Effectiveness of psychosocial treatments in bipolar disorder: state of the evidence

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Authors' objectives
To review the available research evidence on non-pharmacological aspects of the clinical management of bipolar disorder patients, given the need for critical assessments on this topic.

Searching
Published peer-reviewed studies were identified by computerised searches of Current Contents, MEDLINE, and PsycLIT databases through December 1999, based on relevant keywords, e.g. 'bipolar disorder', 'family therapy', 'group therapy', 'depression', 'mania', 'psychotherapy' and 'rehabilitation'. Additional references were acquired from bibliographies of published reports and from expert colleagues.

Study selection
Study designs of evaluations included in the review
The authors did not use any inclusion criteria relating to study design to select studies. Single-case studies were omitted, as were studies that involved fewer than four participants. Additional investigations in various stages of development, completion, and preliminary reporting were also excluded.

Specific interventions included in the review
Group, family and individual psychotherapies. The specific experimental therapies included cognitive-behavioural, interpersonal and psychoeducational. The specific control therapies included psychoeducational, medication or no control. Patients in all studies were treated simultaneously with mood-stabilising medication. An article on the clinical benefits of multiple psychotherapeutic interventions that was not readily classified was excluded.

Participants included in the review
Persons with bipolar disorders were included.

Outcomes assessed in the review
The authors did not use any inclusion or exclusion criteria relating to outcomes to select studies. Outcomes examined were hospitalisation, clinical relapse, vocational functioning, social functioning, self-rated improvement, mood symptoms, other symptoms, illness or treatment knowledge, medication compliance, and other miscellaneous changes.

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

Assessment of study quality
No formal assessment of quality was undertaken.

Data extraction
The authors do not state how the data were extracted for the review, or how many of the reviewers performed the data extraction. The following categories of data were extracted: study identification, study design, experimental and control sample size, experimental and control therapy, mean duration (months), mean visits per month, follow-up, and outcome or comments.

Methods of synthesis
How were the studies combined?
A qualitative narrative synthesis was undertaken, with grouping by type of therapy (group, family and individual). Publication bias was not assessed.

How were differences between studies investigated?
Sources of heterogeneity were not examined.

**Results of the review**

Thirty-two studies were included with a total of 1,052 patients (773 experimentally-treated and 279 comparison participants). Thirty-three studies were controlled in design, 13 were pre-test post-test design and 6 were anecdotal. There were 14 group therapy studies with a total of 353 participants (289 experimental and 64 comparison), 13 family psychotherapy studies with a total of 530 participants (395 experimental and 135 control), and 5 individual psychotherapy studies with a total of 169 participants (89 experimental and 80 comparison).

Group therapy: in the 14 studies using group therapy, treatment lasted an average of 20.7 (standard deviation, SD=27.6) months at a mean intensity of 3.00 (SD=1.41) sessions per month. Reductions in the proportion of participants hospitalised following experimental interventions, as reported in 6 of the studies, ranged from 15 to 31%. Another study showed hospital time decreased from 16.8 to 3.6 weeks. The other 7 studies suggested psychosocial benefits without documenting reduced morbidity or time spent in hospital. In addition to reduced hospitalisation, benefits reported with group therapy included increased adherence to prescribed medication, and improved economic status or vocational and social functioning. Only one study found evidence of fewer and less severe episodes of mania and/or depression over a year of follow-up.

Only 3 of the group therapy trials involved presumably random assignment to an experimental group therapy as an adjunct to ongoing mood-stabilising medication or to a comparison group. All three employed a psychoeducational approach. One of the 3 studies showed that more group therapy than waiting list patients reported a ‘change for the better’ following treatment (p=0.014). This improvement was sustained in 70.0% of group therapy patients at 15 months. Another study showed that treated participants had greater knowledge and more positive attitudes about treatments, as well as better medication compliance, than did the controls. The third study showed that patients in both experimental and control groups reported a ‘change for the better’, but objective clinical measures did not show improvement in either group. Family psychotherapy: of the 13 studies on family therapy, 6 were controlled studies with treatment lasting 14.3 (SD=18.7) months, at a frequency of 2.98 (SD=1.23) sessions per month. There were 7 uncontrolled trials in which treatment lasted 28.3 (SD=22.8) months at 2.42 (SD=1.86) sessions per month. One of the 6 controlled studies showed that patients in the comparison group had more hospitalisations (p=0.027) and marital failures (p=0.054) than patients in family therapy. Family therapy was also associated with better social functioning and family interactions. One controlled study showed that compared to controls, treated patients showed better global status, symptoms, family attitudes, and role functioning at 6 (p=0.07) and 18 (p=0.02) months. In one controlled study, treated patients showed a decrease in recurrence rates from 61 to 11%. Another controlled study showed that with therapy, compliance, psychosocial functioning, and mood and other symptoms remained unchanged. However, there was an improvement in knowledge of the illness, its treatment, and coping strategies at the end of the intervention and 6 months later. A further controlled study showed that expressed emotion ratings improved in treated spouses compared with control spouses (p=0.03). The sixth controlled study showed that with intervention, medication compliance (p<0.01) and overall functioning (p=0.03) improved compared to controls, but there was no symptomatic improvement.

Individual psychotherapy: 4 of the 5 studies were controlled. One study showed that patients receiving cognitive behavioural therapy were significantly more medication-compliant than controls: only half as likely to discontinue treatment against medical advice or to have a recurrent episode associated with stopping medication, and 60% less likely to require hospitalisation. In another study, treated patients showed no changes in symptoms but greater stability in daily routines (p<0.05). The third study showed improvements for treated patients in recurrent episodes, affective stability, overall functioning and compliance with prescribed medication. In the fourth study, treated patients went longer time intervals before experiencing manic episodes (p<0.01), but showed no difference in time to first relapse with depression. Experimental therapy also produced improvements in social and vocational functioning that persisted for 18 months, but it had no effect on medication compliance, time in day-hospital, or number of doses of medications (except for higher doses of antidepressants in the experimental group).
Authors' conclusions
Methodological limitations were common in these investigations. Nevertheless, important gains were often seen, as determined by objective measures of increased clinical stability and reduced rehospitalisation, as well as other functional and psychosocial benefits. The results should further encourage rising international interest in testing the clinical and cost-effectiveness of psychosocial interventions in these common, often severe and disabling disorders.

CRD commentary
This was a poorly reported systematic review. The authors stated the research question clearly but the inclusion and exclusion criteria were severely limited. The literature search, although quite thorough, was limited to published studies only and publication bias was not assessed. The quality of included studies was not formally assessed. Details of included studies were available in tables and text. Study results were grouped according to type of therapy, but they were poorly synthesised and heterogeneity was not assessed. The authors have not reported any details on the review process. The authors' conclusions appear to follow from the results but should be viewed with caution given the limitations mentioned above.

Implications of the review for practice and research
Practice: The authors did not report any implications for practice.

Research: The authors state that further testing in better-designed trials with objectively assessed, clinically-relevant outcomes is needed. Such research is required to specify and quantify the benefits, limitations, risks and costs of particular interventions, and to test their possible differential applicability and effectiveness, both in particular clinical subgroups and with respect to long-term symptomatic and functional improvement. The authors state a number of specific issues that future studies should consider. First, studies should employ methods consistent with contemporary standards of psychotherapy research, including randomisation of patients and use of control or comparison groups. Second, studies should use standardised, verifiable and reproducible therapeutic procedures. Third, studies should test interventions (including those dealing with cognition and behaviour or with expressed emotion) likely to be particularly pertinent to individuals with bipolar disorder. Fourth, studies should enrol sufficient patients to assure adequate statistical power to detect changes relating to experimental interventions. Fifth, studies should employ measures of outcome much broader than reduced signs, symptoms, or rehospitalisation rates. These measures should include assessment of changes in affective stability, coping skills, interpersonal and vocational functioning, and quality-of-life measures - common areas of dysfunction in bipolar disorder patients that are unlikely to be resolved by mood-stabilising drug treatments alone.

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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.