Effects of psychotherapy with people who have been sexually assaulted: a meta-analysis
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CRD summary
This review assessed the effects of psychotherapeutic interventions following sexual assault and concluded that they were beneficial for victims of sexual assault up to one year following treatment. Due to the type of analysis, the conclusion should be treated with some caution as the generalisability of the findings to specific psychotherapeutic interventions and specific sexually assaulted populations was unclear.

Authors' objectives
To assess the efficacy of psychotherapeutic interventions following sexual assault.

Searching
PsycINFO, MEDLINE, Cochrane Central Register of Controlled Trials (CENTRAL) and Social Services Abstracts were searched up to April 2007 for English-language studies. Search terms were reported.

Study selection
Studies of psychotherapeutic interventions for people who had been sexually assaulted (or most participants had been sexually assaulted) and who were experiencing rape trauma or post-traumatic stress disorder (PTSD) were included. Case studies and studies where there were insufficient data to calculate the effect size were excluded.

Participants in most of the included studies had PTSD based on Diagnostic and Statistical Manual of Mental Disorders (DSM) III-R or DSM IV criteria. All participants were female. Time since the assault ranged from 15 days to nine years. The interventions assessed were mainly cognitive behavioural, of less than six weeks duration and on an individual basis. Interventions consisted of a range of therapies that included stress inoculation training, relaxation, exposure, cognitive-based, cognitive behavioural, supportive counselling, eye movement desensitisation reprocessing, assertion training and insight/experiential therapy. Interventions were delivered by students, students and practitioners or experienced practitioners. All except one of the studies with a control group used waiting-list controls. Several studies compared different psychotherapeutic interventions.

Abstracts were screened by two researchers. Where there was uncertainty a final decision was made based on the full paper.

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

Data extraction
For studies with a control group, the mean difference between the intervention group and control and the pooled standard deviation (SD) across both groups were extracted and effect size (ES) calculated using Hedges g. Where studies had more than one active intervention, the effect size was calculated for each intervention compared to the single control group for the study. For studies without a control group (repeated measures studies) the mean change from pre- to post-treatment for each intervention was extracted and the effect size calculated as recommended by Lipsey and Wilson (2001).

The authors did not state how many researchers performed data extraction.

Methods of synthesis
A single effect size and 95% confidence interval (CI) was calculated for each active intervention within a study by averaging effect sizes across all outcomes. A quantitative synthesis was undertaken using a fixed-effect meta-analysis. Studies with and without a control group were pooled separately. Statistical heterogeneity was assessed using the Q statistic. Several different methods were used to investigate publication bias. Several subgroup analyses were
undertaken to investigate the effect on the results of study characteristics such as therapy approach, frequency and duration of sessions and therapist involvement. A moderating effect was suspected where there was a difference in the subgroup effect sizes, a reduction in variance and non-overlapping confidence intervals.

Results of the review
Eight controlled studies (range 18 to 168 participants) provided 14 treatment groups and seven repeated measures studies (range seven to 121 participants) provided 11 treatment groups. A single study provided both controlled data and repeated measures data. Length of follow-up ranged from one to 12 months.

There was a statistically significant benefit from a psychotherapeutic intervention compared to waiting list controls. The effect size was classified as large (ES 0.91, 95% CI 0.75 to 1.08). There was also a statistically significant benefit with treatment in the repeated measures studies (ES 0.90, 95% CI 0.72 to 1.08). There was statistically significant heterogeneity in both analyses (p<0.0001) and the effect size ranged from small to large across the studies.

There was mixed evidence about possible publication bias in the controlled studies. There was evidence from the subgroup analysis of a difference in effect of individual and group treatment modalities; there was greater benefit from the individual approach.

Authors' conclusions
Psychotherapeutic treatment modalities for the treatment of rape-related PTSD and trauma symptoms were beneficial for victims of sexual assault. The effects were maintained up to one year following treatment.

CRD commentary
The review had clearly stated inclusion criteria and a number of relevant sources were searched for studies. It was possible that relevant studies were missed as only English-language studies were included and limited attempts were made to identify unpublished studies. Statistical tests suggested there was no publication bias. Quality of the included studies was not assessed. It was unclear whether appropriate methods were used to reduce error and bias in data extraction. Studies with and without a control group were analysed separately, which was appropriate. The studies in the main analyses were clinically diverse in terms of population, interventions and outcome measures and there was statistical heterogeneity in the analysis. The variability between studies was investigated through subgroup analysis. However, the small number of studies in several of the subgroups hindered interpretation. Interpretation of the results in terms of clinical implications was hindered by the use of a single effect size based on the average of outcome measures across several different domains. The decision to use the control group multiple times from single studies to allow the inclusion of multiple treatment groups from a single study may have affected the results, especially as this occurred for several studies. Overall, the conclusion of this review should be interpreted with some caution as the generalisability of the findings to specific psychotherapeutic interventions and specific sexually assaulted populations and the quality of the studies on which they were based were unclear.

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

Research: Further research was needed to determine whether specific therapeutic approaches were more effective and to identify variables that might influence treatment outcome.

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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.