   Group psychotherapy was significantly more effective than individual psychotherapy at improving subject outcome ratings at both 12 and 24 month follow-up (OR 9.2 at 24 months (95% CI: 3.0, 27.7), p<0.01). Neither treatment was found to be more effective at preventing subject relapse, re-hospitalisation or likelihood of discharge.

4. Personal therapy versus supportive therapy (n=2 studies).

   Relapse rates were found to be significantly higher in personal therapy than in supportive therapy (OR 4.38 (95% CI: 1.34, 14.31), p<0.05).

5. Group psychotherapy versus control (n=1 study).

   Only the ‘Overall Severity of Illness’ scale showed significant difference in mean subject scores between the treatment regimes. Significantly more subjects in the group intervention scored worse on this score than in the control (OR 7.62 (95% CI: 1.21, 47.95), p<0.05).

6. Interactive behavioural training (IBT) versus waiting list (n=1 study).

   There was no significant differences between the two groups for the Clinical Global Impressions (CGI), Quality of Life Scale (QLS), or Behavioural Assessment Tasks (BAT) scales. Only the GAF measure showed any improvement in post treatment scores for the IBT group (p<0.05).
6. Group psychotherapy versus modular skills training (n=1 study, 41 participants).

There was a significant improvement in BPRS (p<0.001) and Scale for the Assessment of Negative Symptoms (SANS) (p<0.03) scores at 6 month follow up.

7. Coping skills training (CTS) versus problem solving group training (PSGT) (n=1 study, 14 participants).

Mean Goal Attainment Scale (GAtS) scores for the CST group were significantly higher than PSGT scores at both post-treatment (p=0.04) and follow-up (p=0.007). 9. Rotating leaders in group therapy (n=1 study, number of participants not stated).

No significant improvement in symptom scores were reported for any of the group formats.

8. Group therapy for specific behavioural problems (n=3 studies).

Group psycho-education was found to be ineffective for any of the outcomes of interest.

9. One study reported that formation of an activities group was found to significantly improve the verbal interaction (p<0.01).

10. Another study reported that group psychotherapy had no lasting effect in the treatment of polydipsia in subjects with schizophrenia.

Authors' conclusions
The authors give the following recommendations (levels of evidence in brackets):

Individual Cognitive Behavioural Therapy can be effective in improving overall mental state and global functioning (level I). Interactive Behavioural Training is not effective at improving social functioning (level II). Longer term Group Psychotherapy or Modular Skills Training can be effective at improving life skills (level II). Group Psychoeducational Training is not effective for improving medication compliance (level II). The use of Activities Groups can be effective at improving social interaction (level II). Group Psychotherapy is ineffective at producing lasting improvement in subjects presenting with polydipsia (level II).

CRD commentary
This is a well written review. Inclusion and exclusion criteria are clearly reported, and the search strategy is extensive. The methodology of the review is clearly reported, but no tables of included studies are presented. Furthermore, not all of the included studies which were identified are reported in the body of the text. The conclusions appear to follow on from the results of the review. The level of evidence structure used for recommendations, however, was not explained by the authors.

Implications of the review for practice and research
Practice: The authors give the following recommendations (levels of evidence in brackets).

Individual cognitive behavioural therapy can be effective in improving overall mental state and global functioning (level I). Interactive behavioural training is not effective at improving social functioning (level II). Longer term group psychotherapy or modular skills training can be effective at improving life skills (level II). Group psychoeducational training is not effective for improving medication compliance (level II). The use of activities groups can be effective at improving social interaction (level II). Group psychotherapy is ineffective at producing lasting improvement in subjects presenting with polydipsia (level II).

Research: The authors did not state any implications for research.
Bibliographic details

Other publications of related interest

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Subject indexing assigned by CRD

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Cognitive Therapy; Psychotherapy; Psychotherapy, Group; Schizophrenia

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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.