

# 9 Anxiety disorders and other neuroses

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*Classification • Epidemiology • Aetiology • Specific neurotic disorders •  
Management • Conclusion*

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Neurotic disorders are relatively neglected in the elderly. However, there is accumulating evidence that these conditions are clinically important in terms of their prevalence, the distress they cause, the cost to services and the potential for treatment and prevention (Lindesay, 1995). At all ages, neurotic disorders complicate and aggravate other psychiatric and physical disorders, and doctors should be able to recognise and manage these conditions.

## Classification

The concept of 'neurosis' is going through troubled times. It was originally coined in the 18th century to describe a category of disorders of the peripheral nervous system (Knoff, 1970). As the central and psychological origin of many of these conditions came to be recognised, the meaning of the term was revised and reviewed. In the 20th century, it has usually been applied to emotional and behavioural disorders arising from the impact of stress factors on particularities of character. In recent years, this concept has been challenged by the growth of biological psychiatry. Researchers have dissected out specific conditions from the body of neurosis, on the basis of particular physiological characteristics, responses to drugs, genetic heritability and even neuropathology. In the US, the triumph of biology is complete, and words such as 'neurosis' and 'neurotic' no longer form any part of DSM-IV nosology (American Psychiatric Association, 1994). ICD-10 (World Health Organization, 1992) has also rejected the traditional division between neuroses and psychoses. Instead, it has placed many of the conditions previously associated with the neuroses in the group 'neurotic, stress-related and somatoform disorders' (Box 9.1).

The unifying concept of neurosis is not, however, obsolete. Advances in medical understanding come from lumping, as well as splitting clinical phenomena. The biological evidence for discrete disorders needs to be interpreted in the light of clinical and epidemiological evidence that within

**Box 9.1 Summary of ICD-10 classification of neurotic, stress-related and somatoform disorders (World Health Organization, 1992)**

Agoraphobia  
Social phobias  
Specific (isolated) phobias  
Panic disorder  
Generalised anxiety disorder  
Obsessive-compulsive disorder  
Post-traumatic stress disorder  
Adjustment disorders  
Dissociative disorders  
Somatisation disorders

individuals, and over time, there is considerable comorbidity and interchangeability between these disorders. Tyrer (1985) has argued that labelling episodes of illness purely in terms of current symptomatology is misleading, and that such cases are better understood, both clinically and nosologically, as a general neurotic syndrome with a prolonged course and varying presentations over time. This is most apparent in community and primary care populations, where dimensions of depression and anxiety underlie the manifest psychological symptoms in both younger and older adults (Goldberg *et al*, 1987; Mackinnon *et al*, 1994). The unitary model of neurotic disorders is also supported by evidence from genetic studies which suggest that it is not specific disorders that are inherited, so much as a general predisposing trait of neuroticism (Kendler *et al*, 1987; Andrews *et al*, 1990). In the elderly, where chronicity and multiple pathology are the norm, the concept of a general neurotic syndrome is useful in making sense of changing clinical pictures, in understanding the causes and outcome of neurotic presentations and in guiding their treatment.

## Epidemiology

The prevalence rates of neurotic disorders in the elderly depend on the population studied. They are uncommon primary diagnoses in hospital populations, and while there is a steady accumulation of chronic cases in primary care settings, there is a decline, with age, in the rate of new consultations. As with younger adults, the highest rates of neurotic disorders, particularly anxiety, are found in the community. To some extent the discrepancy between clinical and community populations is due to a proportion of the community cases being mild and non-problematic.

However, there are clinically significant cases of neurotic disorder that either do not present to the health services or are not identified or treated (Macdonald, 1986; Thompson *et al*, 1988; Lindesay, 1991).

Table 9.1 summarises prevalence rates for specific DSM-III disorders in community samples of the over 65-year-olds, reported by the US Epidemiologic Catchment Area (ECA) study. Studies have tended to report different rates, due mainly to differences in the operation of hierarchical rules for diagnosis and in the level of severity required for caseness. In most neurotic disorders there is a fall in prevalence with age, in both genders, but the differences are not large compared with clinical populations. At all ages, prevalence rates for neurotic disorders are higher in women than in men, but this difference is least pronounced in the elderly. Community studies of neurotic disorders in the elderly confirm that the majority of cases are long-standing, with onset in young adulthood and middle age. However, a significant minority has an onset after the age of 65 years (Bergmann, 1972; Lindesay, 1991).

## Aetiology

### Physical illness

Epidemiological studies of community populations provide the least biased information about factors associated with neurotic disorder in the elderly (Box 9.3). As noted above, there is at all ages extensive comorbidity between specific neurotic disorders and depression (Boyd *et al*, 1984; Weissman & Merikangas, 1986). In the community elderly, neurotic disorders are also associated with increased mortality and physical

**Table 9.1** Epidemiologic Catchment Area study: prevalence of neurotic disorders in the elderly (%)

	Male	Female	Total
<i>One-year prevalence (Robins &amp; Regier, 1991)</i>			
Phobic disorder	4.9	7.8	–
Panic disorder	0.04	0.08	–
Generalised anxiety	–	–	2.2
Obsessive–compulsive disorder	0.8	0.9	1.7
<i>One-month prevalence (Regier <i>et al</i>, 1988)</i>			
Phobic disorder	2.9	6.1	4.8
Panic disorder	0.0	0.2	0.1
Obsessive–compulsive disorder	0.7	0.9	0.8
Somatisation disorder	0.0	0.2	0.1
Dysthymia	1.0	2.3	1.8

morbidity, notably cardiovascular, respiratory and gastrointestinal complaints (Kay & Bergmann, 1966; Bergmann, 1972; Lindsay, 1990). The relationship between physical and psychiatric disorders in the elderly is even more marked in clinical populations, and emphasises the importance of careful history taking and physical examination, particularly in late-onset cases.

To some extent, this association between neurotic and physical disorder may be due to increased bodily concern leading to presentation with physical, rather than psychological complaints; or to somatic anxiety symptoms being wrongly attributed, by patient and doctor, to physical illness. However, many important physical disorders may present with neurotic symptoms, particularly anxiety, and should be suspected if: the patient is male; there is no history of neurotic disorder; nothing in the patient's circumstances accounts for the episode. Box 9.2 sets out some of the physical conditions that may present as neurotic disorder in this age group. For most elderly people an episode of physical illness, with its associated investigations and treatments, is a threatening and frightening experience. In vulnerable individuals this may result in persistent neurotic disturbance, such as phobic withdrawal and generalised anxiety, as well as more transient adjustment reactions.

### **Psychosocial factors**

Psychosocial factors are important in the aetiology of neurotic disorders in the elderly, particularly at the symptom level, where high scores are associated

#### **Box 9.2 Physical causes of neurotic symptoms in the elderly (adapted from Pitt, 1995)**

Cardiovascular: myocardial infarction, cardiac arrhythmias, orthostatic hypotension, mitral valve prolapse  
Respiratory: pneumonia, pulmonary embolism, emphysema, asthma, left-ventricular failure, hypoxia, chronic obstructive airways disease, bronchial carcinoma  
Endocrine and metabolic: hypo- and hyperthyroidism, hypo- and hypercalcaemia, Cushing's disease, carcinoid syndrome, hypoglycaemia, insulinoma, phaeochromocytoma, hyperkalaemia, hypokalaemia, hypothermia  
Neurological: head injury, cerebral tumour, dementia, delirium, epilepsy, migraine, cerebral lupus erythematosus, demyelinating disease, vestibular disturbance, subarachnoid haemorrhage, central nervous system infections  
Dietary and drug related: caffeine, vitamin deficiencies, anaemia, sympathomimetics, dopamine agonists, corticosteroids, withdrawal syndromes, akathisia, digoxin toxicity, fluoxetine

with low socio-economic status (Himmelfarb & Murrell, 1984; Kennedy *et al*, 1989). Studies of established cases of neurotic disorders have not found a substantive relationship with socio-economic indicators, such as occupational class or household tenure (Lindesay, 1991). However, generalised anxiety was associated with low household income in the ECA study.

Adverse life events can provoke the onset of some psychiatric disorders in vulnerable individuals; it is the meaning of the event for the individual that is important, rather than the severity. Loss events generally lead to depression, while threatening events may lead to anxiety (Brown *et al*, 1987; Brown, 1993). Age-related experiences such as retirement, bereavement and institutionalisation may cause acute psychological disturbance, but they do not appear to be a major cause of persistent disorders in the elderly.

In common with younger adults, early experience, such as parental loss, may be important in determining personal vulnerability to neurotic disorder (Zahner & Murphy, 1989; Lindesay, 1991). Perhaps, early experiences such as these lead to the development of particular cognitive habits and personality traits, which render the individual vulnerable to developing neurotic disorders in response to challenging experiences later in life (see Chapter 11). According to Andrews *et al* (1990) it is the lack of mastery over self and environment, and an inability to make use of effective coping strategies, that results in neurotic symptomatology. Unlike late-life depression, phobic disorders in the elderly are not associated with absence of confiding relationships (Lindesay, 1991); indeed, in some cases, the presence of close relationships may maintain phobic avoidance.

### **Biological factors**

There has been very little research into possible biological factors involved in the development of neurotic disorders in old age (Philpot, 1995). Computerised tomography studies of elderly depressed patients have found that the milder, more 'neurotic' cases, and those with higher anxiety scores, tend to have normal scans. Studies of patients with post-stroke anxiety disorders suggest that the distribution of lesions is different from that seen in post-stroke depression, but there is no consistent location. Functional neuroimaging with younger patients with anxiety disorders is beginning to identify changes in regional cerebral blood flow associated with the provocation of symptoms, and with treatment.

There is no association between neurotic disorders and dementia in surveys of community populations, but clinical studies have found significant levels of anxiety in patients with dementia, particularly those in the early stages (Wands *et al*, 1990; Ballard *et al*, 1996). This anxiety may be associated with depression, psychotic symptoms or with the implications of the dementia and its impact on social functioning.

**Box 9.3 Factors associated with neuroses in the elderly**

Physical illness notably cardiovascular, respiratory and gastrointestinal complaints

Low income

Adverse life events

Early adverse experiences such as parental loss

Other psychiatric illness, including dementia

## Specific neurotic disorders

### **Phobic disorder**

The irrational fears reported by elderly people are similar to those in younger age groups: animals, heights, public transport, going out of doors, and so on (Lindesay, 1991). Unfortunately, much is made of the 'reasonableness' of some of these fears in the elderly, particularly those who live in run-down areas of inner cities, and clinically important fears may be dismissed as rational. In fact, the evidence from fear of crime surveys indicates that an individual's perception of vulnerability is determined principally by factors such as physical disability and the availability of social support (Fattah & Sacco, 1989). It is these, rather than age, that should be taken into consideration when judging the reasonableness, or otherwise, of fears.

### *Long-standing disorder*

These are usually specific in nature, and associated with little in the way of distress or social impairment. These individuals have organised their lives so that they do not need to confront their fears, and it is only occasionally that the onset of old age makes such a confrontation unavoidable; for example, a needle phobic may have to contend with the onset of insulin-dependent diabetes or an agoraphobic may need to shop after the death of their spouse.

### *Late-onset disorder*

These are often agoraphobic in nature and associated with clinically significant levels of distress and disability. They usually develop following a traumatic event such as an episode of physical illness, a fall or a mugging. The resulting impairment usually persists long after the physical consequences of the event have resolved. Unfortunately, the psychological effects of traumatic physical health events in old age are still poorly

appreciated, with the result that the statutory services and the family may unwittingly collude with phobic avoidance by providing well-meaning but misguided domiciliary support. Very few elderly people with disabling phobic disorders receive any appropriate treatment for their problem (Lindesay, 1991).

### **Panic disorder**

Panic attacks and panic disorder are rare in epidemiological studies of elderly community populations (Table 9.1), although cross-sectional surveys may underestimate the true rates. The evidence from case reports, and non-psychiatric patient and volunteer samples, suggests that panic in old age is less common than in early adulthood, is more common in women and widows and is symptomatically less severe than in early-onset cases (Sheikh *et al*, 1991). Elderly panic patients tend not to present to psychiatric services, but the prominent physical symptoms may result in their being referred instead to cardiologists, neurologists and gastroenterologists. In one study of cardiology patients with chest pain and no coronary artery disease, one-third of those aged over 65 years met diagnostic criteria for panic disorder (Beitman *et al*, 1991).

### **Generalised anxiety disorder**

One result of the recognition of specific anxiety disorders, such as phobic disorders and panic disorder, by the new psychiatric classifications has been the relative eclipse of the concept of generalised anxiety as a diagnostic entity. Indeed in ICD-10, generalised anxiety disorder may only be diagnosed in the absence of any other mood disorder. The current unpopularity of generalised anxiety is probably due in part to the lack of specific treatments (Tyrer, 1985), and in part to the current emphasis on the organic as opposed to psychosocial causes of anxiety disorders (Blazer *et al*, 1991). In particular, the role of chronic stress in the aetiology of conditions such as generalised anxiety has been neglected in recent years.

Concern has been expressed that the diagnosis of generalised anxiety disorder may be inappropriately applied to elderly people because of their vulnerability and physical frailty (Shamoian, 1991). In fact, the epidemiological evidence indicates that only a small percentage of the elderly population meet diagnostic criteria for this disorder (Copeland *et al*, 1987*a,b*; Lindesay *et al*, 1989; Blazer *et al*, 1991; Manela *et al*, 1996).

Whatever the nosological status of generalised anxiety, the condition appears to be associated with an increased use of both physical and mental health services (Blazer *et al*, 1991). If service use is regarded as a criterion of clinical importance then generalised anxiety remains a useful concept, particularly at the primary care level.

### **'Neurotic' depression**

Although ICD-10 has retained the concept of neurotic disorders (Box 9.1), no depressive condition appears in this group. As a diagnostic category, neurotic depression has always been unsatisfactory; the criteria are vague, and it is defined more by the absence of psychotic symptoms than by the presence of anything specific. Nevertheless, as Snaith (1991) points out, "consideration of aspects of depression is integral to the understanding of many neurotic disorders" because:

- (a) Conditions such as phobic disorder, generalised anxiety disorder, agoraphobia, obsessive-compulsive disorder (OCD) and somatisation are often accompanied by depressive symptoms, and these often come to dominate the clinical picture over time, particularly if the neurotic symptoms are severe and disabling. This depressive element of the clinical picture may well require treatment in its own right.
- (b) At all ages, the most common psychiatric disorder seen in primary care settings is a mild to moderate mixture of depressive and anxiety symptoms, arising in response to a specific stressor, often in the context of particular maladaptive personality traits.
- (c) Depression in the elderly sometimes presents with apparently 'neurotic' behaviour, such as hypochondriasis, anorexia, importuning and screaming, that can mislead the unwary diagnostician.

### **Obsessive-compulsive disorder**

Of all the specific neurotic disorders OCD is the most persistent and stable diagnosis. It has a chronic, fluctuating course (Rasmussen & Tsuang, 1986), and the clinical features of OCD in elderly patients are similar to those seen in younger adults. Although a proportion of patients with OCD also develop significant depressive symptoms, other evidence suggests that OCD is a distinct disorder involving the orbitofrontal cortex, basal ganglia, substantia nigra and ventrolateral pallidum (Montgomery, 1980; Goodman *et al.*, 1989; Insel, 1992).

While the onset of OCD in old age is rare (Bajulaiye & Addonizio, 1992), a minority of cases present late, and many elderly patients with long-standing disorders have never been adequately treated (Jenike, 1989). Therefore, it is important that all elderly patients receive thorough evaluation and treatment when they come to the notice of services. The development of obsessional orderliness and preoccupation with routines may presage the onset of dementia. Obsessional symptoms may appear at any age following head injury or cerebral tumour.

## **Somatoform disorders**

### *Somatisation*

The somatisation of psychological distress usually starts in early adult life, and once established, has a chronic, fluctuating course showing little improvement with age (Pribor *et al*, 1994). Somatising patients are skilled at seeking medical treatment and avoiding psychiatrists, and it is not uncommon for these individuals to present to psychiatric services for the first time in old age. They come with a very extensive history of complaints, referrals and investigations; are usually depressed and anxious; and the clinical picture is often complicated by the presence of true physical illness. They are the epitome of the 'heartsink' patient, and a significant challenge to all involved in their care.

### *Hypochondriasis*

In contrast to somatisation, hypochondriacal patients usually restrict physical complaints to one or two body organs or systems. Typically they are preoccupied with the possibility of serious physical illness and their demand is for investigation rather than treatment (World Health Organization, 1992). In the elderly, primary hypochondriasis is usually long-standing; hypochondriacal preoccupations that present for the first time in late life are more likely to be a secondary manifestation of depression or anxiety.

### *Malingering*

Malingering is an abnormal illness behaviour that has yet to be dignified as a disorder by any psychiatric nosology. It is largely unresearched and there are no formal diagnostic criteria; nevertheless, it is well recognised and disapproved of by doctors who tend to ignore or dismiss what lies behind it. Doctors and other carers find malingering particularly irritating because the malingerer is clearly physically ill, or disabled, and yet the complaints and crises, such as breathlessness, falls or episodes of incontinence, are timed to cause distress and inconvenience to those responsible for their care. It is important to understand what is being communicated by such behaviour, such as distress, anger, fear or depression. Failure to address this can result in rejection by carers, and institutionalisation, with subsequent escalation in the patient's distress and disruptive behaviour.

## **Dissociative disorders**

Elderly patients occasionally manifest what appear to be hysterical dysmnesias and conversion reactions to stressful experiences, and it is

important to know what these represent. As a rule the appearance of such symptoms in late life is due to organic disease, or the release of hysterical tendencies in vulnerable personalities, by cerebral pathology or functional psychiatric disorder. As Bergmann (1978) said, "It is best to assert dogmatically that primary hysterical illness does not begin in old age".

## Management

### **Psychological**

Although the behavioural and cognitive approaches to psychological treatment are theoretically distinct, in practice most interventions involve elements of both. Cognitive-behavioural therapy is of proven effectiveness in the treatment of conditions such as phobias and OCD, in younger adults (Marks, 1978). Case reports and small series indicate that they are just as effective in the elderly (Leng, 1985; Woods & Britton, 1985; Woods, 1995). Anxiety management training, involving instruction, relaxation and other control techniques (McCarthy *et al*, 1991) is an important approach to anxiety symptoms in the elderly, which can be applied in a wide range of settings to both groups and individuals. Further research is needed to establish which strategies are most effective in this age group; while the principles of cognitive-behavioural therapy are the same at all ages, the goals and techniques may need to be modified to make allowance for physical disabilities (see Chapter 17).

### **Physical**

Despite the effectiveness of behavioural, training and cognitive strategies in the management of neurotic disorders, most elderly patients with these conditions are treated with drugs. Sometimes this is appropriate; for example, if depression is a prominent feature then a course of antidepressant treatment should always be considered. However, the pharmacotherapy of neurotic disorders is often merely an easy and convenient means of avoiding a more detailed and painstaking assessment of the patient's symptoms and circumstances.

The greatest problems with inappropriate and excessive drug treatment of neurotic disorders in the elderly have occurred in association with benzodiazepines. In spite of the fact that there have been relatively few formal controlled trials of benzodiazepine treatment in elderly patients, old people are the largest consumers of this class of drugs, particularly as hypnotics. Because of the altered handling of drugs by the body with increasing age, some benzodiazepines and their metabolites accumulate substantially in some elderly patients, with the result that apparently therapeutic doses can eventually cause persistent drowsiness,

incontinence, delirium and falls (Evans & Jarvis, 1972; Fancourt & Castleden, 1986). Other problems in the elderly include increased central nervous system sensitivity to the effect of the drug, the presence of physical illness (particularly respiratory disease), interactions with other drugs and alcohol, and non-compliance (Salzman, 1991). At all ages, long-term benzodiazepine use can result in physical dependence, cognitive impairment and paradoxical excitement. In view of all these problems, benzodiazepine prescription in the elderly should be restricted to short courses of short-acting compounds without active metabolites, such as oxazepam. As a rule, long-term benzodiazepine users should be encouraged to withdraw from their medication, particularly if they have continuing neurotic symptoms (see Chapter 11).

There is evidence that some of the new generation of anxiolytics and antidepressants are more effective in providing relief in neurotic disorders without unacceptable side-effects. Buspirone is an azapirone anxiolytic drug whose pharmacokinetics, safety and efficacy in the elderly, are similar to those in younger adults (Robinson *et al*, 1988). It is well tolerated by this age group, and it appears that short-term use is not associated with rebound, dependence or misuse (Lader, 1991). Unlike other anxiolytics it takes two to three weeks to have an effect, so it is not useful in the management of acute anxiety states. Neuroleptic drugs have only a limited role in the management of anxiety because of the risk of disabling extrapyramidal side-effects. Antihistamine drugs such as hydroxyzine have a history of use as anxiolytics in elderly patients, and they may be useful when respiratory depressant drugs are contraindicated.

## Conclusion

Neurotic disorders are more common in the elderly than generally realised. Faced with the urgent demands of dementia and depression, it is understandable that some hard-pressed old age psychiatric services might regard the treatment of neurotic disorders as a relatively low priority. While it is true that services should aim to have a limited role in the long-term management of these conditions, they should nevertheless be proficient in their assessment and acute treatment, and be able to advise primary care teams, physicians and others responsible for the continuing care of these patients, in appropriate management strategies.

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