

The Early Diagnosis of Depression

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In July, 1965, the Office of Health Economics held a colloquium on Surveillance and Early Diagnosis in General Practice at Magdalen College, Oxford. It was apparent from the discussion at this meeting that General Practitioners believed that if they were to act effectively in this field, they had to have clear cut information on current screening methods and the impact of early diagnosis of disease on the long term health of the patient. As a result of this view the Advisory Committee set up by the Office of Health Economics came to the conclusion that the best method of furthering this issue was to ask experts in a number of relevant clinical fields to write short papers specifically for General Practitioners. *The Early Diagnosis of Depression* and *The Early Diagnosis of Cancer of the Cervix* are the latest additions to the series. Other papers already published are *The Early Diagnosis of Raised Arterial Blood Pressure* and *The Early Diagnosis of Visual Defects*.

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DEPRESSIVE illnesses are widespread and potentially fatal through suicide. The majority of depressions which come to the notice of doctors are treated solely by GP's.

Diagnosis of the severe case is easy but many patients with milder depressions present with symptoms of a somatic nature. Prevalence increases with age, reaching a peak during the period age 55-64. The disease is commoner in women than in men. Vulnerable times are during the puerperium and also after bereavement.

Because of the self-limiting nature of depressive episodes, systematic screening of whole populations would be unrewarding. In practice, the GP must be the effective screening agent. Despite active interest in the biological and biochemical concomitants of depression, the only 'objective' procedures available to date as screening instruments are psychological questionnaires.

The Beck Depression Inventory is quoted as a research instrument which may be useful in this field, although this has not yet been validated in the setting of general practice.

Early diagnosis of depression has become much more important in general practice since the advent of anti-depressant drugs made treatment possible in this setting.

INTRODUCTION

THE term 'depression' is often used in lay parlance to signify a state of unhappiness or gloom which may have arisen in response to adverse circumstances. To psychiatrists the word connotes a morbid lowering of the spirits quite different in quality from the ordinary miseries of human life. A depressed mood may accompany many varieties of psychiatric disorder. In this paper we are concerned however with those illnesses where depression is the central feature of the disturbance although this may not be plainly apparent at the first clinical encounter.

Depression, using the term in a generic sense to include the varieties of depressive illness, constitutes a substantial hazard to the public health. Attempted suicide is becoming a fashionable mode of behaviour and many patients swallow a handful of tablets in order to signal their distress and to call for help. Accurate statistics for attempted suicide are difficult to compile. A recent estimate for an urban area¹ yielded 820 cases per million per annum.

Only a proportion of attempted suicides (26 per cent male; 43 per cent female)² are suffering from depressive illnesses but recognition is of crucial importance since these are among the most treatable diseases in the whole of medicine. Failure to make a diagnosis and to institute the appropriate measures may lead to a further suicidal attempt, this time perhaps more determined, resulting in death and contributing to the total of approximately 6000 'fatal' suicides which occur each year in England and Wales.

The rate of admission of patients with depressive illnesses to psychiatric hospitals has risen substantially in recent years. Likewise, large and increasing numbers of patients are treated in psychiatric out-patient clinics. This group of specialist-treated depressions constitutes only a minority of the total number of patients with depressive illnesses who seek help from their general practitioners. Thus, Crombie³ working in a Birmingham practice, counted 15.0 cases of depression per 1000 of the practice population in the course of a year.

There may be many people who, for various reasons, choose to cope alone with the misery and social disability engendered in themselves by depression. It is a feature of the natural history that provided suicide, or death from other causes does not occur, spontaneous remission may be anticipated in a majority of cases after a period which varies from a few weeks to several years, but commonly after 3-6 months. Although the psychological state may return to normal, the patient's social situation and circumstances may have been irreparably damaged during a long period of disability.

DIAGNOSIS

There is a good deal of interest at present in the biochemical aspects of depression. Evidence has accrued to indicate a link between depressive illness and cerebral monoamine metabolism; electrolyte metabolism, and cortico-steroid function. As yet,

however, there is no chemical or biological test available for confirming or supporting a diagnosis, or for use in screening operations. The diagnosis of depression is based upon psychological observations, that is, upon the clinician's appraisal of the patient's behaviour and appearance; the manner of his speech, his mood and the content of what he has to say revealing his beliefs, attitudes and his current experience of the world.

The middle-aged woman with sorrowful facies, unable to cry, retarded in movement and speech, admitting to feelings of despair, plagued by an overwhelming sense of guilt and convinced of her imminent doom presents little difficulty in detection and diagnosis. A major problem, however, resides in the manifold nature of the presenting symptoms in depression, especially in those illnesses which are not severe. Thus, bodily symptoms are often the principal complaint in the first instance. Depression lowers the threshold of appreciation of bodily sensations and so discomforts or pains, normally trifling, become obtrusive and major.

There are also other reasons why patients prefer to deal in the currency of somatic symptomatology rather than to talk of feeling depressed. The attitudes of the individual to the occurrence of psychological illness within himself or in others are complex. He is told to regard these conditions as illnesses like any other and to seek treatment without hesitation. He may believe, however, that although man is not in control of the inner functions of his body, he should certainly be master of his own mind and feelings. Giving way and running for advice in the presence of depression or morbid anxiety is merely evidence of weakness and/or moral cowardice. These are not matters for the doctor but rather for his own conscience and will-power.

Under these circumstances and with these beliefs, if the depressed patient does consult his doctor he may prefer to side-step the central issue and talk about backache, or stomach pains, or insomnia. This is the 'admission ticket' which the patient offers to his doctor because he thinks it will be acceptable. The astute clinician may quickly pick up cues which enable him to proceed to the real business.

The presentation in somatic terms is influenced by another feature of depressive illness, namely, hypochondriasis. The patient may develop a belief that he is the victim of a serious bodily illness, usually cancer, and the symptom he offers to the doctor is a diffident attempt to broach this subject.

The notion that the patient has a serious physical disease, malignant in nature, may be reinforced in the patient's mind and aroused in the doctor's, by a story of rapid weight loss and failure of appetite with constipation. Although it may be important not to miss an intra-abdominal neoplasm, it is perhaps more important not to overlook a severe depression which may be fatal in outcome but for which there is a much more certain cure. A sensitive and informed account of depression as it presents in general practice has been published by Watts⁴.

Depressive illness is relatively uncommon in the younger age groups. The preval-

ence increases from the age of 30, reaching a peak during the period from age 55-64 in both sexes. It is commoner in women than in men.

Depression occurring during the involuntional period in both men and women from, say, 45-65, may not be associated with the striking retardation of movement, speech and thinking to be found in the depressed phase of manic-depressive illness. On the contrary, great anxiety with agitation may occur, perhaps accompanied by prominent hypochondriacal concern and powerful feelings of guilt.

The clinical diagnosis may be strengthened by the discovery of a positive family history of depression or of suicide. A previous similar attack—possibly associated with a suicidal attempt—would add weight to the diagnosis.

Vulnerable periods occur during the puerperium and also after bereavement. The clinical picture of depression following a major catastrophe or loss in the patient's life may be that associated with the depressed phase of manic-depressive illness or may take the form of 'neurotic' depression. In the latter state, the patient will be preoccupied with the recent disaster and will have a melancholy outlook, but retardation of movement and of thinking, early morning insomnia, anorexia, improvement in mood towards evening, sense of guilt, and hypochondriasis will not be prominent.

In the elderly, depression may lead to self neglect and the resulting nutritional disturbance can, in turn, give rise to organic mental symptoms such as disorientation and recent memory loss which may complicate and perhaps obscure the primary disorder.

Depression should be watched for as a side effect in treatment with anti-hypertensive drugs (notably reserpine) and with steroids.

SCREENING

Early diagnosis is patently desirable in depression. In our present state of knowledge screening must perforce depend upon evaluation of symptoms and signs. Methods may range from the ordinary clinical interview to more rigid, structured procedures such as questionnaires.

Since bouts of depression are, in the main, of limited duration (remitting spontaneously, or through treatment, or ending in death), systematic screening of whole populations would have to be undertaken at fairly frequent and regular intervals to be of much value.

In practical terms, the GP must be the effective screening agent and the operation is therefore necessarily restricted to those patients who seek advice. Again, the episodic, self-limiting nature of depression raises special problems as regards screening and places the illness in a different category from arterial hypertension, diabetes or cancer. The GP will have no difficulty in spotting the severe case. If his mind is tuned to the possibility he may in the less obvious case quickly see beyond the presenting symptom and pick up cues from the patient's general appearance, facies or from

the way in which he relates his story. The question 'How are your spirits?' or 'How do you feel in yourself?' may elicit a revealing answer.

Is it feasible, practicable and useful to supplement the GP's clinical vigilance by means of questionnaires or other instruments which might pick out depressions likely to be overlooked? Many questionnaires, inventories and interview schedules have been designed and used in the attempt to pick out psychiatric 'cases' using 'objective' procedures, from the general population and from many special populations such as army recruits, school children. For the most part, these instruments are geared to the detection of neurotic disorders and very little work has been specifically directed to screening procedures for depressions. The field is wide open for research and general practice is the obvious setting for investigations of this kind. Scales have been designed for measuring aspects of depression once the diagnosis has been made, for example by Hamilton⁵. No ready-made questionnaire which fulfils the criteria of a good screening instrument *and which has been validated in the setting of general practice* is yet available.

In the absence of a short and simple questionnaire or rating scale which could be given to all patients at regular intervals and which would single out depressives with reasonable precision 'indiscriminate' screening in general practice is not feasible. However, an instrument has been devised⁶ which has recently aroused some interest as an objective procedure for measuring depression. The Beck Depression Inventory (BDI) [APPENDIX] consists of a list of descriptive statements related to twenty-one aspects of depression. For each aspect there are four or five statements in the first person, ranging from a mild or neutral statement to one indicating a severe form of that particular symptom. The patient reads the scale and chooses the statement which he feels is most applicable to himself. Each statement is assigned a score of 0, 1, 2 or 3 to indicate degree of severity. Total score range from 0-62.

The BDI has been validated on British patients suffering from depression⁷. The statements may be read out to the patient or he may carry out the procedure on his own. The time required to complete the inventory is about 10 minutes and scoring takes 1-2 minutes. The BDI has been administered to a series of general medical in-patients and the results compared with clinical diagnoses⁸. The findings suggest that the instrument has clinical value for the diagnosis of depression in this population.

This Inventory is mentioned here as a promising tool which might be used for research purposes in general practice. Although its use as a screening procedure applied to all patients would be inappropriate it might well prove valuable as a diagnostic aid in the doubtful case. For instance, an interesting research exercise might be developed by applying the BDI to a group of patients where there was little doubt about the existence of a depression; to a group of equivocal cases—perhaps presenting in 'somatic' terms but suspected by the GP and to a group of patients where there was no evidence of depression.

The question of appropriate 'cutting scores' to allow optimum discrimination between patients with and without depression would require further research in the general practice setting. Beck compared the scores of patients with various psychiatric disorders and found that 17 was a useful demarcation level. Metcalfe administered the inventory repeatedly to patients diagnosed as having severe depression and compared the scores with ratings made independently by the psychiatrist. She found that 17 was a suitable cutting point to separate patients judged to be depressed from those who were not depressed (having recovered during the course of the study). Schwab, however, quotes a personal communication from Beck (dated 1963) stating that minimally or non-depressed patients score 0-13; mildly to moderately depressed 14-24; severely depressed 25 or more.

In his own study based on general medical in-patients, Schwab found 10 to be the most useful cutting point.

TREATMENT

The first effective treatment for depressive illness, was evolved during the 1930s by the induction of artificial epileptic convulsions. Chemical methods were used initially but were replaced by electro-convulsive therapy (ECT). At the present time ECT administered with a short-acting muscle relaxant and barbiturate anaesthesia is probably still the surest method of relieving severe depression. It has the disadvantage of requiring a specialist setting for its application.

The development of anti-depressant drugs—first introduced in 1957—has placed the means of treating depression in the hands of GPs. The efficacy, virtues and shortcomings of the anti-depressant drugs is a matter of lively controversy.

On the one hand evidence has been assembled to support the view that not only do these drugs relieve depression, but that certain categories of drug are specific for certain forms of depression: tricyclic compounds such as imipramine and amitryptiline for endogenous depression, and monoamine oxidase inhibitors such as phenelzine for neurotic depression. On the other hand the effect of anti-depressants has been dismissed as nothing more than that of a sedative.

Most of the drug trials have been carried out on patients undergoing treatment in specialist settings. There is scope for the conduct of trials in general practice. In this connection it would be important to standardise the criteria for entry to the trial—one might recruit patients with what appeared to be 'endogenous' depression. In order to achieve sufficient numbers of patients with a particular variety of depression it may be necessary to co-operate with other practices. An assessment procedure such as the BDI would form a useful method for measuring clinical response.

- 1 PARKIN, D. and STENGEL, E. (1965). *Incidence of suicidal attempts in an urban community*, *Br. Med. J.* **2**, 133-138.
- 2 KESSEL, N. (1965). Self-Poisoning, *Br. Med. J.* **2**, 1265-1270 and 1336-1340.
- 3 CROMBIE, D. L. (1957). *Coll. Gen. Practit. Research Newsletter No. 16*, 218.
- 4 WATTS, C. A. H. (1966). *Depressive disorders in the Community*. Bristol.
- 5 HAMILTON, M. (1960). *J. Neurol. Neurosurg. Psychiat.* **23**, 56-62.
- 6 BECK, A. T. *et al* (1961). *Arch. Gen. Psychiat.* **4**, 561-571.
- 7 METCALF, M. and GOLDMAN, E. (1965). *Brit. J. Psychiat.* **111**, 240-242.
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A (*Mood*)

- 0 I do not feel sad.
- 1 I feel blue or sad.
- 2a I am blue or sad all the time and I can't snap out of it.
- 2b I am so sad or unhappy that it is very painful.
- 3 I am so sad or unhappy that I can't stand it.

B (*Pessimism*)

- 0 I am not particularly pessimistic or discouraged about the future.
- 1 I feel discouraged about the future.
- 2a I feel I have nothing to look forward to.
- 2b I feel that I won't ever get over my troubles.
- 3 I feel that the future is hopeless and that things cannot improve.

C (*Sense of Failure*)

- 0 I do not feel like a failure.
- 1 I feel I have failed more than the average person.
- 2a I feel I have accomplished very little that is worthwhile or that means anything.
- 2b As I look back on my life all I can see is a lot of failures.
- 3 I feel I am a complete failure as a person (parent, husband, wife).

D (*Lack of Satisfaction*)

- 0 I am not particularly dissatisfied.
- 1a I feel bored most of the time.
- 1b I don't enjoy things the way I used to.
- 2 I don't get satisfaction out of anything any more.
- 3 I am dissatisfied with everything.

E (*Guilty Feeling*)

- 0 I don't feel particularly guilty.
- 1 I feel bad or unworthy a good part of the time.
- 2a I feel quite guilty.
- 2b I feel bad or unworthy practically all the time now.
- 3 I feel as though I am very bad or worthless.

F (*Sense of Punishment*)

- 0 I don't feel I am being punished.
- 1 I have a feeling that something bad may happen to me.
- 2 I feel I am being punished or will be punished.
- 3a I feel I deserve to be punished.
- 3b I want to be punished.

G (*Self Hate*)

- 0 I don't feel disappointed in myself.
- 1a I am disappointed in myself.
- 1b I don't like myself.
- 2 I am disgusted with myself.
- 3 I hate myself.

H (*Self Accusations*)

- 0 I don't feel I am any worse than anybody else.
- 1 I am very critical of myself for my weaknesses or mistakes.
- 2a I blame myself for everything that goes wrong.
- 2b I feel I have many bad faults.

I (*Self-punitive Wishes*)

- 0 I don't have any thoughts of harming myself.
- 1 I have thoughts of harming myself but I would not carry them out.
- 2a I feel I would be better off dead.
- 2b I have definite plans about committing suicide.
- 2c I feel my family would be better off if I were dead.
- 3 I would kill myself if I could.

J (*Crying Spells*)

- 0 I don't cry any more than usual.
- 1 I cry more now than I used to.
- 2 I cry all the time now. I can't stop it.
- 3 I used to be able to cry but now I can't cry at all even though I want to.

K (*Irritability*)

- 0 I am no more irritated now than I ever am.
- 1 I get annoyed or irritated more easily than I used to.
- 2 I feel irritated all the time.
- 3 I don't get irritated at all at the things that used to irritate me.

L (*Social Withdrawal*)

- 0 I have not lost interest in other people.
- 1 I am less interested in other people now than I used to be.
- 2 I have lost most of my interest in other people and have little feeling for them.
- 3 I have lost all my interest in other people and don't care about them at all.

M (*Indecisiveness*)

- 0 I make decisions about as well as ever.
- 1 I am less sure of myself now and try to put off making decisions.

- 2 I can't make decisions any more without help.
- 3 I can't make any decisions at all any more.

N (*Body Image*)

- 0 I don't feel I look any worse than I used to.
- 1 I am worried that I am looking old or unattractive.
- 2 I feel that there are permanent changes in my appearance and they make me look unattractive.
- 3 I feel that I am ugly or repulsive looking.

O (*Work Inhibition*)

- 0 I can work about as well as before.
- 1a It takes extra effort to get started at doing something.
- 1b I don't work as well as I used to.
- 2 I have to push myself very hard to do anything.
- 3 I can't do any work at all.

P (*Sleep Disturbance*)

- 0 I can sleep as well as usual.
- 1 I wake up more tired in the morning than I used to.
- 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.

Q (*Fatigability*)

- 0 I don't get any more tired than usual.
- 1 I get tired more easily than I used to.
- 2 I get tired from doing anything.
- 3 I get too tired to do anything.

R (*Loss of Appetite*)

- 0 My appetite is no worse than usual.
- 1 My appetite is not as good as it used to be.
- 2 My appetite is much worse now.
- 3 I have no appetite at all any more.

S (*Weight Loss*)

- 0 I haven't lost much weight, if any, lately.
- 1 I have lost more than 5 pounds.
- 2 I have lost more than 10 pounds.
- 3 I have lost more than 15 pounds.

T (*Somatic Preoccupation*)

- 0 I am no more concerned about my health than usual.
- 1 I am concerned about aches and pains or upset stomach or constipation or other unpleasant feelings in my body.

- 2 I am so concerned with how I feel or what I feel that it's hard to think of much else.
- 3 I am completely absorbed in what I feel.

U (*Loss of Libido*)

- 0 I have not noticed any recent change in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

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