

Psychiatric illness in inpatients with neurological disorders: patients' views on discussion of emotional problems with neurologists

KEITH W BRIDGES, DAVID P GOLDBERG

Abstract

The prevalence of psychiatric morbidity in inpatients with neurological disorders and the extent to which it is detected by neurologists were measured by using a two stage model of psychiatric assessment and from information recorded in the patients' medical notes. The prevalence of psychiatric morbidity was estimated as 39%, of which 72% was unrecognised by the neurologists. Only a minority of patients with an uncertain physical diagnosis had a psychiatric illness, showing the error in assuming that a patient's physical symptoms arise from a psychological disturbance if an organic aetiology cannot be determined.

When the patients were interviewed on their discharge from hospital they were divided on whether they had wished to discuss their mood with neurologists while they were in hospital. The reasons that they gave suggested that interactions between patients and doctors and the lack of ward facilities for private consultations with doctors are important determinants of hidden psychiatric morbidity in medical inpatients.

Introduction

Several surveys have shown the high prevalence of psychiatric morbidity in medical and surgical patients and the substantial proportion that is not detected by doctors.¹⁻⁹ This is disturbing because these psychological disorders may be treatable⁹ and because any coexisting psychiatric disturbance may impede recovery from a physical illness¹⁰ and be associated with higher mortality.¹¹ Preliminary evidence in the United States suggests that this poor detection is also the case in inpatients with neurological illnesses.¹²⁻¹³ Neurological illnesses have recognised associations with psychiatric conditions,¹⁴⁻¹⁵ and psychological problems are known to occur as a result of neurological disorders.¹⁶⁻¹⁷ It is important, therefore, that further investigations should be carried out on this group of patients.

Psychiatric disorders in physically ill patients are not recognised for several reasons. Firstly, there are doctors who view psychological causes as simple alternatives to physical causes and may overlook a coexisting psychiatric disturbance once a physical cause has been assigned. Secondly, the heavy workload of doctors and the demands of the acutely ill patient may play a part,²⁻³ although how time is used may be more important than how busy a doctor is.⁵ Thirdly, patients may disguise underlying psychological problems by presenting with symptoms

that may be difficult to diagnose even when doctors are strongly motivated to detect emotional disturbances.^{4, 18-20}

This paper reports the prevalence of psychiatric morbidity in inpatients with neurological disorders as estimated with a two stage standardised method of psychiatric assessment, an assessment of the extent to which neurologists may detect such morbidity, and whether patients mind discussing psychological problems with their neurologists.

Patients and methods

The study took place in a busy neurology department of a large teaching hospital in which there were 121 new adult admissions over six weeks. Of these patients, 19 were either physically too ill to participate or had very short admissions and two were excluded because they had known dementia. The remaining 100 patients completed the general health questionnaire-28 on admission,²¹ and within two days 70 patients were assessed psychiatrically with the clinical interview schedule to validate this version of the screening instrument.²²

Seventy six of the 100 patients were also interviewed on the day they were discharged. Those not interviewed included patients who had left the hospital before they could be seen or who were still in hospital at the end of the study period. They were questioned on whether the neurologists had asked them about their mood during their admission; whether they would have liked them to ask, or had liked them asking, about such matters; and whether they thought such an inquiry would have, or had, been helpful. They were also invited to give their reasons. All interviews were conducted privately in a small room.

Several weeks after discharge the patients' medical notes, prescription charts, and discharge letters were scrutinised for any references to their mental state, treatment with psychotropic drugs other than anticonvulsants, and details of their diagnosis. If a definite diagnosis had not been given either in the notes or in the discharge letter then the diagnosis was designated uncertain.

Results

Estimated prevalence of psychiatric morbidity excluding dementia—The best validity coefficients of the general health questionnaire-28 were obtained using a general health questionnaire threshold score of 11/12.²³ This is higher than the threshold score used in other medical settings but was not unexpected for patients with physical illnesses.²⁴ Table I shows the estimated prevalence of psychiatric disorder for each sex and for all the patients. The psychiatric diagnoses encountered among the patients, as assessed with the clinical interview schedule, were mostly minor affective disorders: depression (24 patients), mixed depression and anxiety (six), anxiety states (four), personality disorder with alcohol dependence (one), and organic psychosis with anxiety (one). Table II shows the estimated prevalences in all the patients according to the certainty of the physical diagnosis.

Detection of psychiatric morbidity by neurologists—Table I shows the estimated prevalence of psychiatric morbidity determined by the neurologists: 72% of the morbidity determined by the psychiatric assessment procedure was not detected. The chance of detection was greater in men patients, and, notably, according to the patients interviewed on their discharge, more men (28%) than women patients (14%) recalled neurologists asking them about their mood. Furthermore, the neurologists were no more likely to inquire about a patient's mood if a psychiatric disorder, as assessed by the clinical interview schedule, was in fact diagnosable ($\chi^2=0.11$, NS).

Views of patients concerning their wishes to discuss their mood with

Department of Psychiatry, The Medical School, University of Manchester, Manchester M13 9PT

KEITH W BRIDGES, MSc, MRCPsych, senior registrar

Department of Psychiatry, University Hospital of South Manchester, Manchester M20 8LR

DAVID P GOLDBERG, DM, FRCPsych, professor of psychiatry

Correspondence to: Dr Keith W Bridges.

TABLE I—Estimated prevalence of psychiatric morbidity (excluding dementia) determined by psychiatric assessment and by its detection by neurologists

	No of patients	No of patients with high scores on general health questionnaire*	Estimated prevalence (%)		Chance of detection by neurologists (%)
			By psychiatric assessment†	By neurologists‡	
Men	56	18	27	11	39
Women	44	25	53	12	22
Men and women combined	100	43	39	11	28

*Using a general health questionnaire threshold score of 11/12.

†Formula for calculation given in reference 24.

‡Corrected for sampling procedure, reference 23.

TABLE II—Estimated prevalence of psychiatric morbidity according to certainty of physical diagnosis

Diagnosis	No of patients	No of patients with high scores on general health questionnaire*	Estimated prevalence by psychiatric assessment procedure (%)†
Definite:			
Organic	70	30	39
Functional	3	2	
Uncertain	26	10	31
Not ill	1	1	

*Using a general health questionnaire threshold score of 11/12.

†Formula for calculation given in reference 24.

TABLE III—Numbers of patients responding affirmatively to questions concerning inquiry by neurologists into their mood

	Size of sample	Recalled neurologists inquiring about mood	Would have wished for an inquiry	Would have found an inquiry helpful
<i>Total sample</i>				
Men	40	11	21	18
Women	36	5	19	16
Men and women combined	76	16	40	34
<i>Sample assessed with clinical interview schedule</i>				
Without psychiatric illness	26	5	13	11
With psychiatric illness	31	7	18	16

neurologists—Table III shows that exactly half the patients without psychiatric disturbances, and 58% of those with a psychiatric illness, wished that an inquiry into their mood had been made. Interestingly, however, 55% of the patients regarded such an inquiry by neurologists as unhelpful.

Discussion

The estimated prevalence of psychiatric morbidity (excluding dementia) in inpatients with neurological disorders was comparable to, although generally higher than, the findings of other surveys on medical inpatients using a standardised psychiatric clinical assessment.^{3-4,8} It also supports the observations made in the United States that a substantial degree of psychiatric morbidity exists in patients cared for by neurologists.^{12,13} The higher prevalence found in women patients agrees with observations made on primary care attenders,^{25,26} medical outpatients,⁷ and outpatients with neurological disorders,^{27,28} although other surveys on medical and neurological inpatients did not find such a pronounced difference between the sexes.^{3,4,12,13}

Difficulties in coping with physical disabilities and deformities were an important cause of psychological disturbance especially when they threatened a younger person's independence and livelihood. Some patients worried about the importance of their symptoms and the prognostic uncertainty of their conditions. Some patients were receiving drugs such as steroids, which are known to affect mood, and in a few the psychological disturbance was clearly independent of the physical illness.

Of those patients with uncertain diagnoses in this study, only a minority were likely to have a psychiatric illness. This supports the views that psychiatric illness should not be diagnosed by exclusion of physical disorders and that referral to a psychiatrist

should not be made just because an organic disease has not been established or because the diagnosis is uncertain. Patients should be referred to a psychiatrist only if their symptoms suggest a psychiatric illness.^{29,30}

The neurologists were unaware that we were assessing the extent to which they detected psychiatric morbidity. Although the method we used was inferential and did not take account of the neurologists' opinions (unless they were written down), it did not intrude on or alter their customary practices. Their low recognition of psychiatric illness supports the observations of other surveys of hospital inpatients²⁻⁴ and is also found in outpatients^{5,7,9} and among primary care attenders.²⁶ The fact that neurologists were no more likely to ask patients with psychiatric disorders about their mood suggests either an insensitivity to cues relating to such distress or that any consideration of a coexisting psychiatric illness was simply ignored. It is important to recognise, however, that almost half the patients were against the neurologists asking them about their mood, although they were willing to discuss this with the research psychiatrist privately. Nearly half said that if such an inquiry had been made it would not have been helpful.

There were several reasons why the patients were reluctant to discuss their psychological problems and why they thought it would not be helpful. Many patients regarded the neurologist as a doctor who investigated only physical causes for their symptoms and were satisfied when this had been done. Most patients saw their doctors as being very busy, and many said that they did not wish to burden them with more problems. Some, however, were critical of the doctors for not spending more time with them and complained that they had seen the neurologist only for physical examinations, blood tests, and teaching sessions with medical students. Many criticised the lack of privacy on the ward, particularly when they wanted to discuss sensitive issues. Interviews with doctors were usually overheard despite the curtains being drawn around the bed, and were often limited to ward rounds when the consultant was accompanied by his usual entourage of juniors, social workers, nurses, and students. Some patients were critical that they were lying on the bed in various states of undress during their interview with the neurologists. Some criticised the use of technical medical jargon that they did not understand, and others complained that doctors were evasive or vague when asked specific questions.

These comments, although not the views of all the patients, may illustrate opinions held about other specialists besides neurologists. They highlight the need for hospital doctors to be particularly concerned about how they interact with and talk to their patients.³¹⁻³³ They also draw attention to the inadequate design and function of certain hospitals' wards, and the need to provide appropriate facilities where doctors and patients can talk privately.

Psychiatric morbidity is likely to increase the burden of patients with neurological disorders and may be responsible for physical symptoms in some patients without demonstrable disease.³⁴ This study has shown that neurologists are unlikely to recognise most psychiatric illnesses. It is not known, however, whether detection of these disorders would actually have helped these patients or how they should best be treated.

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SHORT REPORTS

Aeromonas spp in travellers' diarrhoea

Travellers' diarrhoea affects millions of people each year, particularly travellers from industrialised countries when visiting less developed regions such as Asia, Africa, and Central and South America. The main known causes are enterotoxigenic *Escherichia coli* and strains of *Shigella* and *Salmonella*.¹ Parasites such as *Giardia lamblia* and *Entamoeba histolytica* account for a smaller proportion of episodes. *Aeromonas* spp are becoming acknowledged as important enteric pathogens² but are not recognised as a cause of travellers' diarrhoea. They have, however, been reported in travellers with diarrhoea from India³ and Bangladesh.⁴ During the past two years we have had referred to us for enterotoxin assay strains of *Aeromonas hydrophila* isolated as the only enteric pathogen from eight patients with travellers' diarrhoea. We report on these eight cases.

The patients

Two patients were children aged 2 and 12 who had been in Singapore, one of them en route to Australia from Europe. The six adults with diarrhoea had visited Bali, Singapore, India, China, or Italy. One 55 year old man, whose symptoms began during a visit to Italy, suffered recurrent diarrhoea with blood and mucus and accompanied by abdominal pain for two months. His symptoms resolved within two days of the start of treatment with co-trimoxazole, to which most strains of *A hydrophila* are sensitive,² and did not recur. Three of the adults who developed diarrhoea in South East Asia continued to have recurrent diarrhoea for four to 12 months after they returned to Australia and before their faeces were cultured in a laboratory that recognised *A hydrophila* as an enteric pathogen. Two of these adults recovered rapidly after starting treatment with co-trimoxazole; the third patient recovered spontaneously. Both children had diarrhoea of short duration and did not require treatment.

Comment

Examination of faeces from travellers with diarrhoea should include methods appropriate for isolation of *Aeromonas* spp. Not all strains will grow on widely used media such as MacConkey agar. Some *Aeromonas* spp ferment the lactose in these media, making the colonies indistinguishable morphologically from *Esch coli* and giving false negative oxidase reactions, which may result from changes in pH caused by fermentation of sugars in selective media.⁵

The *Aeromonas* strains isolated from adults were recognised with the

use of deoxycholate citrate agar and xylose lysine deoxycholate agar. In experienced hands, the appearance of non-lactose fermenting colonies on deoxycholate citrate agar and acid forming colonies on xylose lysine deoxycholate agar has yielded a high incidence of isolation of *A hydrophila*, although rapid lactose fermenters will be missed. We have found that the yield of isolation of *Aeromonas* from faeces is higher when blood agar is used for primary isolation. We recommend that a blood agar plate containing 10 mg ampicillin/l be added to the media used for examining faeces from patients with diarrhoea. The use of layered plates permits easier recognition of β haemolysis surrounding colonies of *A hydrophila*, which is often, but not always, associated with enterotoxigenic *A hydrophila*. Oxidase positive colonies can be identified with multitest systems or simply and inexpensively with Kaper's medium.⁵

Aeromonas spp should be included in the list of possible enteric pathogens to be sought in patients with travellers' diarrhoea. These organisms will not be overlooked if laboratories adopt appropriate methods to isolate *Aeromonas* spp from faeces.

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Princess Margaret Children's Medical Research Foundation, Perth, Western Australia

M GRACEY, MD, PHD, director, gastroenterology and nutrition research unit
V BURKE, MD, FRACP, senior research fellow
J ROBINSON, AIMLS, technologist

Princess Margaret Hospital for Children, Perth

P L MASTERS, MD, FRCPA, pathologist in charge

Royal Perth Hospital, Perth

J STEWART, AIMLS, senior technologist in charge
J PEARMAN, MD, FRCPA, clinical microbiologist

Correspondence to: Dr M Gracey.