EDITORIAL

Diabetes and depression are a lethal combination in women

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COMPARED WITH THOSE WITH NEITHER CONDITION, WOMEN WITH BOTH DIABETES AND DEPRESSION are more than twice as likely to die from all causes, and nearly three times as likely to die from cardiovascular disease (CVD), a study from the US has found.[1]

The Nurses' Health Study is a prospective study which has followed up a cohort of 121,700 women since 1976. Every two years, the participants are sent a questionnaire which updates information on risk factors and asks questions regarding newly diagnosed major illnesses.

The 2000 questionnaire cycle was used as the baseline for the present study. There were 78,282 participants, aged between 54 and 79, who were followed up for six years. Participants were classified as having depression if they: reported physician-diagnosed depression; declared regular use of antidepressants; or scored ≤52 on the 5-item mental health index (MHI-5). Self-reported type 2 diabetes was confirmed with a supplementary questionnaire.

The reference group consisted of those with neither depression nor diabetes. After adjustment for age, relative risk (RR) for all cause mortality was 1.76 for participants with only depression (95% CI: 1.64-1.89), 1.71 for those with just diabetes (95% CI: 1.54-1.89) and 3.11 for those with both (95% CI: 2.70-3.58). RR for cardiovascular mortality was 1.81 (95% CI: 1.54-2.13), 2.67 (95% CI: 2.20-3.23) and 5.38 (95% CI: 4.19-6.91) respectively.

After full adjustment for demographic and lifestyle factors, plus some major comorbid diseases, the associations were reduced but remained significant. RR for all cause and cardiovascular mortality for those with both conditions was 2.07 (95% CI: 1.79-2.40) and 2.72 (95% CI: 2.09-3.54) respectively.

Each of the three criteria used for classifying participants as having depression presents difficulties. The problem with physician-diagnosed depression is that many patients are not recognised: approximately 40% of patients do not seek medical help,[2] and among those who do, the diagnosis is missed in 30 to 50% of cases.[3] Antidepressants are prescribed for conditions other than depression, including anxiety disorders and functional somatic syndromes. The MHI-5 does not screen specifically for depression, and does not discriminate between major and subthreshold depression.[4]

Both misclassification of depressed participants as non-depressed and vice versa will lead to a reduction in the relative risk. Broadening the definition to include subthreshold depression is also likely to reduce the risk, although this can be justified by the fact that several studies have linked subthreshold depression with increased mortality.[5] Ideally the diagnosis should be made using the diagnostic interview schedule for DSM IV but this is impracticable for such a large study.

Poor health behaviour (physical inactivity and poor compliance with diet and treatment) is thought to be an important mediator of the risk among patients with diabetes. However, it is likely that a significant proportion of the apparent risk is due to confounding: depression is between two and three times more common among patients with chronic physical health problems and may be simply a marker of chronic ill health. Although the present study did adjust for some conditions, including heart disease, stroke and cancer, many others e.g. musculoskeletal and respiratory disorders were not adjusted for.

'Improved recognition of patients who are struggling to adjust to their diabetes ... may be a better approach to reducing the risk'

Depression and diabetes are a perilous combination. Yet, until we can establish the principal mediators of the increase in mortality, it is unclear how we can best reduce the danger.

Screening of all diabetes patients linked to antidepressant prescribing is wasteful of resources and of doubtful benefit. Improved recognition of patients who are struggling to adjust to their diabetes linked to the provision of physical activity programmes and group-based peer support may be a better approach to reducing the risk.

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