Cognitive-behavioral stress management interventions for persons living with HIV: a review and critique of the literature

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CRD summary
The authors concluded that cognitive-behavioural stress management interventions for HIV-infected individuals facilitated positive adjustment and improve coping skills; however, the literature was limited. Due to the unknown quality of the included studies, it is difficult to assess the reliability of the findings.

Authors' objectives
To evaluate stress management interventions for individuals with human immunodeficiency virus (HIV).

Searching
MEDLINE and PsycINFO were searched for English-language papers published in peer-reviewed journals; search terms were provided. The reference lists of relevant publications were checked for additional relevant studies. Search dates were not reported.

Study selection
Studies were included in the review if the primary aim of the intervention was to improve stress management skills in HIV-infected individuals and the intervention included both cognitive or behavioural components.

All but one of the included studies evaluated a group-based stress management intervention and all were designed to facilitate adaptive coping and reduce the negative effects of stress. The core intervention component for some of the reviewed studies was the inclusion of psychoeducation about the nature and consequences of stress. Many of the interventions also included relaxation training. A minority of studies targeted changes in specific HIV-related health behaviour domains (sexual risk behaviours, substance use and medication adherence). The studies compared an intervention with a wait list control group and/or an additional comparison group (such as individual therapy on request). Interventions ranged from three to 20 sessions of 20 minutes to two and a half hours (some studies included day-long retreats). Most studies assessed outcomes immediately post intervention. Follow-up periods ranged from three months to a year. Most studies included Caucasian men. Most studies were conducted in the USA.

The authors stated neither how the papers were selected for the review nor how many reviewers performed the selection.

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

Data extraction
The authors stated neither how the data were extracted for the review nor how many reviewers performed the data extraction.

Methods of synthesis
The studies were combined in a narrative synthesis.

Results of the review
Twenty-nine papers that evaluated 21 interventions were included in the review (n≥1,636 individuals); the interventions included 14 RCTs, four non-randomised controlled trials and three non-controlled studies.

The results varied for all outcomes evaluated. For perceived stress, two studies reported positive results and two studies reported mixed results. For coping strategies, five studies reported mixed results. For coping self-efficacy (an individual's perceived ability to effectively manage stressors), two studies reported positive results and one study...
reported mixed results. For depression, five studies reported positive results and five reported mixed results. For anxiety, four studies reported positive results, one reported mixed results and two reported no improvements after the intervention. For global psychological functioning and symptom levels, 10 studies reported positive results and two reported no improvements after the intervention. For social support, two studies reported positive results, three reported mixed results and three reported no improvements after the intervention. For quality of life, one study reported positive results and three reported mixed results. There was limited evidence for health status markers. No statistical results were reported.

Authors’ conclusions
Stress management interventions for HIV-infected individuals provided a promising approach to facilitate positive adjustment and improve coping skills; however, the literature is limited.

CRD commentary
The review addressed a clear question and was supported by appropriate inclusion criteria. The search was limited to English-language published trials, which introduced potential for language and publication biases and some relevant studies may have been missed. The authors did not state how many reviewers were involved in the systematic review process, thus the potential for reviewer error and bias was unknown. The authors appropriately summarised the data in a narrative synthesis, but they did not assess quality. Although the review included a relatively large number of RCTs, the authors did not place more weight on the results from these studies. Due to the unknown quality of the included studies, it is difficult to assess the reliability of the findings.

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

Research: The authors stated that future studies needed to examine the efficacy of briefer psychoeducational stressors that focused on diverse patient groups; future research should explore the impact of stress management interventions on health behaviour changes (medication adherence, sexual risk behaviour, substance use and psychiatric treatment-seeking behaviours) that may be relevant to longer-term health outcomes; research should examine factors that affect successful dissemination of interventions to community health clinics with limited staff and financial resources; future research should provide clearer, detailed descriptions of interventions and be more methodologically rigorous.

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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.