Effect of psychosocial interventions on social functioning in depression and schizophrenia: meta-analysis

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CRD summary
This review concluded that psychosocial interventions delivered in outpatient and primary care settings in low- and middle-income countries were effective at improving social functioning in people with depression but further research was needed on schizophrenia. The conclusions reflect the evidence but there were limitations including a risk of publication bias skewing the results in favour of psychosocial interventions.

Authors' objectives
To evaluate the effect of psychosocial interventions on social functioning in people with depression and schizophrenia in low- and middle-income (LAMI) countries.

Searching
MEDLINE, PsycINFO, Cochrane Central Register of Controlled Trials (CENTRAL), EconLit and Web of Science databases were searched up to March 2011 for relevant publications in any language. Search terms were reported. Reference lists of selected articles were searched and authors of relevant studies were contacted.

Study selection
Randomised controlled trials (RCTs) that compared any psychosocial intervention with placebo or treatment as usual in patients with depression or schizophrenia in a low- or middle-income country were eligible for inclusion if they measured social functioning using a validated tool. Quality of life measures were excluded.

Most of the included studies evaluated psychological therapy or multicomponent collaborative care (including pharmacotherapy) delivered by mental health specialists in a hospital setting. Included studies were conducted in Brazil, Chile, China, India, Turkey and Uganda. Most studies had strict inclusion criteria and used patient self assessment to assess social functioning (using 10 different scales).

Two reviewers independently selected studies for inclusion. Disagreements were resolved by consensus.

Assessment of study quality
Two reviewers independently assessed included studies using the Cochrane Risk of Bias tool.

Data extraction
Two reviewers independently extracted sample size and post-treatment mean and standard deviation values for social functioning scores in order to calculate the standardised mean difference (SMD) for each trial. Where more than one measure was reported, the scale that captured the most domains was extracted. Data were extracted closest to six months for depression and closest to 12 months for schizophrenia. Study authors were contacted for additional data where necessary.

Methods of synthesis
A random-effects model was used to calculated pooled standardised mean differences with corresponding 95% confidence intervals (CI), with adjustments for clustering where appropriate. Results were reported separately for depression and schizophrenia. Effect sizes were broadly categorised as 0.2 (small), 0.5 (moderate) and 0.8 (large). Heterogeneity was assessed with the I² statistic. Subgroup analyses were calculated by type of intervention. Sensitivity analyses were used to investigate the impact of study quality and length of follow-up. Data not included in meta-analysis were discussed narratively. Publication bias was investigated with funnel plots.

Results of the review
Twenty-four RCTs were included in the review and 21 of these provided sufficient data for meta-analysis.
Depression (11 RCTs, 4,009 participants): Only one trial was considered to have an overall high risk of bias. A statistically significant benefit in social functioning at six months was seen for all interventions combined (SMD 0.46, 95% CI 0.24 to 0.69; 11 RCTs; I²=90%), multicomponent interventions versus treatment as usual (SMD 0.35, 95% CI 0.11 to 0.59; six RCTs; I²=89%) and interpersonal therapy (SMD 0.84, 95% CI 0.40 to 1.29; three RCTs; I²=67%). Problem-solving therapy and Morita therapy were only assessed in single trials.

Schizophrenia (13 RCTs 10 of which were pooled, 1,671 participants): Seven trials were considered to have an overall high risk of bias. A statistically significant benefit in social functioning at 12 months was seen for all interventions combined (SMD 0.84, 95% CI 0.49 to 1.19; 10 RCTs; I²=89%), multicomponent structured psychotherapies versus treatment as usual (SMD 0.93, 95% CI 0.23 to 1.63; four RCTs; I²=89%). Evidence from poor quality trials with a high risk of bias suggested significant benefits for psycho-education (SMD 1.15, 95% CI 0.06 to 2.25; three RCTs; I²=95%) and community-based interventions (SMD 0.33, 95% CI 0.10 to 0.55; two RCTs; I²=0%). Art therapy was assessed in a single trial. Sensitivity analyses did not substantially differ from the main results.

Some asymmetry in funnel plots suggested evidence of publication bias.

Authors’ conclusions
Psychosocial interventions delivered in outpatient and primary care settings were effective at improving social functioning in people with depression in low- and middle-income countries. Evidence for schizophrenia was low quality and over-represented populations of hospital patients in China.

CRD commentary
This review was based on a clearly defined research question. Efforts were made to minimise potential for errors and bias throughout the identification, extraction and synthesis of the relevant evidence. Some treatments included drug medication so it was unclear which parts of the intervention were effective. The authors acknowledged that several studies had small sample sizes and others had short follow-up.

The authors’ conclusions reflect the evidence and account for the risk of bias in individual studies. However, interventions and results were highly heterogeneous and the risk of publication bias skewing the results in favour of psychosocial interventions could not be excluded.

Implications of the review for practice and research
Practice: The authors stated that psychosocial interventions delivered in out-patient and primary care settings in low- and middle-income countries should be incorporated into efforts to scale up services.

Research: The authors stated a need for more high-quality trials of psychosocial interventions for schizophrenia delivered in outpatient settings. Specifically, they noted a need for locally validated social functioning scales, sufficiently long follow-up and trials of a wider range of interventions, including those delivered by non-specialist health workers.

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