Effect of Mindfulness Based Interventions on depression and anxiety outcomes in chronic physical disease: a systematic review and meta-analysis protocol

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Background and objectives

This review aims to assess the effects of Mindfulness Based Interventions (MBIs) to reduce symptoms of anxiety and depression in chronic physical disease. A number of quality and trial design factors may compromise the current clinical literature in this area, including under powering, use of pilot data and broader difficulties with the rigour of study designs. Previous systematic reviews have been criticised for summating randomised controlled trials (RCTs) where the MBI has been compared to a waiting list control. This protocol makes a novel contribution by selecting studies for data extraction from adequately powered randomised controlled trials where the MBI is compared to active intervention.

Methods

Searches of multiple databases including CENTRAL, PUBMED, MEDLINE, CINAHL, EMBASE and PSYCHINFO, trials databases and review reference lists encompass participants with confirmed diagnoses of one or more chronic physical disease, including irritable bowel syndrome, fibromyalgia, chronic fatigue syndrome and chronic pain, excluding obesity, pregnancy, schizophrenia, bipolar disorder, traumatic brain injury and dementia. Data extraction is consciously geared evaluating both MBI specific quality factors, as well as experimental design and risk of bias factors adopting Cochrane Review methodologies.

Results/Planned Analyses

Standard Mean Difference (SMD) effect sizes (Cohen's d) and their 95% Confidence Intervals (CI) will be calculated with appropriate corrections and weighting for sample size. Heterogeneity will be measured using the Q statistic and the I^2 statistic and data will be meta-anlysed according to a random effects model.

Discussion

By adopting rigorous methodology this protocol assesses the effectiveness of MBIs and to appraise what they might offer within larger scale psychosocial healthcare delivery for people with chronic disease. We also hope to gather data about intervention design to inform future trials and technologies.

Conclusion

In summary this protocol explores robustly designed MBIs for treating anxiety and depression in chronic disease, with a view to assessing intervention effectiveness and opportunities for future research development.