Sind psychosoziale Interventionen bei schizophrenen Patienten wirksam: eine Metaanalyse
[Are psychosocial methods of intervention effective in schizophrenic patients: a meta-analysis]

Wunderlich U, Wiedemann G, Buchkremer G

Authors' objectives
To define the influence of psychosocial interventions on the feeling and behaviour of schizophrenic patients.

Searching
MEDLINE, PsycLIT and PSYNDEX, without any date restrictions, and Psychological Abstracts (1955 to 1995) were searched for published studies. In addition, the references of review articles and empirical studies were screened. Only papers in German or English were eligible for inclusion.

Study selection
Study designs of evaluations included in the review
Studies that compared the effects of a treatment with those of a control group not receiving the treatment were eligible for inclusion.

Specific interventions included in the review
Specific psycho- or socio-therapeutic interventions were eligible for inclusion in the review. Studies that compared specific psycho- or socio-therapeutic interventions (i.e. psychoanalysis) with unspecific therapies (i.e. assisting psychotherapy) or psychopharmacological therapies were also eligible.

Participants included in the review
Studies with patients with the diagnosis 'schizophrenia' or 'schizo-affective psychosis with schizophrenic emphasis' were eligible for inclusion.

Outcomes assessed in the review
Outcomes that documented the improvement of patients were eligible for inclusion. These had to be transformable into effect sizes, i.e. reported percentages were not considered. The included studies looked at a range of outcomes: relapse rates, social behaviour, or psychopathologic symptoms.

How were decisions on the relevance of primary studies made?
The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
The authors did not state that they assessed validity.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. The authors transformed parameters from individual studies into effect sizes.

Methods of synthesis
How were the studies combined?
The studies were combined by analysing the weighted (by study size) mean effect size. When studies provided more than one measurement occasion, the average effect size was used.
The effect size was reported as a correlation (r) and as Cohen's d. Furthermore, Rosenthal's binomial effect size display was used to demonstrate an improvement in the main effect.

How were differences between studies investigated?
The authors calculated the effects of different therapy types and analysed different follow-up periods.

Results of the review
Thirty-one studies (2,161 patients) met the inclusion criteria. All of the studies were controlled trials; only one study (63 patients) mentioned randomisation to the treatment groups in the title.

The mean weighted effect (r) for psychosocial interventions (derived from various study specific outcomes) was 0.17 (standard deviation 0.12), with effects (r) ranging from 0.06 to 0.51 in the 31 individual studies; this was equivalent to a Cohen's d of 0.34. It translates to 59% of patients who received psychosocial therapy treatment improved compared with 41% of those without such interventions.

Family education interventions (6 studies) and cognitive therapy (6 studies) showed the highest weighted mean effect size (r=0.28 or d=0.58).

For follow-up periods of directly after therapy, 6 months, and 1, 2 and 5 years after the intervention, the respective weighted effect sizes (r) were 0.22 (13 studies), 0.08 (10 studies), 0.16 (12 studies), 0.15 (14 studies) and 0.24 (3 studies).

Authors' conclusions
Psychosocial intervention methods may claim their rightful place in the treatment of schizophrenia. Psychotherapy has confirmed its incremental value beyond basic treatment. Psychosocial interventions showed a larger effect than the non-specific control group treatments.

CRD commentary
This review synthesised numerous individual studies on psychosocial interventions for patients diagnosed with schizophrenia. The search was restricted to German and English language papers, which leaves some room for language bias. None of the included studies were unpublished. The authors provided detailed inclusion criteria on the studies, but no information on study selection and data extraction processes, i.e. what steps were undertaken to reduce bias and errors. In addition, they did not report whether they assessed the validity of the studies formally. The review was restricted to studies that provided specific data.

The control groups varied widely in the treatment offered (i.e. only ordinary clinic treatment, occupational therapy, assisting psychotherapy). This meant for some studies that two psychosocial interventions were compared: one unspecific (i.e. assisting psychotherapy) and one specific (i.e. psychoanalysis).

The outcomes assessed in the individual studies varied greatly (e.g. social behaviour measures, relapse rates), not much information about the assessment method was given, and all were combined in the effect size measure.

The random assignment to treatment and control groups was not part of the description of the included studies, nor was it an eligibility criterion for inclusion in the review. This weakens the evidence base, as it is unclear whether the control and treatment groups in the individual studies differed already before the start of the treatment. A separate analysis on randomised controlled trials only was not reported.

Heterogeneity between the studies was ignored in favour of determining an overall effect size for psychosocial interventions. The effects of individual therapies and different follow-up periods were also presented.

The mean effect size was translated into other measures to provide further explanation.

The authors' conclusions are plausible, but caution is required in view of the evidence base.
Implications of the review for practice and research

Practice: The authors did not state any direct implications for practice.

Research: The authors stated that further studies on psychosocial interventions for schizophrenia are needed; these should also determine which interventions are successful for which type of patient.

Bibliographic details


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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.