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ARC BITE

Brokering Innovation Through Evidence

Effectiveness of psychoeducational interventions for the treatment of diabetes-specific emotional distress and glycaemic control in people with type 2 diabetes

Results

Interventions significantly reduced diabetes-specific emotional distress (DSD) and glycaemic control (HbA1c) compared to controls.

Who needs to know?

People with diabetes, healthcare providers in both diabetes and psychological fields, researchers to further explore psychological comorbidity in diabetes.

This research was supported by the National Institute for Health Research (NIHR) Applied Research Collaboration East Midlands (ARC EM).

What did we do?

Seven databases were searched to identify potentially relevant studies. Eligible studies were selected and appraised independently by two reviewers. Multiple meta-analyses and meta-regression analyses were performed to synthesise the data; the primary analyses determined the effect of interventions on DSD, with secondary analyses assessing the effect on HbA1c.

What we found and what does this mean?

Thirty-two studies (n = 5206) provided sufficient DSD data, of which 23 (n = 3818) reported data for HbA1c. Meta-analyses demonstrated that interventions significantly reduced DSD ($p = 0.034$) and HbA1c ($p = 0.006$) compared to controls, although subgroup meta-analyses and meta-regression to explore specific intervention characteristics that might mediate this effect yielded non-significant findings.

The findings demonstrate that existing interventions successfully reduce DSD and HbA1c in people with T2DM. While promising, deductions should be interpreted tentatively, highlighting a stark need for further focused exploration of how best to treat psychological comorbidity in people with T2DM.

What next?

The findings of this systematic review and meta-analysis, combined with previous work on the prevalence of DSD, demonstrate that diabetes-specific emotional distress is a significant but treatable condition in people with Type 2 diabetes. More research is needed to understand the specific characteristics of interventions to use to target both DSD and HbA1c in people with diabetes, highlighting the importance of the identification and subsequent management of psychological comorbidity in people with Type 2 diabetes.

What is NIHR ARC EM?

NIHR Applied Research Collaborations (ARCs) support applied health and care research that responds to, and meets, the needs of local populations and local health and care systems. We do this by working collaboratively with our partners and patient groups to bring the best applied health and care evidence into practice.

Evidence

Perrin N, Bodicoat DH, Davies MJ, Robertson N, Snoek FJ, Khunti K. Effectiveness of psychoeducational interventions for the treatment of diabetes-specific emotional distress and glycaemic control in people with type 2 diabetes: A systematic review and meta-analysis. Primary care diabetes. 2019 Apr 28.

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