1

Late-life depression: an introduction

The epidemiology of depression in later life

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There is debate about the prevalence of depression in later life. Some authors argue that the prevalence of depression is substantially less than in younger populations (Regier *et al.* 1993); others, for example Osborn *et al.* (2003), have found an increase with age in the very old in a large community sample. Recent European studies have found prevalence estimates of between 8.8% and 23.6% (Copeland *et al.* 1999). This variability reflects a wide range of issues which include the various definitions used, and in particular, the associated diagnostic instruments.

Strict criteria which have high specificity or are mainly designed for research purposes are likely to identify fewer depressed individuals in population studies when compared to instruments adopting broader definitions of depression. The Diagnostic and Statistical Manual (DSM-IV) has tightly defined criteria, whereas the Geriatric Mental State Examination identifies a broader range of depressive conditions. Consequently, when compared with DSM-IV criteria, the latter identifies cases across a number of different DSM-IV syndromes, provided that the individual presents with depressive symptoms of a severity warranting therapeutic intervention. This instrument also identifies people with adjustment disorder and dysthymia as well as major depressive disorder (Newman *et al.* 1998, Schaub *et al.* 2003). The close relationship between depression, physical illness and dementia also presents problems for epidemiological investigation. A significant minority of the very old may also experience dementia or high levels of physical illness both of which can mask the clinical presentation of depression. Lastly some studies will include institutionalized older people; others will focus on the relatively independent, living in their own homes. These and many other issues will influence the prevalence and incidence rates reported by each study.

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Despite these problems, epidemiological research provides us with a number of important insights and some consistent findings that not only can inform service provision but also have important, more specific clinical implications for both primary and secondary care and social care. Population studies have demonstrated that depression is one of the commonest mental health problems facing older people. Studies have consistently demonstrated that depression (irrespective of how it is defined) is a significant problem for a substantial minority of older people and studies of older people living in residential homes, nursing homes and other institutions tend to report higher prevalence and incidence rates, which probably reflect the higher prevalence rates of physical illness.

Depression in later life ranges in severity and presentation and 'depression' covers a broad spectrum of disorders. Even a few depressive symptoms (not of the severity that warrant treatment) are associated with future development of more severe depressive illness. The early identification and monitoring of these 'sub-syndromal' symptoms is important and has been included within influential clinical guidelines (NICE 2004). Clinical depression may also fluctuate in severity and nature of presentation across many years of illness (Beekman *et al.* 1995) and it is important to remember that major depression is a recurring disorder with the majority of older patients having a recurrence within three years (Reynolds *et al.* 1999). All the research indicates that untreated depression is associated with poor outcome (in naturalistic studies), resulting in prolonged morbidity and increased use of primary and secondary care resources (Pearson *et al.* 1999).

Even though depressed mood remains a core feature of presentation comparative studies of differing age groups indicate that older people may present with differing symptom emphasis. Examples, which are discussed further in the next section, include an increased experience of physical symptoms (Good *et al.* 1987) and an association with cognitive impairment, both potentially causing diagnostic problems and influencing management and prognosis.

A general consensus is developing with regard to potential risk factors for depression in later life. These have been identified through incidence studies which involve following up non-depressed older people and identifying those factors associated with subsequent depression. It is evident that there is a complicated relationship between handicap, defined as 'disadvantage for an individual resulting from ill health compared with what is normal for someone of the same age, sex and background' (World Health Organization 1980), social isolation and pain and subsequent depression (Prince *et al.* 1997). Adverse conditions such as these are more prevalent in poorer populations which may explain the increased incidence of depression in older people from lower socio-economic groups (Wilson *et al.* 1999a).

These and many other studies have provided us with a profile of 'at-risk' populations. Older, physically ill people living in institutions are at particular

risk. Likewise, the prevalence of depression in older people recently discharged from acute medical care is higher than found in the majority of community-based studies (Gerson *et al.* 2004). Depression is a particular problem for the bereaved, the lonely and those living alone (Livingston *et al.* 1990). These and other studies have facilitated targeted screening programmes, enabling the identification of depressed older people in high-risk groups.

The evidence consistently demonstrates that depression is under-diagnosed and under-treated in clinical practice (Wilson *et al.* 1999b). Comparative studies have enabled us to explore how the presentation is influenced by age, age-related factors, social adversity and disease and we are able to provide an informed commentary regarding the nature and course of the condition. High-risk populations are easily identified in community settings. The development of easily delivered screening instruments and evidenced-based pathways of care provide the means for early identification and management of older depressed people in both community and secondary care settings. Despite these advances, one of the main problems confronting the older depressed person continues to be the lack of appropriate assessment, diagnosis and management.

The aetiology of depression in later life

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The primary care clinician needs to be aware of the factors in a patient's background that constitute a risk for depression (Box 1.1), and life events that may precipitate an episode (Box 1.2). There are also counterbalancing factors that are protective (Box 1.3), particularly social support and security of the environment, which the clinician should explore with the patient. It is the interplay of these factors which determines whether a person develops depression, rather than one particular factor, and thus why some people develop

Box 1.1 Risk factors for depression in later life

- Genetic susceptibility
- Gender (being female, although isolated, elderly males are at particular risk of suicide)
- Past history
- Civil status – widows, widowers and divorcees are at particular risk
- Structural brain changes and vascular risk factors
- Personality
- Physical co-morbidity
- Handicap (deafness, poor vision)

Box 1.2 Precipitating factors for depression in later life

Life events
- Bereavement
- Separation
- Acute physical illness
- Hospital admission
- Change of housing
- Financial crisis
- Loss of significant other (including pet)
- Negative interactions with family member

Chronic stress
- Declining health
- Dependence
- Sensory loss
- Problems (e.g. illness) affecting family member
- Socio-economic decline
- Marital difficulties
- Retirement
- Being a carer
- Social isolation

Other
- Drugs (prescribed and non-prescribed)
- Alcohol

Box 1.3 Protective factors in late-life depression

- Social support
- Coping behaviours
- Good nutrition
- Exercise and physical fitness
- Optimal control of co-morbid problems
- Religious affiliation

depression even in the absence of an adverse life event, while in others even one or more major life events does not precipitate a depressive illness.

There is no evidence that ageing per se is a major risk factor for depression. It is important that just because a patient is elderly or has suffered a life event

such as bereavement that the depression is not considered 'understandable' and thus thought to be untreatable by the clinician (Burroughs *et al.* 2006).

It is vital that the clinician explores all factors in assessing the older patient presenting with depressive symptoms, probing for both indicators of individual susceptibility and adverse life events. The potential for exploring these factors in the over-75 assessment outlined in the GP Contract (Department of Health 1989) and in the primary care consultation is probably underexploited.

Organic factors are more important to consider in older people than in younger adults, and a drug and alcohol history is vital, including what the patient is buying over the counter. Disability due to physical ill-health is strongly associated with depression and thus should be minimized where possible. Positive social and environmental factors may offset the negative effects of adverse life events and are important areas for public health intervention.

Presentation of depression in later life

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Core symptoms

People with depression usually present to primary care clinicians who, in order to make a diagnosis of depression, should ideally explore for core and additional symptoms (ICD-10) (World Health Organization 1993) (Boxes 1.4 and 1.5). The DSM-IV (American Psychiatric Association 1994) classification states that in order to distinguish depression from understandable sadness, the symptoms need to be present for more than two weeks, the symptoms must be present for most days, most of the time, and be of an intensity that is definitely not normal for that person.

Clinical presentation of depression in later life

Major depression in older people is essentially the same as at other times of life and it is untrue to say that depressive disorder in older adults cannot be distinguished from normal ageing, although both patients and clinicians experience difficulty with this, and tend to normalize symptoms (Burroughs *et al.* 2006).
For the general practitioner (GP), it is important to consider the following:

- When depressed, older people in Western societies complain less often of sadness that their younger contemporaries.
- Hypochondriasis is consistently reported as a symptom more commonly in late-life depression, and older people are more likely to have co-existent physical illness.

Box 1.4 Main features of depressive disorder

Core symptoms
- Depressed mood sustained for at least two weeks
- Loss of interest or pleasure in normal activities
- Decreased energy or increased fatigue

Additional symptoms
- Loss of confidence or self-esteem
- Inappropriate and excessive guilt
- Recurrent thoughts of death, suicidal thoughts or behaviour
- Diminished evidence of ability to think, impaired concentration
- Change in psychomotor activity (inactivity or agitation)
- Sleep disturbance
- Appetite change and weight change

Box 1.5 Diagnosis of depressive disorder

For *mild* depressive episode
- At least two core symptoms
- Additional symptoms to give a total of at least four symptoms

For *moderate* depressive episode
- At least two core symptoms
- Additional symptoms to give a total of at least six symptoms

For *severe* depressive episode
- All three core symptoms
- At least five additional symptoms
- May be presence of psychotic symptoms or stupor

- Subjective memory disturbance may be a prominent symptom and lead to a differential diagnosis of dementia. Anxiety is a common presenting or accompanying symptom.
- Dementia may alter the presentation of depression and the primary care clinicians should be aware that increased confusion or aggressive outbursts in patients with dementia may be due to co-existent depression.

Making the diagnosis of depression in later life

The primary care clinician needs to have an awareness of the possibility of depression in any older person consulting, particularly those with chronic disease where depressive disorder will be more common. The Quality and Outcomes Framework (QOF) of the new General Medical Services (GMS) Contract (BMA and NHS Employers 2006) requires that GPs and practice nurses use two screening questions within the previous 15 months with patients with chronic disease (Box 1.6).

The clinician needs to be aware of cues, both verbal and non-verbal, exhibited by the patient which would raise the possibility of depression.

Some clinicians use validated schedules to assist in the diagnosis of depression with patients where they already have a high index of suspicion, and the Patient Health Questionnaire-9 (PHQ-9) is now included in the Quality and Outcomes Framework (QOF) of the new GMS contract (BMA and NHS Employers, 2006) in England and Wales (see also Chapter 7, pp. 115–117). There is limited evidence of the effectiveness of the validated tools such as the Geriatric Depression Scale (GDS) for screening of elderly populations in primary care, but it may be useful in certain target populations (Box 1.7) and it does have cross-cultural validity (Rait *et al.* 1999).

Box 1.6 Screening questions for depression

'During the past month, have you often been bothered by feeling down, depressed or hopeless?'
'During the past month, have you often been bothered by having little interest or pleasure in doing things?'

A 'yes' to either question is considered a positive test.
A 'no' response to both questions makes depression highly unlikely.

Box 1.7 Suggestions for targeted screening in primary care

- Recent (<3 months) major physical illness or hospital admission
- Chronic illness
- In receipt of high levels of home care
- Recent bereavement
- Socially isolated people
- Those people persistently complaining of loneliness
- Patients complaining of persistent sleep problems

Rating scales

In primary care, time is at a premium, so rating scales are rarely used. They can, however, provide an additional more objective measure of severity and progress, which can inform treatment decisions. For more information about scales used by clinicians see the following section and Chapter 7.

Clinical evaluation

The clinician should cover five areas in the primary care consultation when suspecting depression (Box 1.8).

Box 1.8 Areas to cover in a primary care evaluation of depression

History
- Sensitive exploration of core and additional symptoms
- Identification of triggers
- Previous history of depression
- Recent bereavement
- Maintaining factors – drugs, alcohol
- List of medications (including benzodiazepines and self-medication)
- Substantiating the history by talking with the a carer or family member (with the patient's consent) can help to clarify aspects of the history

Mental state assessment
- Evidence of psychotic symptoms
- Thoughts of self-harm
- Use of Mini-Mental State Examination (MMSE) where cognitive impairment seems a problem (see also Chapter 7).

Risk assessment
- Thoughts of self-harm
- Plans
- What prevents the patient acting on thoughts or plans

Focussed physical examination
- Focussed neurological examination
- Blood pressure and pulse
- May help identify contraindications to certain classes of antidepressants

Appropriate investigations
In primary care, blood tests including full blood count, biochemistry (including calcium), glucose, liver and thyroid function, haematinics (B_{12} and folate, in particular).

In summary, a comprehensive assessment of depressive disorder in an older person includes taking a history, performing a focussed physical examination, assessing mental state and risk, and arranging relevant blood tests. It should be remembered that those most at risk of suicide are isolated men, aged over 80 years, and those with chronic physical conditions or who use alcohol to excess. A previous history of self-harm or a clinical picture of severe depression also increases risk. Most older people who succeed in killing themselves have consulted a primary care doctor in the month prior to suicide. Whilst clinicians are perhaps more aware of the risks of suicide and the need to carry out a risk assessment, it is sometimes forgotten that older people may harm themselves through self-neglect, and the clinician should be aware of the risk of a patient becoming physically compromised through dietary self-neglect as a result of a depressive illness.

Depression in older people from different ethnic groups

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Background

The 2001 Census indicated that 7.9% of the population in the UK are of ethnic minority origin. The first post-war migrants to arrive were from the Caribbean, shortly after the Second World War and during the 1950s. Later immigrants from India and Pakistan arrived mainly during the 1960s and Bangladeshi people came to Britain during the 1980s. These groups have a younger age structure than the White population, reflecting past immigration and fertility patterns. Progressive ageing of the minority ethnic population is anticipated in the future, as these groups are fast approaching retirement age, but changes will depend on mortality rates and future net migration (United Kingdom National Census 2001).

The concept of multiple jeopardy postulates that ethnic elders, by virtue of age, socio-economic difficulties and minority status, are at greater risk of illness, thus in greater need of health services (Norman 1985, Rait *et al.* 1996). There is a paucity of research on mental health, access and use of mental health services, health providers' understandings of explanatory models and the need for culturally sensitive services for ethnic elders in the UK.

Prevalence and risk factors for depression

The community prevalence of depression in South Asian elderly people may approach 20% (Bhatnagar and Frank 1997) and is 13–19% in Black people

from Africa and the Caribbean (McCracken *et al.* 1997). Similar high levels of symptoms of anxiety and depression and low levels of life satisfaction in both Somali and Bengali elderly people have been reported from inner-city London. These Bengali elderly people compare unfavourably with previous studies among the general population in other parts of Britain, including the underprivileged (Silveira and Ebrahim 1998).

Prevalence of depression, self-harm and suicide is also higher amongst ethnic minority adults of working age, particularly women. Psychosocial issues in the realms of poor housing, racial discrimination, low literacy, lack of English language skills, isolation, lack of support and difficulties in marital and family relationships are the reasons cited for this elevated prevalence in ethnic minorities. This is further compounded by different traditional or religious expectations and beliefs about marriage, divorce, widowhood and family honour (Husain *et al.* 1997, Chew-Graham *et al.* 2002, Khan and Waheed 2006).

Age-related factors commonly observed in the lives of older people from ethnic minorities further contribute to this high prevalence. A majority of people aged over 65 are said to suffer from a chronic medical condition that impairs their ability to function and makes them more vulnerable to depression (Unützer *et al.* 1999). This gains further importance due to the fact that prevalence of diabetes, heart disease and other chronic medical conditions is much higher in ethnic elders (Bhopal *et al.* 2002). It has been observed that higher psychological morbidity occurred amongst bereaved Caribbean individuals, with family doctors cited as a source of support for three-quarters of these respondents, who therefore may need to focus on the culture specific needs of these communities (Koffman *et al.* 2005).

This higher prevalence must be seen in the context that Asian and Black elders are more likely to consult their GP than White elders (Blakemore 1982, Murray and Williams 1986) yet they are referred less to secondary care health and social services, particularly psychiatric services (Shah and Dighe-Deo 1997). Several reasons have been suggested for the lack of utilization of psychiatric services. Interpreting symptoms as a spiritual problem (Kleinman 1987) or a physical illness (Odell *et al.* 1997); reluctance of ethnic elders to accept referral to secondary mental health services (Shah *et al.* 1998); and perceptions by Black people of racism in health workers (Hutchinson and Gilvarry 1998) are cited as the main reasons.

The majority of older people do not view depression as a mental illness. Ethnic elders particularly do not see psychiatric services as appropriate and believe they are primarily for psychosis and violence. These views are amenable to change. Doctors should be explicit that services include people with depression (Marwaha and Livingston 2002).