Severe depression in old age

Successful treatment of severe depression in old age depends on recognition of severe depression, identification of relevant causative factors and a combination of biological and psychosocial treatments. Treatment is often necessary on a prolonged basis to prevent recurrences.

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Evidence from outcome studies suggests that people with severe depressive disorders are much less likely to make full and lasting recoveries than those with milder depressions. Brodaty and colleagues followed up patients 25 years after their admissions to hospital because of depression and found that only one in eight had recovered and then remained continuously well.[1] They concluded that 'the usual pattern is for recurrences and persistent symptoms, psychiatric comorbidity and impaired level of psychosocial functioning'.

On the other hand, another study showed that only 40% of patients with depressive illness seen in general practice experienced recurrences of depression during the next 10 years.[2] The range of clinical presentations to psychiatrists differs from that seen by GPs largely because of selection. Those referred on for specialist advice or management tend to be those who are treatment-resistant or more severely disabled or distressed, and who may require closer observation or more intensive treatment.

The focus of this article will be on elderly people with severe depression (although we need first to define this term). Are severe depressions in old age any easier or more difficult to treat than those in younger people? How well do GPs recognise and deal with such cases, and are they any less likely to refer older than younger patients for consideration of treatments that are only available from specialist services?

Defining severity

Three measures of severity of depression have been used in research studies:[3]

- hospital admission for depression – commonly accepted as implying severity
- rating scales – threshold levels of, for example,

IN SUMMARY

- **Severe depression in old age may be melancholia, psychotic depression, or loss-related or illness-associated.**
- **Psychosocial factors may precipitate or contribute to persistence of biological depressions.**
- **A combination of biological and psychosocial interventions will prove effective in most cases of severe depression.**
- **The essential first step in management of severe depression is to recognise it – which may be difficult if physical illness complaints dominate the presentation.**
- **Prolonged maintenance treatment will usually be necessary once severe depressions have been relieved.**

over 20 on a 17-item Hamilton Depression Rating Scale
- diagnostic criteria – such as those in DSM-IV and ICD-10.[4,5] The ICD-10 criteria for 'severe depressive episode' include having at least eight symptoms out of those listed in the ICD-10 manual.

Melancholia (which is synonymous with 'endogenous depression')[6] and psychotic depression would generally be regarded as severe disorders.

These indicators, however, do not capture all the severe cases. Ultimately, severity should be rated according to the degree of distress and dysfunction caused by the depression. If the person's ability to relate to others, carry out activities and enjoy life is markedly curtailed (and especially if this has a profound effect on the lives of others), the disorder should be regarded as severe – whether or not criteria for a diagnostic category have been met or a threshold on a depression scale exceeded.

Depression that is life-threatening must be regarded as severe. This includes cases where people go without food, neglect safety or are suicidal because of distorted perceptions of themselves and the future. Assessment of severity should include judgements about the person's likely behaviour consequent on their depressive feelings or ideas. Recent studies of suicides of older people have shown that most of these patients had been depressed for some time prior to death. The causes and types of their depressions varied. In one study, only one-fifth of the subjects could be diagnosed retrospectively as having melancholia while about one-half had major depression.[7] Nevertheless, if most of these suicides were attributable to depression, it must be agreed that the depression was severe in its consequence.

For present purposes, depression will be defined as severe if it is manifested by persistent severe distress and marked interference with ability to function (in thought and action), or if it leads to serious undesired effects on the person or others.

Clinically significant depressions

The first step in the management of depression is to recognise it. Whenever a doctor sees a patient, it should be automatic to note whether the patient is distressed. If distressed, what is the reason?

PHOTODISC

Figure 1. Various factors, including personality and current life circumstances, influence the development of depression in old age.

Can the distress be described as depression, anxiety, mixed anxiety–depression, or something else (such as the patient's reaction to pain or discomfort)? If the patient is depressed or anxious in association with a recognised physical problem, the prime focus will be on alleviation of the physical condition. Nevertheless, it is important to be alert to the possibility that the one is not due to the other.

It is widely stated that depression in old age is under-recognised. Partly this is because older patients tend to deny feelings of depression and direct their doctors' attention to physical symptoms and away from the possibility that the latter are features of a depressive disorder. Partly it is because emotional distress may not be noted if comorbid with physical problems: older patients are more likely than younger people to have physical diseases and disabilities that distract doctors from noticing emotional disturbance. The so-called under-recognition has also been due to GPs and researchers having different concepts of what is depression.

Obvious distress is more likely to be noticed than the quiet distress of people who determine not to show their feelings. This applies particularly when patients are seen only briefly, as is often the case in aged care facilities. In both these facilities and doctors' waiting rooms there is good reason to ask staff to administer or provide questionnaires that screen for depression – for

example, the Geriatric Depression Scale (see the box on this page).[8,9,10] Once alerted in this way, doctors can assess whether these patients manifest features of an anxiety or depressive syndrome.

Recognition that a person has depressive symptoms leads to consideration of whether clinical intervention is warranted. Various factors need to be considered, including personality and circumstances. Explorations of attitude and discussion of ways of adapting to situations may be appropriate.

Most cases of severe depression are recognised by doctors, even when patients dissimulate (deny or hide depressive features). This recognition should lead to interventions, the first of which should be to talk at length with the patient and, if possible, an informant to establish the history and manifestations of the depression, and to formulate views on its possible causes.

Geriatric Depression Scale – 15-item version (GDS-15)[8,9,10]

Choose the best answer for how you have felt over the past week:

Are you basically satisfied with your life?	yes/NO
Have you dropped many of your activities and interests?	YES/no
Do you feel that your life is empty?	YES/no
Do you often get bored?	YES/no
Are you in good spirits most of the time?	yes/NO
Are you afraid that something bad is going to happen to you?	YES/no
Do you feel happy most of the time?	yes/NO
Do you often feel helpless?	YES/no
Do you prefer to stay at home, rather than going out and doing new things?	YES/no
Do you feel you have more problems with memory than most?	YES/no
Do you think it is wonderful to be alive now?	yes/NO
Do you feel pretty worthless the way you are now?	YES/no
Do you feel full of energy?	yes/NO
Do you feel that your situation is hopeless?	YES/no
Do you think that most people are better off than you are?	YES/no

Answers in capitals indicate depression. Although differing sensitivities and specificities have been obtained across studies, for clinical purposes a score above 5 points is suggestive of depression and should warrant a follow up interview. Scores above 10 points almost always indicate depression.

Table. Types of depressive conditions[11]

Category 1 –	Depression associated with loss, stress or diminished reasons for positive self-regard (i.e. primarily a psychological reaction)
Category 2 –	Depression associated with physical disorders, including brain disorders (i.e. both psychological and organic factors may be relevant)
Category 3 –	Depression related to medications, other drugs, alcohol, toxic or depressant substances
Category 4 –	Depression associated with other functional disorders (e.g. schizophrenia)
Category 5 –	Melancholia
Category 6 –	Psychotic depression
Category 7 –	Depression in cases of bipolar disorder

Types of depression

The classification of depression shown in the Table has proved useful in attempting to understand why an individual has become depressed and in planning how best to treat the depression.[11] However, in most (if not all) cases, development of depression at a particular time in a particular person is determined by a combination of factors.

Biological depression

Cases of melancholia, psychotic depression and bipolar disorder are believed to have a biological or 'endogenous' basis, being related to changes in neurotransmitter availability and altered brain function but commonly precipitated by meaningful life events or situations (see the flowchart on page 43). People with different personalities may be affected differently by particular stresses.

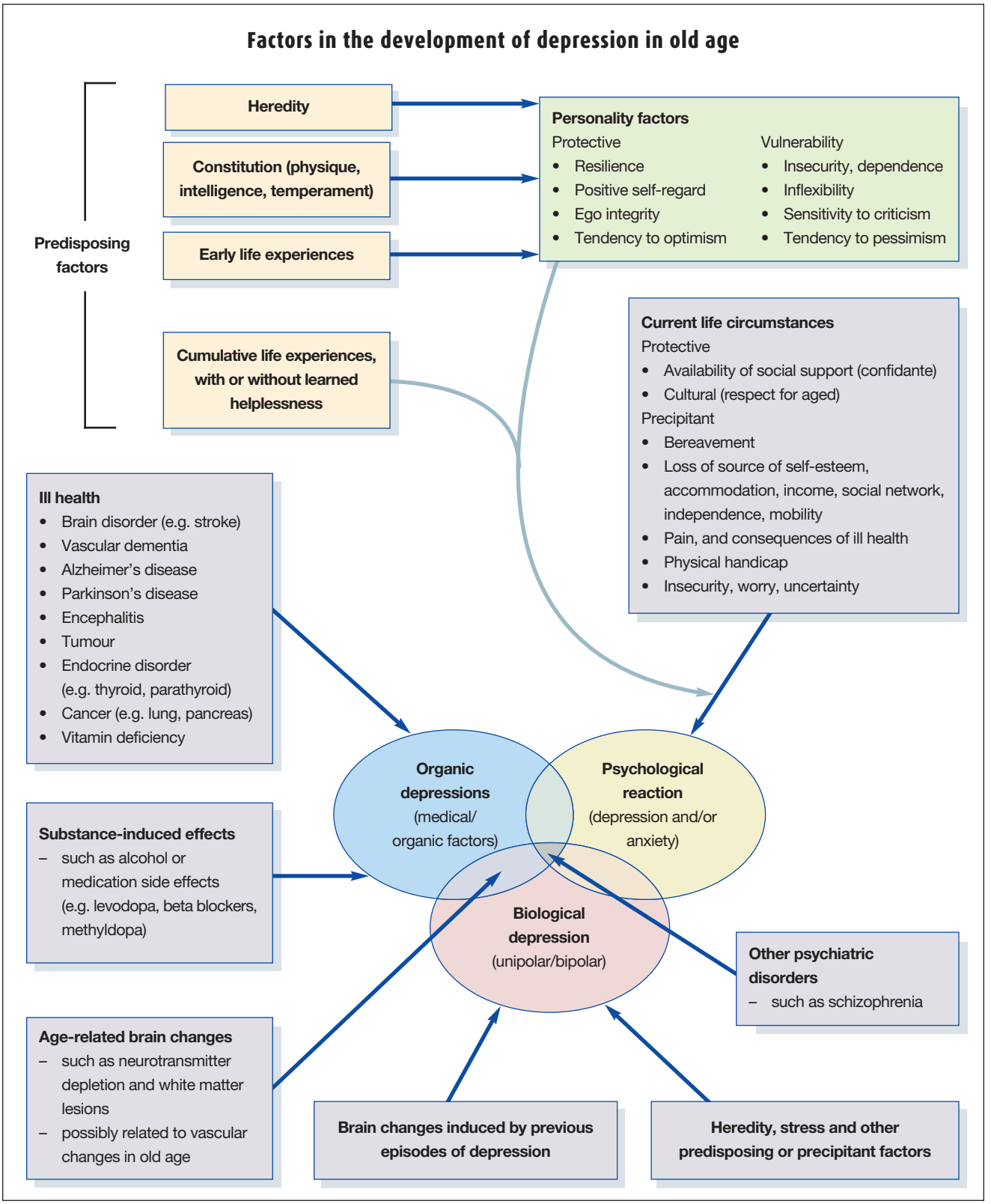
Psychological reaction

Emotional reactions to loss and stress and threats to self-esteem are viewed as psychological responses (again varying according to personality and previous experiences). However, it has become clear in recent years that stress may lead to lasting organic changes, notably in the hippocampus.

Organic depressions

Some severe depressions are clearly attributable to development of physical disorders such as metabolic disturbance, stroke, Parkinson's disease and progressive dementing disorders. These disorders may lead to changes in structure, blood flow, neurotransmitter function, electrolyte balance or other bodily effects. At the same time, however, patients may just be distressed and depressed about having the physical illness and the consequent implications for the future.

Factors in the development of depression in old age



Diagnoses help guide treatment

Generally it is useful to consider the relative importance of biological, organic and psychological factors in cases of depression. It is important to identify cases of bipolar disorder because of implications for treatment and prognosis. For the same reason, making a diagnosis of melancholia or psychotic depression can be useful and important. The terms major and minor depression and their variants are less useful, and imply more about severity than aetiology or likelihood that a particular treatment will be beneficial.

The term adjustment disorder has meaning when considering aetiology, but if a person is adjusting and depressed and fulfils criteria for major depression, DSM-IV calls the person's mental disorder major rather than adjustment. In planning clinical management it might make more sense in this case to call it severe adjustment disorder/depression. Certain aspects of the DSM-IV and ICD-10 classifications are distracting rather than helpful in providing pointers towards appropriate treatment.

Surveys suggest that at any one time about 15% of elderly people have a depressive condition. About 6% have psychological reactions to loss, stress etc. (category 1 in the Table), and another 6% have depressions related to physical disorders (category 2) and/or depressant drugs and substances (category 3). Many patients in these categories also have anxiety symptoms. It would be reasonable to say that 1% of elderly people have depression associated with schizophrenia or other functional disorders, and the remaining 2% have biological depression – melancholia, psychotic or bipolar.

Most of the depressions seen among older people in primary care will fit in categories 1 and 2, and most will be relatively mild. Most would get better with nonpharmacological approaches, but often medications are used because of doctors' time constraints or unfamiliarity with cognitive and interpersonal therapies. For older patients, a selective serotonin reuptake inhibitor (SSRI) is the preferred class of antidepressant drug. In the absence of ongoing life disruptions or personality problems, most of these patients will recover.

Some of the depressions associated with loss or stress and illness or disability (categories 1 and 2) are severe, and some end in suicide. While 2% of elderly people at any one time have biological depressions (as suggested above), this author estimates that another 2% have severe depressions related to loss and/or illness or disability. Brodaty and colleagues reported on almost equal numbers of patients with endogenous (psychotic and melancholic) depression and neurotic depression in their follow up of patients with depression severe enough to warrant hospital admission.[1] The two groups had similar, poor long term outcomes, with an almost equal number of suicides in each group over the first 15 years of follow up (nine suicides overall out of 45 patients). The mean age of the endogenous group (73.4 years at 25-year follow up) was some 15 years older than the neurotic depression group, confirming other evidence that melancholia becomes more of a problem in older age groups.

Outcome studies of severe depression in old age

Brodaty and colleagues' follow up study was of nonelderly inpatients.[1] What evidence is there about the outcome in cases of severe depression in late life? Are our treatments effective and successful?

General opinion from studies of depressed elderly hospital patients is that prognosis for recovery is no worse for elderly than younger patients except that their death rate is much higher, and some develop dementia. A 4.5-year study of elderly patients (over 65 years of age) who were in hospital for treatment of depression showed a death rate of 33%, while 15% developed dementia.[12] If natural deaths are excluded, the recovery rate at 4.5 years (67%) was not significantly worse than that of younger people (78%).

A six-month outcome study of depressed older and younger patients, two-thirds of each group having melancholia or psychotic depression, showed the older group to have the more favourable prognosis, despite a higher prevalence of chronic health conditions.[13]

Various studies have shown that the elderly patients who tend to have worse outcomes are those with:

- psychotic depression
- severe deep white matter lesions detected on MRI
- physical illness or cognitive impairment at baseline
- more severe depressions.

One key factor found to predict chronicity is inadequacy of treatment.

Treating severe depression in old age

As stated above, most older people with mild depressive disorder recover quite well with treatment. Most of those with severe depression do not. Can we do better? A key to providing optimal treatment in all cases is to take into account all relevant factors when planning clinical management, and then consider them again when reviewing and re-reviewing the management (see the flowchart on page 43). If a patient's depression does not respond to treatment, what have we missed?

Melancholia and psychotic depression

Melancholia and psychotic depression may be referred to as biological depressions, which are usually severe at first presentation – i.e. there is usually severe distress and/or marked interference with ability to function. Often such patients present with recurrences of depressions that have responded well to biological treatments previously; in these cases, the same treatments are likely to be effective again. In some patients the episodes are the depressive swings in a bipolar cycle.

As always, the first steps in management include taking a history and conducting a physical (as well as mental state) examination of the patient. We need to search for an underlying physical cause, even when the depression is a recurrence. Unnecessary medications should be stopped, especially if they are on the list of potentially depressant medications. Even in the most obviously biological case, psychosocial factors should be considered, since they may have precipitated or may contribute to maintenance of depressive feelings.

Treatments for melancholia and psychotic depression have been discussed elsewhere.[11] In summary, if the patient is severely distressed or suicidal, a hospital admission and possibly initiation of electroconvulsive therapy (ECT) will be warranted. Adequate doses of an antidepressant will be given. Venlafaxine (Efexor), mirtazapine (Avanza, Remeron) or an SSRI would be an appropriate first choice drug, but possible interactions with other essential medications should be considered. There is some evidence that tricyclic antidepressants are more effective for severe depression than the abovementioned drugs, but this has to be balanced against their greater likelihood of causing serious side effects in elderly people and their greater toxicity in overdose. A neuroleptic agent, such as risperidone (Risperdal), olanzapine (Zyprexa) or quetiapine (Seroquel), will usually be given as well as the antidepressant in cases of psychotic depression (and sometimes in cases of melancholia, especially if severe thought disturbance is obvious). However, researchers have found that the combination does not work so well for elderly as for younger patients, and it is often necessary to proceed to ECT because of nonresponse.

Augmentation with lithium may be effective in cases of melancholia. Most such cases will have been referred to psychiatrists.

The prognosis for recovery is good, but the chances of recurrence are high. Recovery is less likely or more prolonged if there is evidence of ageing-related brain changes, such as white matter lesions, ventricular dilatation or cognitive impairment. It is also poorer if psychosocial stresses, including those due to persistent physical illnesses, are ongoing.

Organic depressions

Patients with organic depressions (i.e. those resulting from comorbid physical factors) may present with features of melancholia or even psychotic depression. Treatment of the physical illness may lead to relief of the depressive symptoms, but in most cases it will be appropriate to add antidepression treatments as if these were cases of melancholia without evidence of a precipitant organic disease. Response is often satisfactory, but relapse may be rapid if organic factors persist.

Nonmelancholic depression

Treatment of nonmelancholic but severe depressions related to loss or stress or associated with physical disability or irremediable physical illness may be complex and challenging. Much depends on the patient's personality and adaptive potential. Clearly, if precipitant or maintenance factors are identified, they should be neutralised wherever possible. Physical aids, pain relief and appropriate support services may help diminish feelings of hopelessness and helplessness in cases of physical illness, and various losses may, at least to some extent, be replaced.

Ventilation of feelings (grief work) and adaptation to losses are needed, with progressive reacquisition of hope and positive attitudes, even in the face of adversity. Identification and discussion of important issues, together with properly based reassurance, can work wonders, although not all doctors feel comfortable in dealing with such problems. Training courses (e.g. in cognitive therapy) may improve confidence. Alternatively, referral to trained counsellors or specialists, or a shared care approach, may be appropriate. The major requirement and responsibility of GPs in such cases is to recognise the patient's distress and the fact that the depression is severe. These are patients who, in spite of the severity of their depression, may not benefit from admission to a psychiatric facility. Something needs to be done, but not necessarily in a hospital. Specialist help may be needed.

Antidepressants (e.g. SSRIs) may be effective in loss-related severe depressions, but should be used in combination with nonpharmacological interventions.[3] As stated previously, psychosocial and physical stresses can have lasting effects on brain function (such as via the hippocampus), and it is thought that antidepressants may reduce those biological effects of psychological depressions.

When severe depressions have been relieved, it will usually be appropriate for the patient to continue taking antidepressants for years. In some cases, ECT will be needed regularly (such as monthly) for many months or years to prevent recurrences.

Conclusion

Optimal treatment of severe depression in late life depends on:

- recognising that a person is severely depressed
- identifying relevant causative factors
- using a combination of biological and psychosocial treatments assertively and on a prolonged basis, to deal with the range of causative factors. MT

A list of references is available on request to the editorial office.

Professor Snowdon is on the Dementia Drug Advisory Board for Janssen-Cilag, Australia. He has been a sponsored speaker and/or investigator for Janssen-Cilag, Eli Lilly, SmithKline Beecham and Pfizer and has received financial support to attend educational meetings from Novartis, Roche and Lundbeck.

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