

# Understanding the impact of depression

**Penny Louch, MSc, BSc (Hons), RGN, RM, lead nurse practitioner/clinical lead, Health E1 Homeless Medical Centre, London and PhD student, University College, London**

Louch P. Depression in primary care. Part 1. Understanding the impact. *Practice Nurse* 2009; 37(9): 39-44  
Date received: 15 March 2009 Date accepted for publication: 10 April 2009

Depression is common, debilitating and potentially fatal. The development of skill mix in primary care means that practice nurses need to be able to recognise depression and manage it in partnership with the patient, according to their competency

**T**he World Health Organization (WHO) definition of depression is '... a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy and poor concentration. These problems can become chronic or

recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities.<sup>1</sup>

Depression syndrome is one of the oldest diagnoses in psychiatry.<sup>2</sup> Robert Burton, a 17th century English churchman and scholar, is regarded as the first person to present a treatise on the medical condition of melancholy in 1621.<sup>3</sup> However, it was not until the late 19th century that the first widely accepted systematic classification of psychiatric disorders was introduced by Emil Kraepelin, a German psychiatrist.<sup>4,5</sup> While Freud was proposing psychological theories to explain mental illnesses, Kraepelin firmly asserted their physical or biological origin and made the distinction between endogenous and exogenous disorders.<sup>5</sup>

Depression began to regularly appear as an illness classification in Western medical diagnostic manuals in the 1930s,<sup>6</sup> but it was not until the 1950s that depression became a familiar diagnosis

in psychiatry. The development of the various pharmacological treatments reconfigured ideas about disease and facilitated the development of disease categories.<sup>4,7</sup> 'Depressive reactions' were highlighted as a diagnostic category by the American Psychiatric Association in 1952 in the first *Diagnostic and Statistical Manual of Mental Disorders* (DSM).<sup>8</sup>

## 'MODERN-DAY' DEPRESSION

Today depression represents a major source of the burden of disease everywhere in the world;<sup>9</sup> it is a common, complex and debilitating condition with potentially fatal consequences.<sup>10,11</sup> Statistics indicate that depression affects between 1 in 5 and 1 in 6 people at some times in their lives,<sup>12-14</sup> which means that 1 family in 3 is affected.<sup>15,16</sup> Studies estimate that major depression occurs in:

- 2–4% of the general population
- 5–10% of patients in primary care
- 10–14% of medical in-patients.

In each setting there are 2–3 times as

## LEARNING OBJECTIVES

### After working through this article you will be able to:

- Discuss the prevalence of depression across settings, ages and sexes
- Identify the increased risk factors that individuals with depression are exposed to
- Discuss the role of primary care in the recognition and management of depression
- Discuss the increased risk and the consequences of depression with comorbid chronic diseases
- Identify those medications that may have side-effects that are causing or exacerbating depression in elderly people



For details on the education and training opportunities available at Education for health tel 01926 493313 or visit [www.educationforhealth.org.uk](http://www.educationforhealth.org.uk)

This series is for primary care nurses working in advanced practice. It aims to encourage you to question practice, and consider and implement changes to improve care provision.

### Module 09.7 Depression in primary care

Part 1. Understanding the impact  
Part 2. Diagnosis and treatment

**ACTIVITY**

Identify how many patients on your practice register have a diagnosis of depression

- What percentage of your practice population does this represent?
- Is the prevalence within your practice greater or less than that predicted in research studies?

many people with depressive symptoms that fall short of major depression criteria.<sup>17,18</sup> Depression is also known to have a high degree of chronicity.<sup>19,10</sup> A 15-year longitudinal study looked at the recurrence of depression after recovery from a major depressive episode and reported that although two-thirds of individuals recovered within the first year, 85% of patients experienced a recurrence during the 15-year follow-up. The median time to recurrence of symptoms after a period of wellness was 31 months.<sup>19,20</sup>

Individuals from all backgrounds, age groups and cultures are affected by depression. However, it is most common in people aged 25–44<sup>21</sup> and affects more women than men, with a female to male risk ratio of about 2 to 1.<sup>22</sup> Table 1 shows the prevalence of mental health problems, including depression, across age ranges and sexes.<sup>13,21,23</sup>

Depression should also be considered a life-threatening disorder.<sup>24</sup> A 2002 meta-analysis of 25 studies involving more than 100,000 individuals, identified that an increased risk of mortality exists not only in major depression but also in subclinical forms of depression.<sup>24</sup> It is not clear what mechanisms cause the increased mortality rate in depressed

**ACTIVITY**

Undertake a significant event audit of all patients with a diagnosis of depression who have died in the past 12 months

- Identify the cause of death
- Identify all other comorbid diseases
- Was the patient on treatment for their depression? Were they compliant with their medication?
- How often did they attend at the practice in the months and weeks preceding their death?

**TABLE 1. THE PREVALENCE OF MENTAL HEALTH PROBLEMS ACCORDING TO AGE AND SEX**

Sex	Age	Prevalence
Adult males	16–65 years	14%
	Over 65 years	15%
Adult females	16–65 years	20%
	Over 65 years	15%

Sex	Age	Prevalence
Male	Pre-school	• Mild 15% • Severe 7%
	5–10 years	10%
	11–16 years	13%
	16–19 years	6%
Female	Pre-school	• Mild 15% • Severe 7%
	5–10 years	6%
	11–16 years	10%
	16–19 years	16%

individuals, but the authors of the study suggest that the following factors may contribute to the increased mortality risk:<sup>24</sup>

- increased suicide rates
- increased hazardous health behaviours
- a higher incidence of accidental deaths
- adverse effects of depression on endocrine, neurological and immune processes
- interference with the patient's motivation toward recovery
- poor compliance with treatment.

**PATIENT CARE**

Most mental health care (90%) is provided solely within primary care.<sup>25,26</sup> Depression is the most common mental health disorder, with 80–90% of patients with depression receiving their care in primary care.<sup>27,28</sup>

Evidence suggests that depression places a significant burden on primary care services in the UK. UK studies undertaken in the 1980s,<sup>29,30</sup> and a more recent study undertaken in the mid-1990s in the US,<sup>31</sup> showed that about 10% of patients who consult their GP meet the

criteria for mild or moderate depression, which represents one-third of the mental health burden in general practice.

Although symptoms will resolve in most patients within 6–12 months, about 20% will have symptoms that persist, becoming chronic and disabling.<sup>32</sup>

NICE has reported that the number of consultations for depression increased from 4 million to 9 million from 1994 to 1998.<sup>27</sup> The number of consultations appears to have continued to increase; about 60% of GPs in the 2006 Health of the Nation Survey stated that the number of patients reporting depression had continued to increase over the previous year.<sup>33</sup>

Depression tends to be a recurrent long-term illness that requires early identification and prompt and adequate treatment to avoid chronicity.<sup>34</sup> The disability caused by depression limits the activity and productivity of individuals and is greater than that reported for other physical conditions, such as diabetes, arthritis and back pain.<sup>34</sup> The tendency of depression to recur and become a chronic disease accounts for its ranking as the fourth leading cause of burden among all diseases and in all

**TABLE 2. THE COST OF MENTAL ILLNESS IN ENGLAND 2002–2003<sup>35</sup>**

Category	Cost (£bn)
<b>Health and social care</b>	
• NHS services	6.5
• Informal care	3.9
• Local authority social services	1.4
• Other public sector	0.5
• Private expenditure	0.2
Total category cost	12.5
<b>Human costs</b>	
• Households	37.0
• Institutional population	1.3
• Premature mortality	3.5
Total category cost	41.8
<b>Output losses</b>	
• Sickness	3.9
• Non-employment	9.4
• Unpaid work	8.0
• Premature mortality	1.8
Total category cost	23.1
<b>Total overall cost</b>	<b>77.4</b>

age groups by the WHO.<sup>18</sup> The WHO predicts that depression will become the second-ranking cause of global disease burden (after ischaemic heart disease) by 2020.<sup>1,27</sup>

### ECONOMIC AND SOCIAL COSTS

A number of key organisations have identified that the direct and indirect economic consequences of mental illness are substantial, with depression being a major contributor to this economic burden.<sup>15,27,35</sup> Depression and anxiety account for one-third of all cases of disability in Great Britain. However, only 2% of NHS spending is on mental health, and most of this is spent on the most seriously mentally ill, those with psychotic problems.<sup>15,16</sup>

The Sainsbury Centre for Mental Health undertook an analysis of mental illness in

**TABLE 3. COST MATRIX FOR DEPRESSION<sup>36</sup>**

	Care cost	Productivity cost	Other costs
<b>Depressed individual</b>	Treatment – prescription fees, therapy	Non-employment, unemployment, time off-sick, work disability	Anguish, treatment, side-effects, suicide, premature mortality
<b>Family and friends</b>	Informal care-giving	Time off work	Carer burden
<b>Employers</b>	Employer contributions to treatment and care	Reduced productivity	
<b>Society</b>	NHS, social services and other public sector services. Taxation and insurance	Reduced productivity	Loss of lives, untreated depression, unmet need

England in 2002–2003 to estimate the multiplicity of the costs involved; the human cost, the health and social care cost and the economic cost.<sup>35</sup> The costs of mental illness and depression are identified in Tables 2 and 3.

Depression reduces economic output through time off-sick, non-employment and unemployment; there are currently more people on incapacity benefit because of mental health problems than the total number of unemployed people claiming Job Seeker's Allowance.<sup>15</sup> The London School of Economics (LSE) New Deal report identifies the total loss of output that results from depression and anxiety as about £12bn per year. This is equivalent to 1% of the total national income<sup>15</sup> and equates to about 50% of the total output losses for all mental illness in England.<sup>35</sup>

### LONG-TERM CONDITIONS

Depression is associated with a 50% increase in the medical costs of treating chronic medical illness, even after controlling for severity of the physical illness.<sup>37</sup> Chronic conditions affect people of all ages, and it is because people with chronic conditions have greater health needs at any age that their costs are disproportionately high.<sup>38</sup>

In recent years, the existence of comorbidities with depression has been recognised as a major problem. Comorbidity is known to be associated with poor treatment outcomes, more severe illness, and high service

utilisation.<sup>39</sup> Individuals with a lifetime diagnosis of depression have a 43–80% risk of having one or more comorbidities. However, this comorbidity is not random because most disorders show systematic comorbidities with specific diagnoses or diagnostic classes.<sup>40</sup> Depression and dysthymia are likely to co-exist with personality disorder (23–87%),<sup>41,42</sup> anxiety disorder,<sup>43</sup> substance misuse,<sup>44-46</sup> and alcohol dependence.<sup>47,48</sup>

### CHRONIC DISEASE

Individuals with a long-term medical condition are at increased risk of developing major depression compared to people who do not have a chronic disease.<sup>37</sup> Chronic disease is typically associated with pain, fatigue, and disability, and is considered to be a permanent stressor affecting processes of cognitive appraisal and coping, and to have a significant impact on daily functioning, quality of life and survival.<sup>49-51</sup> Despite this, many people with pain and disability do not report symptoms of depression.<sup>52</sup> The factors that have been found to increase the risk of depression are:

- being female
- younger age at diagnosis of chronic disease
- personality traits of low self-esteem, helplessness and denial.<sup>49,50,53</sup>

The elderly population is increasing; estimates forecast that by the year 2050, 20–25% of the US population will be

TABLE 4. CHRONIC DISEASE AND THE RISK OF DEPRESSION<sup>54-60</sup>

Chronic disease	Risk of major depression
Diabetes	11–15%
Recent myocardial infarction (MI)	15–23%
Coronary artery disease	15–23%
Post-stroke (at 3–4 months)	9–31%
Parkinson's disease	50%
Multiple sclerosis (MS)	16–30%
HIV	10%
Rheumatoid arthritis	20%

older than 65 years, 88% of people over the age of 65 years will have one chronic disease, and 25% will have four or more conditions. However, most individuals with chronic conditions are not disabled, nor are they elderly.<sup>38</sup> Based on the fact that major depression occurs in 2–4% of people in the community,<sup>17</sup> the increase in the risk of depression in those with a specific chronic disease is shown in Table 4.

There are a number of causal associations that may account for the increase in the prevalence of depression in individuals with chronic disease. Depression may be a psychological reaction to the development of the disease; a result of the depressogenic effects of the disease, or a side-effect of the treatment used to manage it; or the chronic illness may have a direct pathophysiological effect on the brain, such as stroke or multiple sclerosis; or an indirect physiological effect via inflammatory processes.<sup>61</sup>

One study aimed to clarify the temporal and directional character of the relationship between depression and functional disability in later life using prospective data. It examined the reciprocal relationship between depressive symptoms, functional disability and their temporal character in a community-based cohort of

### ACTIVITY

Consider the list of chronic diseases identified in Table 4

- What percentage of patients with these diagnoses in your practice also have a diagnosis of depression?
- How does this compare with the numbers identified by the studies?
- Consider the possibility of further case-finding for depression among members of your practice population with a diagnosed chronic disease

753 older people with physical limitations.<sup>61</sup> The results indicated that the association between depression and disability can be attributed to one or more processes:

- a contemporaneous effect of change in disability on depressive symptoms
- a lagged effect of change in depression on disability
- a correlation between the trait components of depressive symptoms and disability.

The author's recommendations were that treatment should target disability when it is new and depression when it is persistent.

Depression is also associated with increased morbidity and mortality in individuals with diabetes and/or heart

disease. This may be because of detrimental lifestyle choices and poor adherence to medical regimens as well as the direct physiological consequences of depression.<sup>37</sup>

Patients' beliefs may be the key to coping with the stress of a disease; positive beliefs lead to better disease adjustment and consequently to lower levels of physical disability, depression and anxiety.<sup>49</sup> Conversely, poor adjustment to the diagnosis of chronic disease contributes to the onset of depressive symptoms.<sup>62</sup>

### OLDER PEOPLE

Major depression is the most common psychiatric disease in older people; in individuals over the age of 65, its prevalence is estimated to be 2% in the general population.<sup>63,64</sup> This increases to 12% in elderly people living in residential homes, with a further 30% manifesting mild symptoms of depression; the prevalence increases to 10–35% in elderly people who are hospitalised.<sup>65</sup> Elderly people often take a variety of prescribed medication (polypharmacy), such as antihypertensives, digoxin, sedatives and corticosteroids, of which depression may be a side-effect.<sup>63</sup>

The risk factors of genetic liability, early adversity and serious life events are likely to play a less prominent role in the development of depression in elderly people than in younger people.<sup>66</sup> Advanced age has been hypothesised to be a risk factor for depression, but one epidemiological study found that the association of age and depressive symptoms reversed when the following variables were simultaneously controlled:

- increased age
- female sex
- lower income
- physical disability
- cognitive impairment
- social support.

Very elderly people suffered fewer depressive symptoms when factors

### Answers to self-assessment, p47

- 1 Any five of the following: depressed mood; loss of interest; loss of pleasure; guilt; low self-worth; disturbed sleep; altered appetite; low energy; poor concentration.  
 2 In the first Diagnostic and Statistical Manual of Mental Health, published in 1952 by the American Psychiatric Association, 3–5–10% of patients in primary care.  
 4 People between the ages of 25 and 44, 5–10% of patients in primary care meet the diagnostic criteria for mild or moderate depression, 6–20% of patients with depression go on to experience symptoms that are chronic and disabling. 7 50% increase in medical costs; poor treatment outcomes; more severe illness course; high service utilisation. 8 Any three of the following: female sex; younger age at diagnosis of the chronic disease; low self-esteem; denial of the illness. 9 Depression is the most common psychiatric disease in elderly people. 10 Any three of the following: beta-blockers; corticosteroids; sedatives; oestrogens; digoxin; levodopa.  
 11 Disabling or handicap is the major cause of depression in later life

associated with both increased age and depressive symptoms were taken into account.<sup>64</sup> Many cases of depression experienced in later life appear to be attributable to disability, particularly physical handicap, and the onset of new chronic medical illnesses that result in a new decrease in functional ability.<sup>37,66</sup> If these limitations reduce the ability to engage in usual social functions and interactions, then disablement, specifically handicap, can be understood as the chief cause of onset of depression in later life.<sup>66</sup>

## CONCLUSION

Depressive disorder is a common, complex and debilitating condition with potentially fatal consequences. It places a significant burden on the individual, their family, the NHS and the economy. The GP has traditionally been the healthcare professional from whom the patient seeks help. However, the development of skill mix in primary care means that nurses need to be able to recognise depression and manage it in partnership with the patient, according to their competency.

The entire primary healthcare team has a responsibility to be alert to recognising depression. However, practice nurses have regular contact with patients with chronic disease through nurse-led clinics and they need to be alert to the signs of depression in this high-risk group. Formalising the ongoing care of patients with depression as a chronic disease means that practice nurses are well placed to take on the responsibility of monitoring and educating this group of patients. ●

## RESOURCES

- **NICE. Management of Depression in Primary and Secondary Care**  
[www.depression-primarycare.co.uk/images/NICE\\_Depression\\_NICE\\_full%20guideline.pdf](http://www.depression-primarycare.co.uk/images/NICE_Depression_NICE_full%20guideline.pdf)
- **Mental Health Foundation**  
[www.mentalhealth.org.uk](http://www.mentalhealth.org.uk)
- **Depression Alliance**  
[www.depressionalliance.org](http://www.depressionalliance.org)
- **Depression in Primary Care**  
[www.depression-primarycare.co.uk](http://www.depression-primarycare.co.uk)
- **Sainsbury Centre for Mental Health**  
[www.scmh.org.uk](http://www.scmh.org.uk)

## REFERENCES

1. World Health Organization. Mental Health: depression. WHO, 2006. [www.who.int](http://www.who.int)
2. Jackson SW. Melancholia and Depression: from Hippocratic times to modern times. New Haven, Connecticut: Yale University Press, 1986.
3. Burton R. The Essential Anatomy of Melancholy (6th edn). New York: Dover Publications, 2002.
4. Healy D. The Antidepressant Era. Massachusetts: Harvard University Press, 1997.
5. National Schizophrenia Foundation. [www.nsfoundation.org/emil.htm](http://www.nsfoundation.org/emil.htm)
6. Charlie Waller Memorial Trust. Depression in Context: different ways of seeing depression. Charlie Waller Memorial Trust, 2005. [www.studentdepression.org/](http://www.studentdepression.org/)
7. Medawar C, Hardon A. Medicines out of Control? Antidepressants and the conspiracy of goodwill. Netherlands: Aksant Academic Publishers, 2004.
8. Shorter E. Historical review of diagnosis and treatment of depression. In: Dawson A, Tylee A (eds). Depression: social and economic timebomb. London: BMJ Publishing Group, 2001.
9. Kleinman A, Cohen A. A global view of depression from an anthropological perspective. In: Dawson A, Tylee A (eds). Depression: Social and economic timebomb. London: BMJ Publishing Group, 2001.
10. Montgomery SA. Managing depression in the community. Professional Nurse 1995; 10(12): 805-7.
11. Manning C, Marr J. 'Real-life burden of depression' surveys - GP and patient perspectives on treatment and management of recurrent depression. Curr Med Res Opin 2003; 19(6): 526-31.
12. Depression Alliance. One in Five. Depression Alliance, 2003. [www.depressionalliance.org/publications/da\\_one\\_in\\_five.pdf](http://www.depressionalliance.org/publications/da_one_in_five.pdf)
13. Office for National Statistics. Psychiatric Morbidity in Great Britain, 2000, Prevalence of Psychiatric Morbidity Among Adults Living in Private Households. London: HMSO, 2001.
14. Mental Health Foundation. Fundamental Facts: all the latest facts and figures on mental illness. Mental Health Foundation, 2003.
15. The Centre for Economic Performance's Mental Health Policy Group. The Depression Report: a new deal for depression and anxiety disorders. London: London School of Economics, 2006.
16. Layard R. Mental Health: Britain's biggest social problem? Strategy Unit Seminar on Mental Health, 2005.
17. Katon W, Schulberg H. Epidemiology of depression in primary care. Gen Hosp Psychiatry 1992; 14(4): 237-47.
18. WHO. The World Health Report 2001. Mental health: new understanding, new hope. Geneva: WHO, 2001.
19. Mueller TI, Leon AC et al. Recurrence after recovery from major depressive disorder during 15 years of observational follow-up. Am J Psychiatry 1999; 156(7): 1000-6.
20. Winkler D, Tauscher J, Kasper S. Maintenance treatment in depression: the role of pharmacological and psychological treatment. Curr Opin Psychiatry 2002; 15(1): 63-8.
21. Mental Health Foundation. Statistics on Mental Health: a factsheet. [www.mhf.org.uk](http://www.mhf.org.uk)
22. Kessler RC. Epidemiology of women and depression. J Affect Disord 2003; 74(1): 5-13.
23. Office for National Statistics. The Development and Well-being of Children and Adolescents in Great Britain - summary bulletin. ONS, 1999.
24. Cuijpers P, Smit H. Excess mortality in depression: a meta-analysis of community studies. J Affect Disord 2002; 72(3): 227-36.
25. DH. National Service Framework for Mental Health. London: DH, 1999.
26. The Sainsbury Centre For Mental Health, NHS Alliance. Primary Solutions: an independent policy review on the development of primary care mental health services. London: Sainsbury Centre for Mental Health, 2002.
27. NICE, National Collaborating Centre for Mental Health. Depression: management of depression in primary and secondary care. National Clinical Practice Guideline Number 23. London: NICE, 2004.
28. Tylee A, Jones R. Managing depression in primary care. Br Med J 2005; 330(7495): 800-1.
29. Blacker C, Clare AW. The prevalence and treatment of depression in general practice. Psychopharmacology 1988; 95(suppl): 14-7.
30. Freeling P, Rao BM, Paykel ES. Unrecognised depression in general practice. Br Med J 1985; 290: 1880-3.
31. Coyne JC, Fechner-Bates S et al. Prevalence, nature and comorbidity of depressive disorders in primary care. Gen Hosp Psychiatry 1994; 16: 267-76.
32. Mild depression in general practice: time for a rethink? Drug Ther Bull 2003; 41(8): 60-4.
33. Norwich Union. Health of the Nation Index 7. [www.healthofthenation.com/](http://www.healthofthenation.com/)
34. Ustun TB, Chatterji S. Global burden of depressive disorders and future projections. In: Dawson A, Tylee A (eds). Depression: social and economic timebomb. London: BMJ Publishing Group, 2001.
35. The Sainsbury Centre For Mental Health. The Economic and Social Costs of Mental Illness: policy paper 3. London: The Sainsbury Centre For Mental Health, 2003.
36. Chisholm D. The economic consequences of depression. In: Dawson A, Tylee A (eds). Depression: social and economic timebomb. London: BMJ Publishing Group, 2001.
37. Katon WJ. Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. Biol Psychiatry 2003; 54(3): 216-26.
38. Hoffman C, Rice D, Sung HY. Persons with chronic conditions - their prevalence and costs. JAMA 1996; 276(18): 1473-9.
39. Teesson M, Degenhardt L, Proudfoot H, Hall W, Lynskey M. How common is comorbidity and why does it occur? Aust Psychol 2005; 40(2): 81-7.
40. Clark LA, Watson D, Reynolds S. Diagnosis and classification of psychopathology: challenges to the current system and future directions. Annu Rev Psychol 1995; 46(1): 121-53.
41. Shea MT, Widiger TA, Klein MH. Comorbidity of personality disorders and depression - implications for treatment. J Consult Clin Psychol 1992; 60(6): 857-68.
42. Corruble E, Ginstet D, Guelfi JD. Comorbidity of personality disorders and unipolar major depression: a review. J Affect Disord 1996; 37(2-3): 157-70.
43. Sanderson WC, Beck AT et al. Syndrome comorbidity in patients with major depression or

- dysthymia: prevalence and temporal relationships. *Am J Psychiatry* 1990; 147(1025): 1028.
44. Sullivan LE, Fiellin DA, O'Connor PG. The prevalence and impact of alcohol problems in major depression: a systematic review. *Am J Med* 2005; 118(4): 330-41.
45. Rounsaville BJ. Treatment of cocaine dependence and depression. *Biol Psychiatry* 2004; 56(10): 803-9.
46. Delbello MP, Strakowski SM. Understanding the problem of co-occurring mood and substance use disorders. In: Westermeyer JJ, Weiss RD, Ziedonis DM (eds). *Integrated Treatment for Mood and Substance Use Disorders*. Baltimore: John Hopkins University Press, 2003.
47. Helzer JE, Pryzbeck TR. The co-occurrence of alcoholism with other psychiatric disorders in the general population and its impact on treatment. *J Stud Alcohol* 1988; 49(3): 219-24.
48. Gilman SE, Abraham HD. A longitudinal study of the order of onset of alcohol dependence and major depression. *Drug Alcohol Depend* 2001; 63(3): 277-86.
49. Nagyova I, Stewart RE, Macejova Z, van Dijk JP, van den Heuvel WJA. The impact of pain on psychological well-being in rheumatoid arthritis: the mediating effects of self-esteem and adjustment to disease. *Patient Educ Couns* 2005; 58(1): 55-62.
50. Covic T, Adamson B, Spencer D, Howe G. A biopsychosocial model of pain and depression in rheumatoid arthritis: a 12-month longitudinal study. *Rheumatology* 2003; 42(11): 1287-94.
51. Mancía G. Prevention and treatment of stroke in patients with hypertension. *Clin Ther* 2004; 26(5): 631-48.
52. Dickens C. The burden of depression in patients with rheumatoid arthritis. *Rheumatology* 2001; 40(12): 1327-30.
53. Ramjeet J, Koutantji M, Barrett EM, Scott DGI. Coping and psychological adjustment in recent-onset inflammatory polyarthritis: the role of gender and age. *Rheumatology* 2005; 44(9): 1166-8.
54. Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. The prevalence of comorbid depression in adults with diabetes: a meta-analysis. *Diabetes Care* 2001; 24(6): 1069-78.
55. Gonzalez MB, Snyderman TB et al. Depression in patients with coronary artery disease. *Depression* 1996; 4(2): 57-62.
56. Whyte EM, Mulsant BH. Post stroke depression: epidemiology, pathophysiology and biological treatment. *Biol Psychiatry* 2002; 52(3): 253-64.
57. McDonald WM, Richard IH, DeLong MR. Prevalence, etiology, and treatment of depression in Parkinson's disease. *Biol Psychiatry* 2003; 54(3): 363-75.
58. Patten SB, Metz LM, Reimer MA. Major depression in multiple sclerosis: A population-based perspective. *Neurology* 2003; 61: 1524-7.
59. Ciesla JA, Roberts JE. Meta-analysis of the relationship between HIV infection and risk for depressive disorders. *Am J Psychiatry* 2001; 158(5): 725-30.
60. Hyrich K, Symmons D, Watson K, Silman A. Baseline comorbidity levels in biologic and standard DMARD treated patients with rheumatoid arthritis: results from a national patient register. *Ann Rheum Dis* 2006; 65(7): 895-98.
61. Ormel J, Rijdsdijk FV, Sullivan M, van Sonderen E, Kempen GJM. Temporal and reciprocal

## SELF-ASSESSMENT

- 1 Identify five key features of depression
- 2 When did depression first become a recognised diagnostic medical category?
- 3 What percentage of patients in primary care fulfil the criteria for major depression?
- 4 What age group does depression most commonly affect?
- 5 What percentage of patients who present in primary care meet the criteria for mild or moderate depression?
- 6 How many patients with depression go on to experience chronic symptoms of depression?
- 7 Identify four reasons why depression is significant in patients with long-term conditions
- 8 Identify three factors that increase the risk of depression in patients with chronic disease
- 9 What is the most common psychiatric disease in elderly people?
- 10 Identify three drug groups that may cause depression
- 11 What is the main cause of depression in later life?

relationship between IADL/ADL disability and depressive symptoms in late life. *J Gerontol B Psychol Sci Soc Sci* 2002; 57(4): 338-47.

62. Groarke A. The role of perceived and actual disease status in adjustment to rheumatoid arthritis. *Rheumatology* 2004; 43(9): 1142-49.

63. Gareri P, De Fazio P, De Sarro G. Neuropharmacology of depression in aging and age-related diseases. *Ageing Res Rev* 2002; 1(1): 113-34.

64. Blazer D, Burchetti B et al. The association of age in depression among the elderly: an

epidemiologic exploration. *J Gerontol* 1991; 46: 210-15.

65. Fountoulakis K, O'Hara R et al. Unipolar late-onset depression: a comprehensive review. *Ann Gen Hosp Psychiatry* 2003; 2(1): 11.

66. Prince MJ, Harwood RH, Thomas A, Mann AH. A prospective population-based cohort study of the effects of disablement and social milieu on the onset and maintenance of late-life depression. The Gospel Oak Project VII. *Psychol Med* 1998; 28(2): 337-50.