Quality improvement

Practice based education did not increase primary care physician recognition of depression nor improve the outcome of depression

Thompson C, Kinmonth AL, Stevens L, et al. *Effects of a clinical-practice guideline and practice-based education on detection and outcome of depression in primary care: Hampshire Depression Project randomised controlled trial. Lancet* 2000; Jan 15;355:185-91.

QUESTION: In primary care, is an education programme based on a clinical practice guideline effective in improving the recognition and outcome of depression?

Design

Cluster randomised (allocation concealed*), unblinded*, controlled trial with 6 months of follow up.

Setting

59 primary care practices in an English health district, UK.

Patients

21 409 patients attending the surgeries of 152 physicians were screened. Exclusion criteria were < 16 years of age or too unwell to complete the questionnaire.

Intervention

29 practices (3 withdrew leaving 26 practices with 64 physicians) were allocated to the education group and 30 (1 was excluded leaving 29 practices with 88 physicians) were allocated to the control group. Education using a clinical practice guideline (recommended tricyclic antidepressants as first line treatment and advised physicians to aim for a dose of 150 mg) was provided in 2 parts by a team. Part 1 consisted of 4 hours of seminars at the beginning of the intervention year. Part 2 consisted of the team being available for the next 9 months to provide additional information and help. Physicians in the control group started seminars 2 months after education had been completed in the intervention group.

Main outcome measures

Recognition of depression as defined by the Hospital Anxiety and Depression (HAD) scale, and clinical improvement of those identified as being depressed at 6 months of follow up.

Main results

Analysis was by intention to treat. 4129 patients were classified as depressed by the HAD. The education and control groups did not differ in the sensitivity or specificity with which physicians recognised depression at any point during the study (after the seminars, after education, or at the end of the study). After education, the sensitivity and specificity with which physicians recognised depression was 39% and 92%, respectively in the education group compared with 36% and 93%, respectively in the control group ($p=0.2$ for the difference between treatment groups). The improvement in depressed patients did not differ between the groups at 6 weeks or 6 months after the diagnostic assessment. The study had approximately 80% power to detect a difference of 10% in clinical improvement between the treatment groups.

Conclusion

In primary care, a clinical practice guideline and practice based education did not increase physician recognition of depression nor improve the clinical outcome of those diagnosed.

*See glossary.

COMMENTARY

The evidence that education improves general practitioners' detection of depression is largely based on circumstantial evidence, and this randomised controlled trial by Thompson *et al* attempts to counter the criticisms of previous investigations. By adopting a countywide approach to patients visiting the surgeries of 152 physicians, a sufficient number of patients (over 4000) were recruited to test the 2 main hypotheses. The authors sensibly included both the ability to detect depression successfully and their ability to relieve depression through successful treatment. Most previous investigations have only concentrated on the detection of depression. When the threshold for diagnosing depression is set below that which is clinically significant, failure to detect the symptoms may be unimportant.

The results are convincingly negative. The difference of 3% in sensitivity between the groups is not large enough to be clinically important. I think this would be true even if different measures of depression were used.

It is therefore difficult to refute the conclusions of the authors that the offer of a clinical practice guideline together with additional education on treatment does not increase either the recognition of depression or success in improving its clinical outcome. It is important, however, to recognise that Thompson *et al* have chosen one of the topics that has been recognised as an issue for over 25 years and this does not necessarily imply that clinical practice guidelines and educational packages for other areas might not be more successful. The knowledge that people with depression can present in many different ways in primary care and require an adequate dose of medication for a period of at least 4 weeks before treatment can be effective, should have been known to almost all doctors for a very long time. It is therefore possible that general practitioners have, by and large, learnt this information in their training and the additional education offered in the experimental arm of this study added little to what they already knew. None the less, the findings are important because they should put a brake on optimism that educational initiatives alone can reduce depression in primary care and, by extension, reduce the national rate of suicide.

Peter Tyrer, MD, FRCP, FRCPsych
Paterson Centre
London, UK

Sources of funding:
Medical Research Council; South and West Research and Development Directorate; Southampton Community Health Services Trust.

For correspondence:
Professor C. Thompson,
Community Clinical Sciences Research Division, Department of Mental Health, University of Southampton, Royal South Hants Hospital, Brinton's Terrace, Southampton SO14 0PE, UK. Fax +44 (0)2380 234243.

A modified version of the abstract and commentary also appears in Evidence-Based Medicine.