Clinical effects of reminiscence therapy in older adults: a meta-analysis of controlled trials

Chin A M

CRD summary
This review assessed the effectiveness of reminiscence therapy in reducing depression and enhancing various aspects of well-being in older adults. The author concluded that further evidence to determine the effects of reminiscence therapy is required. The author appears to have considered the various limitations of the included studies and the conclusions are likely to be reliable.

Authors' objectives
To assess the effectiveness of reminiscence interventions in reducing depression and enhancing subjective well-being (i.e. life satisfaction and happiness) and self-esteem in older adults.

Searching
Twelve electronic databases, including PsycINFO (1887 to 2001), PREMEDLINE and MEDLINE (1966 onwards), CINAHL (1982 to 2001), EMBASE (1980 onwards) and the Cochrane CENTRAL Register were searched along with relevant websites; the search terms were reported. In addition, manual searches of bibliographies of relevant papers and journals were undertaken.

Study selection
Study designs of evaluations included in the review
Controlled trials, dated pre-2001, and containing at least 5 participants in each comparison group post-test, were eligible for inclusion if they used a pre-test post-test design. The included studies were randomised and non-randomised trials.

Specific interventions included in the review
Studies that compared reminiscence therapy (defined as a psychosocial intervention which has the ability to improve and increase participants’ communication, socialisation and self-confidence and focuses mainly on pleasurable past events or experience) with no treatment (except baseline treatment) were eligible for inclusion. The included studies used medium- and high-intensity reminiscence therapy, with treatment durations lasting between 30 minutes and 2 hours for 4 to 24 sessions, delivered on a one-to-one or group basis.

Participants included in the review
Studies involving adults aged 50 years or older were eligible for inclusion. The included studies identified adults with mean ages ranging from 65.6 to 86 years, and living in institutions or communities. The majority of studies reported higher proportions of females.

Outcomes assessed in the review
Studies were eligible for inclusion if they measured life satisfaction, happiness, self-esteem or depression using validated assessment tools. The included studies used a variety of assessment tools to assess each outcome.

How were decisions on the relevance of primary studies made?
One reviewer initially screened studies and discarded those identified as obviously irrelevant or ineligible. Two reviewers independently screened the remaining studies for relevance, with any discrepancies resolved through discussion.

Assessment of study quality
Two reviewers assessed validity using a published scale that considered method of treatment assignment, control of selection bias, and blinding. A score of between 0 and 3 was awarded for each item, given a total score of between 0 and 9, with a higher score indicating superior quality. Any disagreements were resolved through discussion.

Data extraction
Two reviewers independently extracted the data from the included studies, with any disagreements resolved through
discussion. Attempts were made to contact authors for missing data. Data were extracted on intervention intensity (low, medium or high) and outcomes. Baseline and end point data for the treatment and control groups were used to calculate the mean change in effect size for each study, along with 95% confidence intervals (CIs).

Methods of synthesis

How were the studies combined?
A random-effects or fixed-effect model was used, where appropriate, to pool continuous variables using the standard mean difference (SMD). Publication bias was assessed using Rosenthal’s file-drawer method.

How were differences between studies investigated?
The chi-squared test was used to assess heterogeneity in study effect sizes. Sensitivity analyses were conducted by excluding studies with skewed distributions of data, i.e. outcomes presenting a mean smaller than twice the standard deviation.

Results of the review
Eleven randomised and 4 non-randomised controlled trials (n=424: 220 received the intervention and 204 received the control) were included in the review.

The quality assessment yielded scores of between 1 and 6, with non-randomised controlled trials reporting lower scores. Only one study reported blinding of the outcome assessor (seven not blinded and seven not specified). Sample sizes were between 10 and 72 participants. The file-drawer method identified publication bias for happiness and depression.

Life satisfaction: there was no significant difference between the intervention and control groups (SMD 0.22, 95% CI: -0.8, 0.53; 5 studies) and no significant heterogeneity.

Happiness: there was a significant difference between groups, favouring the intervention group (SMD 1.09, 95% CI: 0.26, 1.92; 6 studies). However, there was significant heterogeneity, and skewed data was identified for one study. Sensitivity analyses also reported a significant difference in favour of the intervention (SMD 1.28, 95% CI: 0.34, 2.21; 5 studies).

Depression: there was a significant difference in levels of depression between groups, favouring the intervention group (SMD -0.90, 95% CI: -1.49, -0.32; 6 studies). There was significant heterogeneity and 3 studies reported skewed data. A significant difference favouring the intervention was also identified from the sensitivity analyses (SMD -1.39, 95% CI: -2.26, -0.52; 3 studies).

Self-esteem: no significant difference was reported between the groups (SMD 0.63, 95% CI: -0.20, 1.45; 6 studies) and the sensitivity analysis showed the same SMD (0.55, 95% CI: -0.11, 1.21; 5 studies).

Authors’ conclusions
A convincing conclusion about the clinical effects of reminiscence therapy on life satisfaction, happiness, depression and self-esteem of older adults cannot be drawn, owing to insufficient reliable evidence.

CRD commentary
The review question was clear and was supported by appropriate inclusion criteria relating to the participants, interventions, comparator, outcomes and study design. Attempts were made to identify all the relevant literature by searching several electronic databases and other sources. However, publication bias was reported and there may have been potential for language bias, which would affect the reliability of the results. Validity was assessed according to published criteria, but was limited by the small number of included studies and small sample sizes. Attempts were made to minimise errors and bias for most stages of the review, and appropriate methods were used to pool the results and identify heterogeneity, although potential sources of heterogeneity could not be investigated because of the limited number of included studies. Other methodological limitations included lack of blinding, use of different outcome measurement tools, and high attrition rates. Several studies reported wide CIs, all of which affect the reliability of the results. However, the author considered such limitations and the conclusions are likely to be reliable.
Implications of the review for practice and research

Practice: The author did not state any implications for practice.

Research: The author stated that future studies should undertake a more comprehensive literature search to include studies not identified by the current review.

Bibliographic details

Original Paper URL
http://www.hkjot-online.com/article/S1569-1861(07)70003-7/abstract

Indexing Status
Subject indexing assigned by CRD

MeSH
Aged /psychology; Aged, 80 and over; Memory; Mental Recall; Personal Satisfaction; Psychotherapy /methods; Psychotherapy, Group; Self Concept

AccessionNumber
12007001305

Date bibliographic record published
13/12/2007

Date abstract record published
09/08/2008

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.