

## Contemporary Themes

# Unrecognised depression in general practice

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### Abstract

**Patients attending their general practitioner were screened and a group with unrecognised major depressive disorder identified. This group was interviewed and the findings compared with those in a group of patients recognised correctly as depressed by their general practitioners. Half of the patients with severe depression screened in their doctors' waiting rooms went unrecognised, and they differed in few ways from those who were recognised. The differences found were that the patients with unrecognised depression were less obviously depressed and their illness had lasted longer. Physical illness was present in nearly 30% of patients in the unrecognised group, and the depression seemed related to it. Patients with unrecognised depression were more likely to have feelings other than those of normal sadness and more likely to respond with change of mood to intercurrent events.**

**These data suggest that patients might benefit if general practitioners were better trained to recognise depression, although it is not known whether treatment would be effective.**

### Introduction

The challenge posed to the general health and social services by psychiatric ill health is widely recognised.<sup>1</sup> Depressive illness forms a considerable proportion of this challenge.

The incidence of neurotic depression diagnosed in general practice increased from 14 to 31·4/1000 population between 1955-6 and 1970-1. This was attributed to an increased diagnostic awareness by the general practitioner rather than an increased awareness by the patients.<sup>2</sup> Most of such patients are managed exclusively within general practice: one study found that only 17% were referred to a psychiatrist.<sup>3</sup> One approach to the psychiatric challenge is to strengthen the general practitioner's skill in diagnosis and treatment. General practitioners have been criticised for diagnosing as depressed patients who are not and for prescribing inadequate doses of antidepressant drugs and obtaining poor compliance even with these.<sup>4,5</sup> Many doctors have been shown to have biased perceptions of their patients' emotional states and to estimate inaccurately the severity of their disturbance.<sup>6</sup> Consequently, not only are patients who do not conform to criteria for psychiatric diagnosis treated as depressed but patients who do conform go unrecognised.<sup>7</sup> Attempts to improve the diagnosis and management

of depressed patients in general practice have tended to focus on the doctor's skills in interviewing, his self confidence, and his ability to handle his own feelings.<sup>8,9</sup> Skills in interviewing are a major concern of vocational training<sup>10</sup> and a teaching interest of many departments of general practice. Research and education have focused on skills and characteristics of general practitioners but have been bedevilled by fairly crude classifications of disorders currently used within primary care.<sup>1</sup> A tendency to study only patients recognised by general practitioners, omitting those who go unrecognised, has been compounded by studying only patients receiving antidepressant drugs.<sup>11</sup> It seems possible that characteristics of depressed patients influence their diagnosis and management, indicating that deficiencies in general practitioners' knowledge are also important.

Knowledge of psychiatric illness has been advanced by the development of various rating scales. In a study to determine the characteristics of depressive illness seen by general practitioners we identified and described not only patients recognised as depressed but also those who saw their doctor, had a major depressive disorder,<sup>12</sup> but went unrecognised. This paper compares the characteristics of recognised and unrecognised sufferers of major depressive disorder.

### Patients and methods

Letters of invitation were sent to general practitioners in south west London and adjacent parts of Surrey who had an association with this hospital. Sixty two general practitioners agreed to participate, of whom 36 doctors from 31 practices notified us of at least one patient diagnosed as newly treated for depression. The practices were urban or suburban and ranged from singlehanded, "shop front" surgeries to large, new purpose built health centres, serving people from predominantly working class to predominantly middle class. Figure 1 summarises the design and sampling procedures. The characteristics, clinical features, and diagnosis of the recognised sample and comparisons between those receiving antidepressants, those receiving other treatments, and a sample of depressed outpatients have been described and discussed elsewhere.<sup>13,14</sup>

For the element in our procedures that required the 30 item general health questionnaire<sup>15</sup> an experienced psychiatric research assistant (BMR) attended the practice of each doctor during surgery hours in rotation, producing a representative sample of the days and times of the week. All attenders aged 18-64, including adults accompanying children, were asked to complete the questionnaire. At the end of a session each doctor was asked to review his consultations and identify patients who had been newly prescribed antidepressant drugs or given other treatment for depression. To be newly prescribed an antidepressant drug meant receiving a drug from the antidepressant section of the British National Formulary for the first time in three months. Other treatments ranged from social help to an arranged recall for monitoring the patient's state. Collaborating doctors from unscreened surgeries notified us of patients who had been newly prescribed antidepressant drugs or given other treatment for depression.

Two groups of patients were interviewed at home by a research psychiatrist (LIS), usually within three to seven days of the questionnaire—namely, those newly given antidepressant drugs or other treatment and those not recognised as depressed by their doctor but scoring five or more on the questionnaire. This second group had a screening interview based on the schedule for affective disorders and schizophrenia.<sup>16</sup> Those conforming to major depressive disorder (definite or probable) on the research diagnostic

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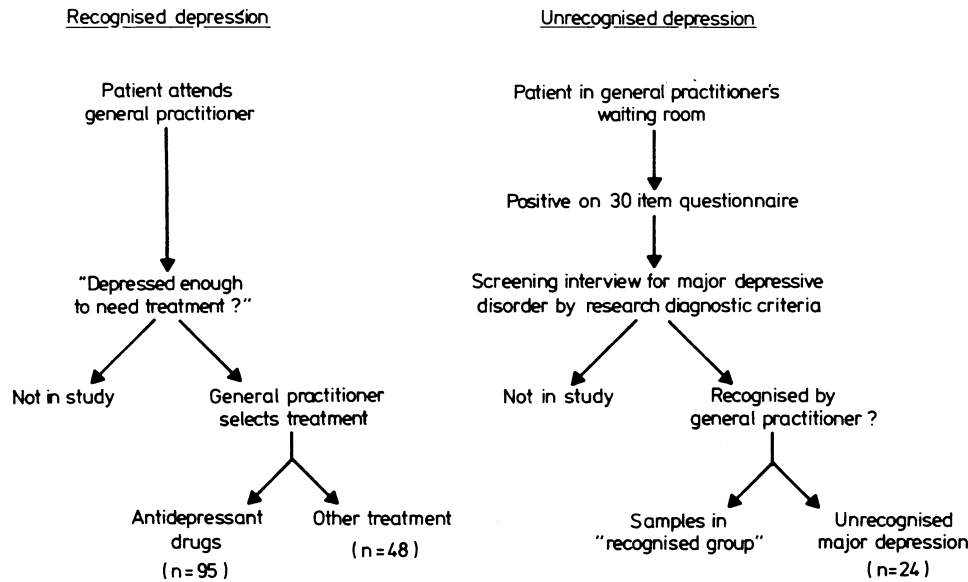


FIG 1—Design of study and sampling procedures.

criteria<sup>12</sup> by having had depressed mood or loss of interest for two weeks, with at least five out of eight associated symptoms, received the full interview, and only these patients are included in this paper as having unrecognised depression. From the group given antidepressant drugs or other treatment only those conforming to the same criteria were included in this paper.

The interview used several scales: the present state examination,<sup>17</sup> the research diagnostic criteria,<sup>12</sup> the Feighner criteria,<sup>18</sup> the Hamilton rating scale for depression,<sup>19</sup> the clinical interview for depression,<sup>20,21</sup> the Newcastle diagnostic index,<sup>22</sup> and the Raskin three area depression scale.<sup>23</sup> Social class, age, and marital state were determined and several global ratings made.

Data were analysed using the statistical package for the social sciences.<sup>24</sup> Significance of differences between groups was tested by  $\chi^2$  test for qualitative variables and by *t* test, using two tailed tests, for continuous variables, with 5% significance.

TABLE 1—Demographic data on patients with unrecognised and recognised depression. (Values are numbers (%) of cases)

	Unrecognised (n=24)	Recognised (n=62)
Age (years):		
18-24	2 (8)	14 (23)
25-34	9 (38)	25 (40)
35-44	7 (29)	11 (18)
45-54	5 (21)	8 (13)
55-64	1 (4)	4 (7)
Sex:		
Male	4 (17)	7 (11)
Female	20 (83)	55 (89)
Marital state:		
Single	2 (8)	16 (26)
Married or widowed	18 (75)	34 (55)
Separated or divorced	4 (17)	12 (20)
Social class:		
One and two	6 (20)	23 (37)
Three	13 (53)	28 (45)
Four and five	5 (27)	11 (18)
White people	24 (100)	56 (90)

**Results**

Figure 2 shows how the sample of 24 patients with unrecognised depression was obtained. During screening 17 patients were recognised as depressed by general practitioners, of whom eight were given antidepressant drugs and nine other treatment. A further 126 patients were notified as depressed during unscreened surgeries; 87 were newly prescribed antidepressant drugs and 39 received other treatment. Of the total of 143 treated patients, 62 (43%) conformed with the research diagnostic criteria for probable or definite major depressive disorder and formed the recognised sample.

Table I shows the demographic characteristics of patients with unrecognised and recognised depression. There were no significant differences between the groups. Table II shows overall ratings for severity of depression that

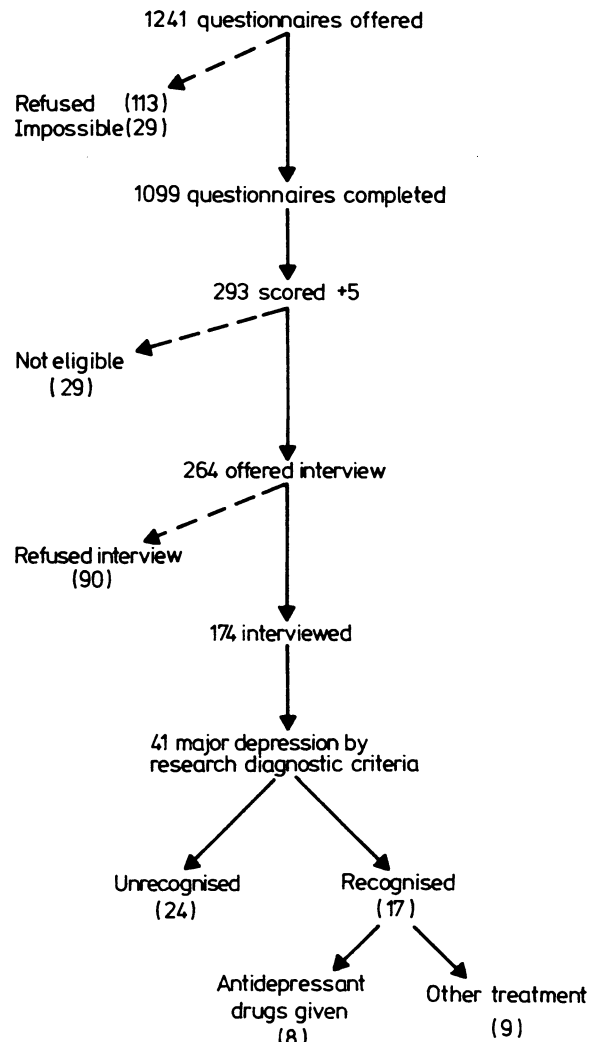


FIG 2—Result of screening attenders at general practice surgeries for depressive illness.

were available from three scales. The patients with unrecognised depression were less severely depressed on the Raskin scale and clinical interview for depression.

The mean scores for many symptoms were similar in patients with recognised and unrecognised depression, including such characteristic

features as pessimism, guilt, impaired activity, loss of energy, and insomnia. As table III shows, however, a few symptoms showed significant differences. On both the Hamilton rating scale and the clinical interview for depression patients with unrecognised depression showed less evidence of overt depressed mood, as judged by manifestations such as the patient feeling depressed or sad or weeping. On the Hamilton rating scale for depression they showed greater lack of insight—that is, they were less aware of being ill and depressed. On the clinical interview for depression they were less obviously depressed at interview. Patients with unrecognised depression

TABLE II—Means for severity of depressive illness

	Unrecognised (n=24)	Recognised (n=62)
Hamilton rating scale total	15.91	17.93
Raskin three area scale total	7.25	8.15**
Clinical interview for depression (total depression score)	21.78	23.94*

\*p&lt;0.05; \*\*p&lt;0.01.

TABLE III—Items for which differences in mean scores between patients with unrecognised and recognised depression were significant

	Unrecognised (n=24)	Recognised (n=62)
Hamilton rating scale (21 items):		
Depressed mood	3.00	3.47**
Lack of insight	2.08	1.35***
Clinical interview for depression (35 items):		
Depressed mood	3.83	4.29**
Depressed appearance	2.17	2.76*
Reactivity	4.00	3.45*
Distinct quality of mood	4.54	3.77*

\*p&lt;0.05; \*\*p&lt;0.01; \*\*\*p&lt;0.001.

had higher scores for reactivity of mood—that is, short term worsening or improvement of mood according to changes in environmental circumstances—and for distinct quality of mood—that is, the degree to which the patient regarded his depressed mood as different from the normal experience of depression and sadness.

Two items of history showed significant differences: the proportion of patients whose current illness had lasted more than a year was 40% among patients with unrecognised depression and 24% among those with recognised depression (p<0.05). Table IV shows that patients with unrecognised depression were more likely to have a concurrent physical illness that the psychiatrist judged, on the basis of all the information available, to be contributing appreciably to the depression.

TABLE IV—Number of patients with physical illness judged to contribute to depressive illness

	Unrecognised (n=24)	Recognised (n=62)
Physical illness making no or only slight contribution	17	59
Physical illness making noticeable contribution	7	3

p&lt;0.001, Yates's correction.

A fairly large number of additional variables of background and history (41 in all) failed to show significant differences. These included personal and family psychiatric history, current social state, and social stress. Significant differences were not evident in an additional 30 variables covering psychiatric diagnoses and subtypes of depression, including research diagnostic criteria, present state examination, and Feighner criteria.

As several significant differences might have occurred by chance we applied the procedure of Schweder and Spjotvoll<sup>25</sup> to the results shown in table III. This indicated that among the total of 56 significance tests on each item of the Hamilton rating scale and clinical interview for depression null hypotheses could be refuted on all items reaching 5% significance or better.

## Discussion

Perhaps the most important finding was that our doctors failed to recognise more than half of the depressed patients whom they saw during the sessions that we screened. The lack of accuracy<sup>26</sup> is in line with findings calculated in other ways in other studies<sup>6</sup> and with a recent report from the sessions of one physician.<sup>7</sup> What is surprising is that the patients with unrecognised depression were on the whole as handicapped as those who were recognised. Although the means for overall severity differed on two scales, there was a considerable overlap in individual scores between the two groups, and the mean for the group with unrecognised depression on the Raskin three area scale was higher than the figure often used as a cut off for entering patients into a study of drugs.

It must be asked why our doctors failed to recognise these patients. General practitioners are often said to have the advantage of being familiar with the family and social history of their patients, but our study did not show that family or social history predicted recognition of depressive illness. General practitioners have claimed that they use a history of depression to help select antidepressant treatment<sup>27</sup>: no evidence suggests that this affected their diagnosis in our sample of patients.

The items for which mean scores differed give some clues. In many respects the patients with unrecognised depression were more difficult to recognise; they were less likely to complain of depression or admit to it, and they looked and behaved in a less depressed way. These seem reasonable excuses for the general practitioners' lack of accuracy. Two clues suggest that this situation is correctable to a degree at least. Firstly, unrecognised patients were significantly more likely to have had their symptoms for more than a year, and, secondly, they were more likely to have a physical illness contributing to their depression.

That patients with unrecognised depression were more likely than recognised ones to have had their symptoms for more than a year is worrying. General practitioners may have been reluctant to change diagnoses or patients' lack of insight may have affected persistently the information they provided. Certainly these patients seemed to suffer rather than benefit from continued care. If general practitioners were to review people whose malaise lasted for a year or more they might identify some as having a major depressive disorder.

Follow up interviews were conducted three months after the initial interview, and the results will be published in full elsewhere. In that period 10 of the 24 patients with unrecognised depression were referred to medical specialists. Two of the patients had babies, one had proved carcinoma of the cervix, and three underwent investigations to exclude serious risk of malignancy. This indicates that the general practitioners failed to recognise depression in the presence or threat of serious organic disease and did not refer patients to specialists inappropriately. If doctors were prepared to consider the possibility that people with physical illnesses might also be suffering from depression they might increase their accuracy.

Accuracy might also be increased if general practitioners were aware that depression is not necessarily simply an increased quantity of misery. Patients need to be helped to confront the possibility of an unwanted diagnosis. Perhaps it is all a matter of self confidence, and general practitioners would be helped by knowing the criteria for major depressive illness that require only a short catechism to be elicited. The eight specified symptoms, five of which must be elicited in addition to two weeks of depressed mood to diagnose major depressive illness, are: change in appetite or weight; change in pattern of sleep; loss of energy or weariness; agitation or retardation; loss of interest or pleasure in usual activities; self reproach or unnecessary guilt; inability to concentrate or make decisions; and recurrent thoughts of death or suicide. We emphasise that the questions in the questionnaire relating to symptoms could be asked by any doctor.

It remains to be determined whether the unrecognised depressed patients would benefit from recognition. We know from the follow up study that only a few recognised patients completed even a

minimal course of treatment with antidepressant drugs, yet the outcome of our unrecognised patients was worse.

Failure to recognise depression seemed to be related to general practitioners' basic knowledge of diagnosing depression and not only to their skills in interviewing or their attitudes towards patients with emotional disorder.

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## References

- 1 Clare AW. Psychiatry in general practice. *J R Coll Gen Pract* 1983;33:195-8.
- 2 Royal College of General Practitioners, Birmingham Research Unit. *Trends in national morbidity*. London: Royal College of General Practitioners, 1976. (Occasional Paper No 3.)
- 3 Fahy TJ. Pathways of specialist referral of depressed patients from general practice. *Br J Psychiatry* 1974;124:231-9.
- 4 Johnson DAW. Treatment of depression in general practice. *Br Med J* 1973;iii:18-20.
- 5 Johnson DAW. A study of the use of anti-depressant medication in general practice. *Br J Psychiatry* 1974;125:186-92.
- 6 Marks JN, Goldberg DP, Hillier VF. Determinants of the ability of general practitioners to detect psychiatric illness. *Psychol Med* 1979;9:337-53.
- 7 Skuse D, Williams P. Screening for psychiatric disorder in general practice. *Psychol Med* 1984;14:365-77.
- 8 Goldberg D, Huxley P. *Mental illness in the community: the pathway to psychiatric care*. London: Tavistock Publications, 1980:57-107.
- 9 Balint M. *The doctor, his patient, and the illness*. London: Pitman Medical, 1957.
- 10 Pendleton D, Schofield T, Tate P, Havelock P. *The consultation: an approach to learning and teaching*. Oxford: Oxford University Press, 1984.

- 11 Watson JM, Barber JH. Depressive illness in general practice. *Health Bull (Edinb)* 1981;39:112-6.
- 12 Spitzer RL, Endicott J, Robins E. Research diagnostic criteria: rationale and reliability. *Arch Gen Psychiatry* 1978;35:773-82.
- 13 Sireling LI, Freeling P, Paykel EG, Rao BM. Depression in general practice: clinical features and comparison with out-patients. *Br J Psychiatry* (in press).
- 14 Sireling LI, Paykel ES, Freeling P, Rao BM, Patel SP. Depression in general practice: case thresholds and diagnosis. *Br J Psychiatry* (in press).
- 15 Goldberg DP. *The detection of psychiatric illness by questionnaire*. London: Oxford University Press, 1972. (Maudsley monograph No 21.)
- 16 Endicott J, Spitzer RL. A diagnostic interview: the schedule for affective disorders and schizophrenia. *Arch Gen Psychiatry* 1978;35:837-44.
- 17 Wing JK, Cooper JE, Sartorius N. *The measurement and classification of psychiatric symptoms*. Cambridge: Cambridge University Press, 1974.
- 18 Feighner JP, Robins E, Guze SB, Woodruff RA, Winokur G, Munoz R. Diagnostic criteria for use in psychiatric research. *Arch Gen Psychiatry* 1972;26:57-63.
- 19 Hamilton M. Development of a rating scale for primary depressive illness. *British Journal of Social and Clinical Psychology* 1967;6:278-96.
- 20 Paykel ES, Klerman GL, Prusoff B. Treatment setting and clinical depression. *Arch Gen Psychiatry* 1970;22:11-21.
- 21 Paykel ES. The clinical interview for depression. In: Sartorius N, Bau TA, eds. *Assessment of depression* (in press).
- 22 Carney MWP, Roth M, Garside RF. The diagnosis of depressive syndromes and the prediction of ECT responses. *Br J Psychiatry* 1965;111:659-74.
- 23 Raskin A, Schullerbrandt JG, Reatig N, McKeon JJ. Differential response to chlorpromazine, imipramine, and placebo. A study of sub-groups of hospitalised depressed patients. *Arch Gen Psychiatry* 1970;23:164-73.
- 24 Nie NM, Hull CH, Jenkins JG, Steinbrenner K, Bart DH. *Statistical package for the social sciences*. 2nd ed. New York: McGraw Hill, 1975.
- 25 Schweder T, Sjøtvoll E. Plots of p-values to evaluate test simultaneously. *Biometrika* 1982;69:493-502.
- 26 Goldberg D, Huxley P. *Mental illness in the community: the pathway to psychiatric care*. London: Tavistock Publications, 1980:64-5.
- 27 Burton RH, Freeling P. How general practitioners manage depressive illness: developing a method of audit. *J R Coll Gen Pract* 1982;32:558-61.

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# My Student Elective

## An eyewitness in Bhopal

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I flew to Bhopal from Delhi on Sunday 2 December 1984 to begin my elective, which I had arranged to spend in the paediatric department at Hamidia Hospital. In the next two weeks 1337 children were admitted to the department. Of these 119 died and Bhopal became a household name. As the only outsider I was in a unique position to observe the reaction of the city and its medical resources to the world's worst industrial disaster. This report recounts my impressions of how the hospital and staff coped with the disaster and describes some of the clinical features of the toxic gas poisoning.

I spent the first night of my stay with Dr Bhandari, the professor of paediatrics. At about 1.30 am I was woken by the repeated ringing of the doorbell followed by the entry of several people who were coughing violently. At the same time I noticed a sweetish smell, my eyes were mysteriously stinging and watering, and my throat felt raw. I heard the distant sound of a siren, but this being my first night in Bhopal I thought nothing of the incident and went back to sleep. When I woke the next morning I heard that there had been a major gas leak from the Union Carbide insecticide plant about a mile from the hospital, but the nature of the gas was not yet known. At first the

local news reports knew little more than we could deduce from seeing the numbers of affected people who had flooded into the hospital grounds. The earliest reports suggested that about 30 people had died. With each subsequent news report we listened with disbelief as further details about the horrifying story began to emerge. Even after the first full day we were unable to believe the estimate from the BBC World Service of 2000 dead—later even this proved to be conservative.

The dead and dying arrived by the truckload, others came by rickshaw or were carried by relatives. For some the effort of the journey itself proved too much, and they died soon after arrival. Many families were split up during the initial panic, everywhere there were people looking for missing relatives. There were long queues of people trying to identify relatives in the mortuary. From an early stage when the mortuary was full, other unidentified bodies were laid out on a nearby lawn and under hastily erected shelters.

### Facilities overwhelmed

The facilities in the hospital and the manpower became increasingly overstretched as the enormity of the disaster became apparent. The doctors were quite overwhelmed. I felt even more helpless; having arrived only the day before I had been unable to see inside the hospital or be introduced to the staff, and was unable to speak the language. For the first few days I was frustrated that I was not able to do more to help. Without a doctor to interpret for me there

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