How effective are psychotherapeutic and other psychosocial interventions with older adults?

Authors' objectives
To evaluate the effectiveness of psychosocial and psychotherapeutic interventions with older adults, and to explore the influence of moderator variables.

Searching
MEDLINE, PsycINFO and PSYNDEX were searched using the keywords ('intervention' or 'psychotherapy' or 'group work') and ('elderly' or 'old age'). Library shelves were also browsed

Study selection
Study designs of evaluations included in the review
Controlled studies that reported sufficient data to convert into effect sizes were eligible. Case studies were excluded.

Specific interventions included in the review
Studies that compared psychosocial or psychotherapeutic interventions with a control intervention were eligible. Studies that only examined combinations of psychotherapy and pharmacotherapy, and studies that compared two active treatments without an untreated control treatment, were excluded. The included studies examined the following types of interventions: cognitive-behavioural, psychodynamic, reminiscence, relaxation, supportive, psychoeducational, activity promoting, cognitive training and miscellaneous therapies. The most common control treatments were no or delayed treatment and attention placebo (socialising without psychotherapeutic intervention). The therapists' qualifications varied from paraprofessionals or master's students, to master's level or higher plus training or practical experience of working with older adults. The number of therapy sessions ranged from 1 to 250 (mean 9). Group and individual treatments (including self-administered treatments) and combinations of these were used.

Participants included in the review
Studies that involved participants with a mean or median age of at least 55 years were eligible. The mean age of the participants in the included studies ranged from 55 to 87 years. The proportion of females ranged from 0 to 100%. Community-dwelling adults and nursing home residents were included.

Outcomes assessed in the review
Studies that reported outcomes for self- or clinician-rated depression or other measures of psychological well-being were eligible. The statistics had to be reported such that they could be converted into effect sizes. The included studies used the following instruments to measure the outcomes: for self-rated depression, the most commonly used instruments were Beck's Depression Inventory, the Geriatric Depression Scale, the Zung Depression Scale and the CES-D; clinician-rated depression was most commonly assessed using the Hamilton Rating Scale for Depression; other measures of well-being included the Life Satisfaction Index, Rosenbergs Self-esteem Scale, single items measuring happiness or satisfaction, the Philadelphia Geriatric Center Morale Scale, and the Affect Balance Scale.

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
The quality of the included studies was classified on a scale of 1 to 3. A study was classified as '1' if there was little information on the intervention, i.e. goals and methods of intervention not described, little statistical information provided, or methodological problems detected (e.g. random allocation to treatment groups). A study was classified as '2' if moderate information was provided, i.e. the main therapeutic goals and strategies were reported and there was
reference to therapeutic manuals. A study was classified as ’3’ if additional details were provided about the course of therapy or therapeutic progress, or there was detailed information of the therapeutic sessions.

The authors do not state how the papers were assessed for quality, or how many of the reviewers performed the quality assessment.

**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 data were extracted: year of publication; the number of participants in each treatment group; mean age; depression at pre-test; residence; intervention setting; effect size; the methods used to assess the outcomes; the number of sessions; the time interval between termination of the intervention and assessment; and the qualification of the therapist. For each study, the effect sizes and 95% confidence intervals (CIs) were either calculated using the difference in the post-treatment measure between the intervention and control groups, or estimated from the statistical test values. The effect sizes were adjusted for bias (see Other Publications of Related Interest nos.1-2). If more than one effect size was calculated for an intervention using one type of outcome measure, the effect size was divided by the sample size.

**Methods of synthesis**

How were the studies combined?
The studies were grouped according to the type of outcome measure and then grouped by intervention type. The weighted mean effect sizes were pooled.

How were differences between studies investigated?
Statistical heterogeneity was assessed using the Q statistic. Differences in effect sizes between the treatments were assessed and interpreted as significant when the 95% CIs did not overlap (see Other Publications of Related Interest no.3). The influence of the following variables on the results was explored: the type of control intervention (waiting list versus psychological placebo); individual versus group intervention; depressed versus non-depressed adults; community versus nursing home residents; longer versus shorter study duration; training and experience of the therapist; and the mean age of the participants. Weighted multiple linear regression was used to investigate the effect of different moderator variables simultaneously, i.e. the type of intervention, depression status at pre-test, number of sessions, interval between the end of the intervention and post-test, median age of the participants and quality of the study.

**Results of the review**

One hundred and twenty-two controlled studies were included.

Self-rated depression was reported in 57 studies and clinician-rated depression in 12 studies; other self-rated measures of well-being (SWB) were reported in 84 studies.

Overall, the studies found significant improvement for interventions versus control in depression and well-being using self-rated measures, clinician-rated measures and other SWB. For self-rated depression (91 effect sizes; 1,917 patients), the mean effect size was 0.43 (95% CI: 0.37, 0.49). For clinician-rated depression (31 effect sizes; 57 patients), the mean effect size was 1.03 (95% CI: 0.89, 1.17). For SWB (166 effect sizes; 3,718 patients), the mean effect size was 0.45 (95% CI: 0.40, 0.50). However, significant heterogeneity was found for each of these (p<0.001).

When analysed by type of intervention, cognitive-behaviour therapy, psychodynamic therapy and supportive treatments were all significantly more effective than controls using self-rated, clinician-rates and other SWB. However, significant heterogeneity was found in most analyses.

The following results for psychodynamic therapy and supportive treatments were not subject to significant heterogeneity. Psychodynamic therapy; the mean effect size was 0.79 (95% CI: 0.37, 1.21) for self-rated depression (3
effect sizes; 56 patients), and 0.65 (95% CI: 0.20, 1.11) for SWB (2 effect sizes; 42 patients). Supportive treatments: the mean effect size was 0.61 (95% CI: 0.26, 0.95) for clinician-rated depression (4 effect sizes; 64 patients).

Greater improvements were found for interventions versus controls for the following: individual interventions compared with group interventions for clinician-rated depression and SWB, but not for self-rated depression; depressed seniors compared with non-depressed seniors; nursing home residents compared with community dwellers; longer versus shorter interventions for clinician-rated depression; and therapists with professional qualifications and relevant experience compared with those with qualifications but no experience.

There was no difference in the results between high-quality studies and either low- or medium-quality studies.

Further results were reported in the review.

Authors' conclusions
Psychotherapy with seniors is worthwhile because it promotes an improvement in depression and increases general psychological well-being. Psychosocial interventions are useful in enhancing SWB in older adults and in reducing depression in seniors with mental disorders. Cognitive-behavioural interventions and control-enhancing interventions are especially recommended with older adults.

CRD commentary
The aims of the review were stated and the inclusion criteria were broadly defined in terms of the participants, intervention, outcomes and study design. Neither the specific group of older adults targeted by these interventions, nor the diagnostic criteria for depression, were clearly defined or described. Several relevant sources were searched but the methods used to select the studies were not described. In addition, it was not stated whether any language restrictions were applied. The lack of an attempt to locate unpublished material raises the possibility of publication bias. Study quality was assessed predominantly according to the level of information about the intervention.

Relevant information on the very large number of included studies was apparently extracted and, although no details of the individual studies were presented, characteristics of the included studies were summarised in the text of the review. The methods used to extract the data were not described. The studies were appropriately grouped according to the type of outcome measure and then grouped by intervention type. Meta-analyses were performed by outcome and within the subgroups, despite statistically significant heterogeneity within most analyses. Further exploration of the causes of this widespread heterogeneity would have been informative. The conclusions about comparisons between the treatments were indirect and, hence, they are not definitive. The influence of various moderators on the results was assessed both alone and in multivariate analyses.

The authors' conclusions should be interpreted with caution in view of the above limitations of the review.

Implications of the review for practice and research
Practice: The authors state that psychotherapy improves depression and increases general psychological well-being in seniors, and that psychosocial interventions are useful in enhancing psychological well-being and reducing depression in seniors with mental disorders. Cognitive-behavioural interventions and control-enhancing interventions are especially recommended with older adults. The authors also suggest that there is a need for improved gerontological and geriatric training for psychotherapists and other persons who work with older adults.

Research: The authors state that more research is required into other interventions such as family therapy and client-centered therapy.

Bibliographic details
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Other publications of related interest

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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.