OBJECTIVE: To conduct a systematic review and meta-analysis examining the effectiveness of cognitive behavioural therapy for the treatment of depression post SCI.

RELEVANCE: Clinically significant levels of depression in individuals with spinal cord injury (SCI) are reported to be approximately 27%; while rates of depressive symptoms among SCI individuals is shown to be up to 60%. These individuals may experience high levels of distress which can impact their quality of life.

METHODS: Medline, CINAHL, EMBASE and PsycINFO databases were searched for all relevant articles published 1980 to February 2010. Studies were selected by two reviewers and were only included for analysis if: 50% of the subjects had a SCI and study subjects participated in a treatment or intervention involving the treatment of depressive symptoms. Two independent reviewers assessed studies for inclusion criteria. Study results were pooled using a random effects model. Hedges g was used to calculate standardized mean difference (SE, 95% CI) for the post treatment effect on depressive symptoms in intervention vs. control groups for each study. Effect sizes were interpreted as: small=0.2, moderate=0.5, large=0.8.

RESULTS: Nine studies met inclusion criteria, of these 2 were RCTs, 6 prospective controlled trials and 1 cohort study, with a total pooled sample size of 531. The analysis demonstrated a significant reduction in depressive symptoms in the treatment group compared to the control, with a pooled SMD=0.6120.152 (95% CI 0.314, 0.910; p=0.0001). Assessment of depressive symptoms was conducted primarily using the BDI and CESD tools. Clinical evaluation of major depressive disorder was present in only 2 studies. Hence, the effect size calculated may be over or under inflated.

CONCLUSION(S): There was moderate evidence for the effectiveness of cognitive behavioural treatment to reduce depressive symptoms following SCI. More comprehensive clinical evaluation should be conducted in order to fully evaluate the effect of this treatment.

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