Individualised treatment improves depression in people with depression and diabetes

Katon WJ, Von Korff M, Lin EHB, *et al.* The Pathways study: a randomized trial of collaborative care in patients with diabetes and depression. *Arch Gen Psychiatry* 2004;**61**:1042–9.

Q Does an individualised treatment programme improve depression in people with depression and diabetes mellitus?

METHODS

Design: Randomised controlled trial.

Allocation: Unconcealed.

Blinding: Single blind (assessors blinded to treatment).

Follow up period: 12 months.

Setting: Nine primary care clinics in Washington, USA; March 2001 to 31 May 2003.

Patients: 329 people with diabetes mellitus and comorbid depression with or without dysthymia (mean age of 58 years). Inclusion criteria: ambulatory; English speaking. Main exclusion criteria: under current psychiatric care; history of bipolar disorder or schizophrenia; taking antipsychotic or mood stabilising medication; significant dementia.

Intervention: Usual physician care: participants advised to consult primary care physician about depression, who prescribed antidepressant medication or referred to specialist mental health services. Individualised depression treatment programme: participants received different types and intensities of problem solving treatment for depression in primary care or antidepressant medication (step 1). If symptoms persisted at 10–12 weeks, participants switched to another antidepressant; or to the alternative step 1 treatment; or the alternative treatment in addition to their current treatment; or had a psychiatric consultation (step 2). If one or more step 2 interventions were needed, symptoms persisted, or physician and participant were unsatisfied with the outcome, participants were referred for long term specialist mental health follow up (step 3 care). Participants with a significant decrease in clinical symptoms (<50%) received monthly telephone contact with a nurse (continuation phase treatment).

Outcomes: Depression at 6 and 12 months (40% or greater reduction in SCL-90 scores).

Patient follow up 80% of participants completed the study.

MAIN RESULTS

The individualised treatment programme significantly improved depression compared with usual care at 12 months (proportion of participants with a 40% or more decrease in SCL-90 depression score: 79/288 (54.1%) with individualised treatment *v* 54/288 (38.0%) with usual care; OR 1.89, 95% CI 1.18 to 3.02).

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CONCLUSIONS AND NOTES

A programme of individualised depression treatment is more effective than usual care for treating depression in people with depression and diabetes.

Expressing the results as odds ratios when the event rates are high can be misleading if interpreted as a relative risk. In this case, it overstates the relative risk, which we calculate to be 1.4.

Commentary

Katon *et al*'s Pathways study is a well designed "practical clinical trial".^{1,2} It used established principles congruent with both the Chronic Care Model³ and the US Preventive Services Task Force guidelines for behavioural counselling.⁴ People representative of those commonly seen in primary care settings were provided with choices for depression treatment, with follow up support and stepped care for non-responders. This practical, flexible, and patient centred approach to depression care resulted in a clinically significant improvement in depression—but not in diabetes, which was not treated directly. Thus, the behavioural principle of specificity appears to hold: "If one wants generalization, one needs to program it, not simply hope for it".⁵

Those receiving the intervention fared significantly better than those receiving usual care (NNT=10 for ≥50% improvement in depression symptoms; NNT=3.5–4 for global improvement). No formal economic analyses were presented, but the programme appears feasible and efficient; follow up calls could be challenging since nurse calls are often not reimbursable. Data on depression remission, relapse (although 12 months may be insufficient time to see significant differences in relapse), diabetes self-management behaviours, and overall quality of life were not reported. Intervention may be needed for each condition in comorbid patients (at least for diabetes and depression)—treating depression does not generalise to diabetes (and vice versa).⁶ Ideally, biopsychosocial interventions using concepts applicable to both depression and diabetes (self-efficacy, exercise, medication adherence) would be delivered by a single care manager (rather than one for diabetes and another for depression). Many of the same principles apply to diabetes as well as depression and other chronic illnesses.^{7,8} Thus, the tools and resources with which clinical teams need to be familiar seem to be generic—but in order to be effective, they may need to be targeted to each specific condition or target of focus.

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