Diagnosis of depression in elderly patients

Mavis Evans & Pat Mottram

Depression in old age is a pathological process, not a normal reaction to growing older. The majority of people cope with ageing, and many feel happy and fulfilled. However, there is a bias among health professionals and the community in general to accept lower functioning and more symptoms in older people (Alexopoulos, 1992). Depression tends to be denied by the current generation of elderly people, many of whom were raised in an atmosphere where showing feelings was discouraged, and this adds to diagnostic difficulties. Comorbid medical conditions, the tendency of patients to somatise, cognitive deterioration, and multiple life events, often of loss (e.g. bereavement, retirement, moving to smaller housing), all further complicate the diagnostic process.

Why diagnose depression

Depression causes increased morbidity and mortality. It increases demand on relatives, social and health services. Depression usually responds well to treatment, at least initially, thus improving quality of life and possibly reducing the mortality rate. Antidepressant treatment is effective, safe (even with comorbid physical disease) and cost-effective when compared with costs of the untreated disease.

Prevalence

It is generally accepted that the burden of depression in the elderly is high. Despite this, the prevalence of major depressive disorder has been shown to be no higher in the elderly than in the young (1–3%), although these findings do not take into account the comorbidity of physical illness and the dementias (Blazer, 1999). Sub-threshold or minor depressive disorders cause marked morbidity and mortality – but with differing terminology and definitions, it is not surprising that prevalence studies differ widely and that longitudinal and treatment studies are difficult to compare (Tannock & Katona, 1995).

‘Caseness’ can be considered to be a level of severity of depression at which the majority of professionals would consider treatment. Such a degree of depression is seen in approximately 10–15% of community-living elderly, the prevalence rising in those attending their general practitioners (GPs) (15–30%), and those in residential (30–40%) or hospital (15–50%) care. In the elderly, a low threshold for the diagnosis of depression, leading to a trial of treatment with social or medical interventions, is often the best way of confirming the diagnosis.

What is depression?

It is important not to rely on categorical definitions of types of depression, as these do not fit well when superimposed on the variety of illness seen in clinical practice. The concept of a spectrum of symptoms and severity, ranging from no disease through minor or sub-threshold depression to major depressive disorder (MDD) is more applicable, and this model is becoming increasingly accepted.

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A 15-year longitudinal study (Angst & Merkangas, 1997) provides evidence for such a concept by demonstrating movement along the spectrum over time. Most sufferers with MDD also showed sub-threshold depressions; approximately a third of those with sub-threshold depression in this study went on to develop MDD, and a half of those with MDD suffered sub-threshold depression after recovery.

There is genetic evidence supporting the concept of a depressive spectrum. Remick et al (1996), in a study of 146 consecutive patients and their relatives, found no difference in morbid risk for first-degree relatives to develop mood disorder between those with index diagnoses of major depression, minor depression (dysthymia) and double depression.

There is a body of supporting evidence that late- and early-onset types of depression are different (Alexopoulos, 1989a, b; Conwell et al, 1989). Patients with late-onset depressive disorders have an increased incidence of structural cerebral abnormalities, a decreased likelihood of a family history of depression, poor treatment response as shown by longer hospital stays and more residual symptoms, increased risk of progression to dementia, and earlier mortality. Burvill et al (1991) described increased severity and increased risk of cognitive impairment in those with late-onset depressive disorders, but the incidence of family history of depression was unchanged. However, the Royal College of Psychiatrists' Old Age Depression Interest Group (1993) study showed no difference in two-year prognosis after recovery in early- or late-onset cases.

### Stigma of diagnosis

A surprisingly frank study with six rural family physicians in Nebraska (Susman et al, 1995) showed that although the physicians felt they could usually recognise and treat depression adequately, they tended not to use the diagnosis of depression. This was owing to the fear that perceived stigma might threaten the doctor–patient relationship, and also compromise the future treatment of those patients who had depression recorded in their medical records.

Elderly patients may actively deny depressed mood because of the perceived stigma both of depression itself and of the need for help with psychiatric problems. Biological features such as low appetite or poor sleep are more acceptable as reasons to request help, but may lead to unnecessary investigations and/or treatment. The elderly are more likely to seek help from physicians than from services or professionals with explicit mental health labels, and this highlights the need for primary care and general hospital physicians to be able to recognise depressive symptoms.

### Signs and symptoms

Physical signs of ageing, such as stooped posture and lined faces, may influence the perception of elderly patients by others and result in a tendency to consider them depressed. Conversely, depressive symptoms and signs, such as complaints of pain or fatigue, may be attributed to the process of ageing or to organic disorders.

#### Depression and dysphoria

Depressed mood or sadness may not be present, the patient denying such feelings when questioned. Complaints of not coping, anxiety or irritability are more frequent (Shulman, 1989). Such patients may complain of sleep or appetite disturbances, loss of energy and other somatic symptoms; usually they will acknowledge a loss of interest or pleasure in their daily activities. Because of the importance of recognising the depressive illness in such patients, depressed mood is not an absolute requirement for the diagnosis in either DSM–IV (American Psychiatric Association, 1994) or ICD–10 (World Health Organization, 1992). DSM–IV requires depressed mood or anhedonia for the diagnosis of depression. ICD–10 (mild or moderate depressive episode) requires two of: depressed mood, loss of interest and enjoyment, and increased “fatigueability”. Only a severe depressive episode requires all three. ICD–10 also allows for the diagnosis of “masked depression” with mixtures of somatic depressive symptoms and persistent pain or fatigue not due to organic causes.

#### Crying

This is rare in men in the current cohort of elderly, many of whom belong to the ‘stiff upper lip’ generation. Crying may therefore point to associated lability from cerebral ischaemia.

#### Anxiety/agitation

Nervousness, irritability, or importuning behaviour together with some degree of associated anxiety is seen in over 80% of elderly patients with depression. It is associated with lowered self-esteem and
decreased ability to cope – sleep disturbance or restlessness may cause fatigue. Irritability may disrupt or strain relationships so that necessary help may be withdrawn. A sense of worthlessness and feelings of being a ‘nuisance’ or a ‘burden’ may lead to help not being requested, the need being denied by the patient or unrecognised by his or her carers.

### Low energy, fatigue

Complaints of tiredness are common, but these may be attributed to physical disease or to sleep disturbance so that the diagnosis is missed.

### Physical retardation

This slowing of movements, and in more severe cases slowing of thoughts, can lead to increased difficulty coping with activities of daily living, poor diet, and ultimately cessation of eating and drinking. Reduced mobility can progress to no movement at all with development of pressure sores. The condition when severe is life-threatening.

### Cognitive deficits

These are frequently seen with depression in older people, and sometimes reach a level of severity to be considered pseudodementia. This condition is important to diagnose and treat, as the deficit is at least partially reversible, but an eight-year follow-up (Kral & Emery, 1989) of 44 such patients found that 89% had developed Alzheimer’s disease. Deficits in language and memory processing are relatively common, often not explainable by retardation or lack of motivation. A depressed patient with memory problems often improves with cues, showing a problem accessing information rather than loss of the information. However, even mild cognitive deficits are not always fully reversible.

Antidepressant treatment with tricyclics can precipitate acute confusion owing to the centrally acting anticholinergic side-effects of this class of drug.

### Depression and dementia

Community studies show cases of depression to be much more common than dementia. Depression may be the presenting feature of a dementia, particularly Alzheimer’s disease. Such depression is often resistant to treatment, and cognitive deficit is usually present although initially mild. Low mood is also common in the early stages of any dementia where there is insight.

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**Somatisation**

Somatisation as a concept is becoming increasingly recognised. Lipowski (1988) defined somatisation as “the tendency to experience and communicate somatic distress and somatic symptoms unaccounted for by relevant pathological findings, to attribute them to physical illness, and to seek medical help for them”. Somatisation can lead to iatrogenic disease from unnecessary investigations and treatment, as well as chronicity of the underlying depressive illness. The topic was well-covered by Smith (1996) in this journal. DSM-IV allows somatic symptoms to be counted towards the diagnosis of depression if there is any possibility of psychological causation – a more accurate method than the previous requirement to attribute them to either physical or psychiatric causes.

A further difficulty, however, is the tendency among many health professionals to attribute difficult-to-diagnose symptoms, and also any symptoms in those patients known to have a psychiatric diagnosis, to somatisation. Severe anaemia, thyroid disorders and malignancies are all seen on routine screening of psychiatric referrals – 46% of a series of 100 elderly patients with depression had a comorbid physical diagnosis (Sweer et al., 1988).

### Hypochondriasis

This is a recognised symptom of depression in the elderly population, and is also seen associated with anxiety disorders. It differs from somatisation in the attribution of normal bodily sensations to illness, and the active seeking of medical investigations and reassurance. It may be part of lifelong maladaptive behaviour. However, in this age group, rigorous steps must be undertaken to exclude physical problems before ascribing symptoms to hypochondriasis or somatisation secondary to depression. That such patients are depressed is inferred from their good response to standard treatments for depression (Jacoby, 1981).

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**Box 1. Somatisation**

Correct diagnosis and treatment would reduce the GP’s workload in the medium- to long-term as the number of somatised complaints decreases with resolution of the depression.
Suicidal ideas

Feelings of life not being worth living and wishing to die can occur in the absence of depressed mood (Jorm et al, 1995). Other factors linked with the wish to die include not being married, poor subjective health, disability, pain, sensory impairment and living in a nursing home or hostel.

Fleeting suicidal thoughts are common in the elderly, especially those who are physically ill or disabled. Suicide itself is not rare – age and physical disease being known risk factors for suicide. Coroners’ figures are probably an under-estimate as not all suicides in this group are active: non-compliance with medication for physical conditions can lead to death from ‘natural causes’.

Behavioural disturbances

A wide variety of behavioural changes can present as signs of depression in elderly people, especially among those who are highly dependent on carers. These disturbances can take the form of refusing food, inappropriate urinary and faecal incontinence, screaming, and theatrical ‘falls’ where they throw themselves to the ground. In nursing homes, this may also be seen in violent behaviour towards carers, biting, scratching and in recent ‘falling out’ with other residents.

Cultural context

When the patient is from a different ethnic group than the clinician, signs and symptoms must be seen in the context of that person’s cultural context. Different cultures, religions and social groupings can have unique ways of expressing distress. Further information about such norms should be sought from relatives and carers, as ignoring sociocultural differences can lead to a missed diagnosis or misdiagnosis.

Risk factors for developing depression

The following factors are considered to be linked to the development of depression, and can be used as a means of identifying and targeting high-risk groups:

- physical illness, especially if painful or disabling
- feeling lonely (not living alone)
- recent bereavement or other adverse life-event
- hearing difficulties
- past or family history of depression
- dementia, early or retained insight
- medication (e.g. steroids, major tranquillisers)
- female gender (70 : 30 female : male ratio).

Depression and physical disease

Elderly physically ill patients frequently show symptoms of depression. These may be an appropriate situational response and may require only supportive treatment. However, such symptoms can persist, interfering with social functioning and even impairing recovery from the physical illness itself. Persistent depressive symptoms may respond to antidepressants and may be regarded as features of clinical depression (Finch et al, 1992) even though they do not reach the strict diagnostic criteria of DSM–IV or ICD–10.

Symptoms such as lack of energy, poor concentration and weight loss may be due to physical illness or ageing, not depression – even experienced clinicians may have difficulty in distinguishing physical or psychiatric causes, as required by previous DSM classifications. The DSM–IV

Box 2. Requirements for diagnostic interview

Privacy – patient may be ashamed of feelings or ‘weakness’
Appropriate timing of interview – allow for effect of diurnal variation
Suitable length of interview – rapport will take time, patient may become fatigued
Collateral information – from relatives or carers, patient may often deny problems

Box 3. Secondary handicap from untreated depression

Iatrogenic disease from unnecessary investigations and treatment
Genuine physical problems caused by, for example, self-neglect and poor diet
Residential placement owing to inability to cope with independent living because of poor concentration and low energy, low self-esteem and self-confidence and cognitive changes
approach has advantages with symptoms being counted towards the diagnosis of depression if there is any possibility of psychological causation. These symptoms of depression may be similar to those of a chronic illness such as cancer, and it must be remembered that depression and physical illness can coexist and may both warrant treatment.

Depressive illness and feelings of worthlessness may underlie a failure to complain of symptoms of physical illness or to ask for help. The result may be non-compliance with medication and other treatments, self-neglect or non-attendance at clinics. Alternatively, lowered self-esteem and decreased ability to cope can lead to increased attendance at clinics.

Diagnosing depression in the general hospital

Diagnosis can be very difficult in practice. The medical ward is often noisy with little privacy and ward routines may be obstructive making it difficult for the psychiatrist to find a suitable time to see the patient. Patients may be dysarthric or deaf, and they may be too ill to be moved to an interview room or other quiet and private situation. They may be fatigued by their illness or by its investigation, and they may be sedated and/or confused by prescribed medication.

The choice of interviewer is crucial: a known nurse or doctor is more likely to elicit painful symptoms than a stranger. Allowing time for the interview is also important, more symptoms will be admitted if there is time for rapport to develop. Diurnal variation of mood may affect answers. An additional factor is that the elderly frequently withhold information about personal matters and feelings, so that some cases may only be identified upon repeated evaluation.

Because of these difficulties, collateral information should be sought. Conversations with relatives and friends may establish how the patient behaved in his or her home environment rather than in the strange and possibly frightening hospital surroundings. Nursing notes often contain useful information, particularly about biological features of depression such as sleep and appetite, and also about social interaction and aggressive behaviour.

The speciality of liaison psychiatry has two major roles: to aid in the diagnosis and treatment of psychiatric problems on medical wards; and also to educate and advise non-psychiatrically trained physicians in the recognition and treatment of such problems themselves. Psychiatric morbidity in medical wards is too high for a psychiatrist to see all the patients affected – his or her main role must therefore be educational, only taking an active part in the management of more difficult cases.

Rating scales

Screening scales are of most use where a condition would otherwise be at risk of being missed. In the case of depression, staff may not know how to elicit symptoms appropriately, nor what importance to attach to them in diagnosis. They may also find it difficult to ask questions about feelings or suicidal thoughts. It is important to screen for the associated symptoms of depression in the elderly, as they may not show depressed affect and will deny feeling sad.

It becomes cost-effective to use scales if the condition to be identified is either relatively rare, but with serious consequences if missed, or more common but with an appreciable degree of morbidity. It is also necessary for a treatment to be available – there is little point encouraging staff to identify a problem if nothing can be done about it. The positive feedback for staff in seeing effective treatment and improvement in patients they have identified as depressed gives added impetus to the process.

Depression in the elderly is thus a good example of a condition where case-finding scales are useful. It can be a difficult diagnosis with a significant morbidity and mortality if untreated.

Meakin (1992) found that completion of pen-and-paper screening tests for depression was acceptable to the majority of the physically ill elderly. He recommended that they should be administered by staff to reduce practical difficulties such as loss of glasses, or hand tremor, etc., which might otherwise lead to non-completion. Toner et al (1988), in an outpatient sample, showed that the use of rater-administered depression scales was superior for both patient compliance and accurate diagnosis among the elderly.

Box 4. Requirements for screening scales for depression in the elderly

Observer-rated
Use simple, non-medical language
Administered in private in an unhurried manner
Identify at-risk patients requiring further investigation
Cost-effective where the illness has high prevalence and is followed by effective treatment
The following three screening scales are appropriate for use in most situations. They are screening scales, not diagnostic instruments, but will identify those elderly requiring more detailed interview and appropriate treatment.

**Brief Assessment Schedule (BASDEC)**

Self-assessment scales have the particular disadvantage that a patient may be limited by concentration, insight or literacy (Hamilton, 1976). Observer-rated scales require considerable time and skill. The elderly, especially if cognitively impaired or physically ill, can find it difficult to complete questionnaires. This can be overcome by reading out the questions, in an unhurried manner, in a quiet environment or with the use of devices such as the BASDEC cards (Adshead et al., 1992). These are a set of 19 cards with statements from the Brief Assessment Schedule printed on each. The cards are presented to the patient one at a time with the instruction to place it in one of three piles: ‘true’, ‘false’ or ‘don’t know’. Patients have to be cognitively intact and able to read the (large) script. It has been printed in various languages and has obvious advantages for the deaf.

**Geriatric Depression Scale (GDS)**

The GDS has been recommended by the Royal College of Physicians, British Geriatric Society and the Royal College of General Practitioners as a suitable scale to screen for depression. It has been extensively validated in both 15- and 30-item formats. It is a self-rating scale that can also be given by interview.

The 30-item scale was initially validated in psychiatric patients and non-depressed community subjects aged 55 years and over (Yesavage et al., 1983). It has also been validated in nursing homes, but showed poor sensitivity until those with cognitive impairment were excluded.

The 15-item scale was validated against the 30-item scale in 18 normal and 17 depressed or dysthymic subjects aged 55 years or more, using a cut-off of ≥6 (Sheik & Yesavage, 1986).

Both the 15- and 30-item scales contain one item on the subjective feeling of energy, but otherwise manage to avoid somatic questions. However, as many as ten questions from the 30-item and five from the 15-item scales can be considered to measure anhedonia, which has been shown by Silverstone (1991) to be non-specific, sometimes occurring in the physically ill in the absence of depression.

Thus, although it is a standard scale for use in the community, it can be difficult to use in the general hospital. Questions such as “Do you think it is wonderful to be alive right now?” and “Do you feel pretty worthless the way you are now?” can be unacceptable to acutely ill patients – for example, just after a stroke – or to their primary nurses, thus leading to non-completion of the screen.

**Evans Liverpool Depression Rating Scale (ELDRS)**

The ELDRS has been developed for use in physically ill people, and is designed for ease of use by non-psychiatrically trained staff. It was the first specific screen for depression in this population. It includes collateral information and also enquires into suicidal thoughts – an important area often untouched in general-hospital clerking. All questions refer to the previous four weeks, so that in acute wards the scale is investigating mood prior to admission, reducing the likelihood of diagnosing and perhaps initiating treatment for brief reactive depressions owing to the admission itself or its consequences.

The ELDRS is not designed to be a measure of severity. It has been validated in hospitals and nursing homes, against other scales (the Hamilton Rating Scale for Depression; the Montgomery–Åsberg Depression Rating Scale; the Geriatric Mental State Schedule/AGECAT), psychiatric interview and by treatment response (Evans, 1993; Evans et al., 1995).

**Dexamethasone suppression test (DST)**

The DST has been claimed to provide a specific laboratory test for melancholia (Carroll, 1982), but several factors interfere with the test and give false positive results. These include serious medical illnesses (especially diabetes), severe infections, significant weight loss, some drugs (e.g. benzodiazepines) and withdrawal from alcohol or psychotropic drugs (Murphy, 1989). Fifty per cent of dementia sufferers also have a positive test. Dexamethasone may not be fully absorbed during the test in elderly people, leading to spuriously high results. The uses of the DST in the elderly, especially those who are physically ill, are therefore few.

**Conclusion**

Depression is a pathological process at any age. It presents in many ways in elderly people, reflecting the increasing diversity found with ageing. Depression is easily overlooked or considered an understandable reaction in those with comorbid physical illness or loss. Somatisation, communication difficulties and dementing illnesses add to problems of identifying those in need of treatment.
Elderly patients may be reluctant to divulge private matters or feelings and so need repeated evaluation. Primary care and general hospital staff are often reluctant to question sensitive emotional topics. These difficulties can be lessened by the use of appropriate screening scales. Such scales should not be given in isolation: a support service for both the identified patient and the staff involved should be in place before a screening programme is commenced.

Aids to the diagnosis are speed of onset of symptoms, tending to come on over months rather than years (compared with chronic disease or dementia), and the presence of dysphoria and/or anxiety may be found rather than overt depressed mood. Information from a relative or carer often clarifies areas of uncertainty.

Failure to identify and treat depression increases both morbidity and mortality in elderly populations. It increases demands on relatives, health and social services. Treatment is available. When required, antidepressant treatment is effective and safe even with comorbid physical disease. Patients usually respond to treatment, although this may take longer than in a younger adult (up to 8–12 weeks), improving their quality of life and possibly reducing morbidity and pressure on formal and informal carers.

References


Multiple choice questions

1. Depression in the elderly:
   a) is rare
   b) may present as a physical problem
   c) must have depressed mood for diagnosis
   d) is rarely comorbid with physical illness
   e) is reactive so requires only social treatment.
2. The dexamethasone suppression test:
   a. is a specific test for depression in the elderly
   b. can give a false negative in patients with diabetes
   c. is frequently positive in dementia
   d. may be positive in severe infections
   e. may be affected by concomitant medication.

3. Regarding depression and dementia:
   a. dementia is more common than depression in community living elderly
   b. dementia may present as depression
   c. depression may be owing to insight into cognitive problems
   d. treatment of the depression may improve cognition
   e. depression may lead to early residential placement.

4. Regarding signs and symptoms of depression:
   a. active suicidal plans are rare.
   b. wishing to die is always associated with depressive illness.
   c. associated features of anxiety are common.
   d. depression may be actively denied.
   e. elderly men find it easy to express their feelings.

5. Depressive illness:
   a. should not be treated unless it reaches ICD-10 criteria
   b. can worsen prognosis of comorbid physical illness
   c. always needs antidepressant treatment
   d. minor depression rarely progresses to major depression
   e. comorbid physical illness should be actively sought.

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**For forthcoming Events 2000**

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<td>Forensic Faculty Residential Meeting</td>
<td>Cardiff Marriott Hotel</td>
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<td>9 – 10 March</td>
<td>General and Community Residential (with CTC)</td>
<td>Kensington Town Hall, London</td>
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<td>15 – 17 March</td>
<td>Liaison Residential Conference</td>
<td>Raven Hall Hotel, Ravenscar</td>
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<td>30 March – 1 April</td>
<td>Psychotherapy Residential Conference</td>
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<td>4 – 7 April</td>
<td>Faculty of Old Age Psychiatry</td>
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<td>Learning Disability One-Day Meeting</td>
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**MCQ answers**

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