



Effective Health Care

Mindfulness-Based Stress Reduction and Cognitive Therapy for Type II Diabetes Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Cognitive behavioral therapy for patients with diabetes with or without depression was found to be addressed by a 2009 systematic review and an in-process Cochrane review. Given that the existing and in-process reviews cover this nomination, no further activity will be undertaken on this topic.
 - Alam R, Sturt J, Lall R, et al. An updated meta-analysis to assess the effectiveness of psychological interventions delivered by psychological specialists and generalist clinicians on glycaemic control and on psychological status. *Patient Education & Counseling* 2009 Apr;75(1):25-36. PMID: 19084368.
 - Baumeister H, Hutter N, Bengel J. Psychological and pharmacological interventions for depression in patients with diabetes mellitus (Protocol). *Cochrane Database of Systematic Reviews* 2010, Issue 2. Art. No.: CD008381. DOI: 10.1002/14651858.CD008381.
- Mindfulness-based stress reduction with or without cognitive behavioral therapy for patients with diabetes is not feasible for a full systematic review due to the limited data available for a review at this time.

Topic Description

Nominator: Individual

Nomination Summary: The nominator wishes to compare usual care for patients with type II diabetes mellitus (T2DM) to usual care with the addition of a mindfulness-based stress reduction (MBSR) and cognitive therapy program. The nominator is particularly interested in individuals who have progressed from oral medications to injectable insulin without achieving optimal HbA1c levels.

Staff-Generated PICO

Population(s): Adults diagnosed with type II diabetes mellitus; subgroups of interest are patients with a comorbid mood disorder or those who have progressed from oral to injectable medication without achieving optimal HbA1c levels

Intervention(s): Usual care including insulin therapy with the addition of MBSR and/or cognitive therapy

Comparator(s): Usual care including insulin therapy

Outcome(s): HbA1c levels, decreased insulin requirements, long-term health outcomes

Key Questions from Nominator:

1. Would a combination MBSR and cognitive therapy intervention be successful for adults with Type II diabetes who have persistently high A1c levels despite being on insulin?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- This topic has two main areas:
 1. Cognitive behavioral therapy (CBT) for patients with diabetes with or without depression
 2. Mindfulness-based stress reduction (MBSR) with or without cognitive behavioral therapy for patients with diabetes.
- The topic of CBT for patients with diabetes with or without depression was found to be addressed by 2009 systematic review by Alam and colleagues titled *An updated meta-analysis to assess the effectiveness of psychological interventions delivered by psychological specialists and generalist clinicians on glycaemic control and on psychological status* and an in-process Cochrane review titled *Psychological and pharmacological interventions for depression in patients with diabetes mellitus*.
 - The 2009 Alam review addresses the effect of psychological interventions on psychological status and glycemic control measured by HbA1c. The majority of the studies in the review address CBT, including strategies of relaxation, problem solving, contract setting, goal setting, self-monitoring of behaviors, and enlisting social support. Eight studies specifically address patients with sub-optimal glycemic control despite medical treatment, and one study specifically addresses patients suffering from stress or anxiety related to sub-optimal control.
 - The in-process Cochrane review lists cognitive behavioral therapy as an intervention of interest and glycemic control is one of the primary outcome measures for the review. Therefore, the topic of CBT for diabetics with a formal diagnosis of depression will be covered by this review.
- Very few studies have been conducted on the use of mindfulness based interventions (including MBSR) in diabetic patients. One ongoing trial was identified that addresses MBSR plus CBT in diabetics (<http://clinicaltrials.gov/ct2/show/NCT01630512>); however, this trial does not list glycemic control as an outcome measure. Therefore, this topic is not feasible for a full systematic review due to the limited data available for a review at this time.