

### What is already known on this topic

Epilepsy is associated with a wide range of markers of social and economic disadvantage

A small number of epidemiological studies have confirmed this association but have not established the direction of causality

### What this study adds

The incidence of epilepsy, adjusted for age and sex, in the most deprived fifth of the study population was 2.3 times that in the least deprived fifth

Socioeconomic deprivation is an important risk factor for the development of epilepsy, though the results may partly reflect differences in incidence within and outside London

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## Detection of depression and anxiety in primary care: follow up study

David Kessler, Olive Bennewith, Glyn Lewis, Deborah Sharp

Division of Primary Health Care, University of Bristol, Bristol BS6 6JL  
David Kessler  
research fellow  
Deborah Sharp  
professor

Department of Social Medicine, University of Bristol, Bristol BS8 2PR  
Olive Bennewith  
research associate

Division of Psychiatry, University of Bristol, Bristol BS6 6JL  
Glyn Lewis  
professor

Correspondence to: D Kessler  
david.kessler@bristol.ac.uk

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Research shows that general practitioners fail to diagnose up to half of cases of depression or anxiety.<sup>1</sup> Many studies are cross sectional and have been criticised because, unlike primary care itself, they contain no longitudinal element. They do not always indicate whether undetected depression is important clinically or whether it is diagnosed at a later date, persists undetected, or causes disability.

We aimed to determine whether depression or anxiety not diagnosed during one general practice consultation is diagnosed during follow up or is self limiting and of no clinical importance.

### Participants, methods, and results

We followed up consecutive attenders at a general practice in north Bristol in 1997.<sup>2</sup> The original sample represented patients attending morning and evening surgeries and all doctors in the practice.

We interviewed 179 patients with the 12 item general health questionnaire and 12 item short form health survey.<sup>3,4</sup> We followed up 71% (160/227) of patients still in the practice and 43% (28/65) of those who had moved. Patients who scored 3 or more on the general health questionnaire received a more detailed

psychiatric assessment with the clinical interview schedule.<sup>5</sup> We analysed the general practitioners' records for psychological diagnoses, treatments, and referrals during the follow up period.

Patients who were followed up were older (48.5 v 43.3 years), were more likely to be female (76% v 68%), and had lower mean scores on the general health questionnaire (3.6, 95% confidence interval 3 to 4.1, v 4.2, 3.5 to 4.9) than those we did not follow up (67 declined, 37 were untraceable, and nine questionnaires were incomplete). None of these differences was statistically significant. Overall, the results of the questionnaire showed that 88/179 (49%, 42% to 57%) patients had depression or anxiety in the original study, but only 34 (39%, 28% to 50%) of these had received a diagnosis of depression or anxiety at that time. Of the 54 who had not received a diagnosis during the original study, 22 received a diagnosis during the three years of follow up (figure).

Of the 56 patients who received a diagnosis, 38 (68%, 54% to 80%) were treated with antidepressants. Twelve (21%, 12% to 34%) were referred to psychiatric services.

Psychological diagnoses had never been made in 32 of the 88 patients; 16/88 (18%; 11% to 28%)

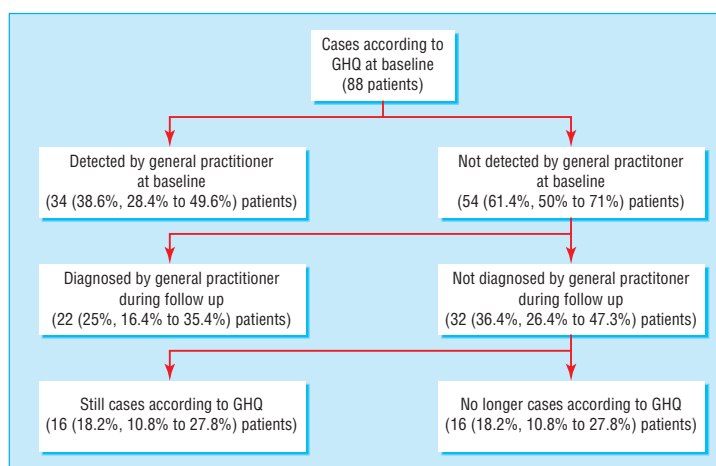
patients had depression or anxiety according to the general health questionnaire and had never received a diagnosis from their general practitioner. These 16 patients had severe symptoms (mean score on general health questionnaire 6.4, 4.8 to 7.9). Twelve (14%, 7% to 23%) of the 88 patients without a diagnosis were cases according to the clinical interview schedule or had daily activities adversely affected by anxiety or depression according to the short form health survey.<sup>4,5</sup>

## Comment

Although many patients with depression did not receive a diagnosis at a single consultation, most were given a diagnosis at subsequent consultations or recovered without a general practitioner's diagnosis. Three years later, 14% of patients with depression still had a clinically severe condition, had not received a diagnosis, and might have benefited from treatment.

The prevalence of anxiety and depression (49%) was in line with the high prevalence often found in primary care studies.<sup>1</sup> We did not follow up 43 undiagnosed cases (of a total of 153 cases in the original study)—we do not know the outcome of these cases, but the patients were more likely to have changed practice than those we did follow up. This mobility means that those we did not follow up may have been less likely to have received appropriate diagnosis and treatment than those we did follow up. We may have underestimated the proportion of undetected cases.

This small study estimates hidden psychiatric morbidity more realistically than cross sectional studies. General practitioners feel they have been criticised unfairly for missing up to half of the patients with depression that present to them. This study supports their view. Undiagnosed depression may lead to long term disability, but the problem may not be as large as has been thought. Evidence that general practitioners fail to detect one in seven patients with treatable depression are more in tune with clinical impression than estimates of one in two, but the outcome for



Diagnosis of patients with depression and anxiety in a cross sectional study and three year follow up period. GHQ = general health questionnaire

patients with undetected depression still needs attention.

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## How a rare diagnosis caused me to sprain my ankle

My brain is the sort that is much better at retaining esoteric facts than more useful information. As a first year clinical student, I had been reading up tumour pathology and was fascinated by a description of chordomata, rare tumours that occur anywhere in the spinal tract from the midbrain to the cauda equina and that retain the cellular characteristics of the primitive notochord. Commonest at the lower end of the spinal tract, they were said to feel like a cricket ball attached to the front of the sacrum.

The next day, on a surgical ward round, my consultant asked me to examine an elderly man rectally. I did so and felt a cricket ball attached to the front of the sacrum. "What is the diagnosis?" I was asked.

"Chordoma, Sir," I replied.

"Nonsense," he said, "it's a carcinoma of rectum." I am not sure whether he had heard of the condition.

At surgery the next day the tumour was removed, and it did indeed prove to be a chordoma. I decided to write it up for the surgical prize and, reviewing the hospital records, discovered that there had only been one other case, some 30 years earlier. It had occurred in the midbrain, and the patient had been a distinguished scientist and FRS. Six months later, I was about to

hand in my study when I heard that my original patient had been admitted in extremis. Sadly he died, but his autopsy report and cellular photographs did much to enhance my report.

A week later, tired by my exertions, I was walking with a friend along the South Downs when we noticed a typical downland church nestling in the valley and decided to visit it. We climbed down to the flint walled graveyard, and my friend walked round to the lychgate while I decided to climb over the wall. As I landed, I twisted my ankle on a grave kerbstone; it bore the name and epitaph of the distinguished scientist.

John Williams *retired general practitioner*

We welcome articles of up to 600 words on topics such as *A memorable patient, A paper that changed my practice, My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for "Endpieces," consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.