1

Depression in primary care

Simon Gilbody

Case study

Jean is a 58-year-old woman who has worked as a teacher for 26 years. She comes to the primary care practice to see Dr Stevens. Her daughter is concerned that her mother is 'under a lot of stress and is not coping'. Jean expresses feelings of frustration, a short temper and lack of purpose in her home, family and work life. She has two late-teenage children, one of whom has recently left home. She works hard in her job as a teacher at a local school. She married in her early twenties and her husband is inattentive and drinks excessively.

During her consultation she appears tearful, shrunken and afraid. She describes a range of physical and psychological symptoms including tiredness, poor concentration and lack of motivation. Her appetite is poor and she has stopped cooking for herself and the family. She feels negative about the future but has no plans to end her own life. She has found it difficult to get to work in the past month and wants a sick note to allow her a week or two to get on top of things.

The case study outlined above will be familiar to many healthcare professionals and to a significant proportion of their patients. Depression is a very common mental health problem and is associated with a great deal of personal suffering, as well as acting as a significant burden on health services.

Managing depression effectively is a major challenge, and one that has exercised patients, professionals and policy makers worldwide. There is increasing consensus that the best place to treat depression is in primary care. For example, the recent World Health Organization report *Integrating mental health into primary care: a global perspective*[1] stated seven reasons why treatment for mental health problems such as depression should be based in primary care (Box 1.1).

The principles outlined by the World Health Organization in Box 1.1 seem reasonable and consistent. But recent years have seen changes to the way in which health policy is made and evaluated, away from ideology and aspiration

Depression in Primary Care: Evidence and Practice, ed. Simon Gilbody and Peter Bower. Published by Cambridge University Press.

Box 1.1 Reasons for treating mental health in primary care[1]

1. **The burden of mental disorders is great**. Mental disorders are prevalent in all societies. They create a substantial personal burden for affected individuals and their families, and they produce significant economic and social hardships that affect society as a whole.
2. **Mental and physical health problems are interwoven**. Many people suffer from both physical and mental health problems. Integrated primary care services help ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.
3. **The treatment gap for mental disorders is enormous**. In all countries, there is a significant gap between the prevalence of mental disorders, on the one hand, and the number of people receiving treatment and care, on the other hand. Primary care for mental health helps close this gap.
4. **Primary care for mental health enhances access**. When mental health is integrated into primary care, people can access mental health services closer to their homes, thus keeping their families together and maintaining their daily activities. Primary care for mental health also facilitates community outreach and mental health promotion, as well as long-term monitoring and management of affected individuals.
5. **Primary care for mental health promotes respect of human rights**. Mental health services delivered in primary care minimize stigma and discrimination. They also remove the risk of human rights violations that can occur in psychiatric hospitals.
6. **Primary care for mental health is affordable and cost effective**. Primary care services for mental health are less expensive than psychiatric hospitals, for patients, communities and governments alike. In addition, patients and families avoid indirect costs associated with seeking specialist care in distant locations. Treatment of common mental disorders is cost effective, and investments by governments can bring important benefits.
7. **Primary care for mental health generates good health outcomes**. The majority of people with mental disorders treated in primary care have good outcomes, particularly when linked to a network of services at secondary level and in the community.

and towards the use of objective and transparent forms of knowledge. This has often been identified with a movement called 'evidence-based practice'. This was succinctly summarized by one of its originators in medicine, who defined it as 'the conscientious, explicit, and judicious use of current best evidence in making decisions'.[2] Box 1.2 presents a full definition of evidence-based practice in the context of medicine.

Evidence-based practice changes according to context. The evidence-based practice of a clinician deciding on a treatment for an individual patient will differ

Box 1.2 The definition of evidence-based medicine[2]

Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. By individual clinical expertise we mean the proficiency and judgement that individual clinicians acquire through clinical experience and clinical practice. Increased expertise is reflected in many ways, but especially in more effective and efficient diagnosis and in the more thoughtful identification and compassionate use of individual patients' predicaments, rights and preferences in making clinical decisions about their care. By best available external clinical evidence we mean clinically relevant research, often from the basic sciences of medicine, but especially from patient-centred clinical research into the accuracy and precision of diagnostic tests (including the clinical examination), the power of prognostic markers and the efficacy and safety of therapeutic, rehabilitative and preventive regimens. External clinical evidence both invalidates previously accepted diagnostic tests and treatments, and replaces them with new ones that are more powerful, more accurate, more efficacious and safer.

from that of a policy maker considering changes to the way services are delivered for a locality. However, in both cases it has the aim of informing that decision using high-quality scientific evidence.

This book applies those principles to the problem of depression. We start, in this chapter, by outlining the nature of primary care, the role of primary care in the management of depression and the different outcomes of that care. We then go on to outline different ways in which primary care services for depression can be organized (Chapter 2), and review the various scientific methods we can use to evaluate those services (Chapters 3 and 4). The aim is to apply those methods to give an evidence-based assessment of the best way to care for depression in primary care (Chapters 5, 6, 7, 8, 9), consider the challenges of implementing those findings (Chapters 10,11, 12) and highlight the research issues for the future (Chapter 13).

What is primary care and primary mental healthcare?

Primary care services are sometimes referred to as general practice, family practice or family medicine. The terms are not synonymous, but together they have a number of common elements that are critical to understanding their role in depression.

Primary healthcare was defined by the Alma Ata declaration as 'essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of

self-reliance and self-determination' (www.who.int/hpr/NPH/docs/declaration_almaata.pdf).

According to the Institute of Medicine,[3] primary care is the 'provision of integrated, accessible healthcare services by clinicians who are accountable for addressing a large majority of personal health needs, developing a sustained partnership with patients, and practicing in the context of the family and community'.

Descriptions of the core content of primary care vary,[4,5] but key aspects include:

- first contact care, with direct patient access
- care characterized by patient-centredness (i.e. consistent with patient needs and preferences), family orientation and continuity (i.e. care over time from a single professional)
- a role in the coordination of care (i.e. coordinating care from multiple agencies)
- a 'gate-keeping' function, regulating access to specialist care (i.e. care from clinicians who focus on certain types of problem or organ systems).

The structure of healthcare systems throughout the world varies widely, and the degree to which particular systems can be characterized as 'primary care-led' varies between countries and over time.[4,5] Some primary care systems act as gatekeepers to specialist services (as in the UK), others provide free-market services in parallel to specialist services, while others function in a complex system containing both types of access (as in the USA). Services also vary according to whether they are free to patients at the point of care delivery; whether they are led by doctors or non-medical staff; and the degree to which they provide continuity of care. There is some evidence that the degree of primary care focus in a healthcare system (especially the 'gate-keeping' role) is a key driver of the cost effectiveness and efficiency of healthcare provision.[6]

Mental healthcare in primary care is defined as 'the provision of basic preventive and curative mental health care at the first point of contact of entry into the health care system'.[7] Usually this means that care is provided by a primary care clinician, such as a general practitioner or nurse, who can refer complex cases to a more specialized mental health professional. The World Health Organization ATLAS survey found that 96% of European countries reported identified mental health activity in primary care, and 62% reported training facilities.[7]

What is depression?

A distinction is often made between 'severe and long-term mental health disorders' (most often associated with schizophrenia), and 'common mental health disorders' (most often associated with anxiety and depression). Although primary care has an important role to play in the management of more severe disorders, recent policy in many healthcare systems has highlighted the role of specialist services in their management. 'Common' disorders are viewed as more appropriately within the remit of primary care, partly by default, as specialist services have

refocused their energies, and partly by design, as primary care is seen as being able to provide appropriate, patient-centred care to this population.

'Common' disorders can be described using standard diagnostic classifications.[8] Box 1.3 shows the diagnostic criteria for depression used by the World Health Organization *International Classification of Diseases* (ICD-10) system and American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Overlapping disorders may exist along a spectrum of anxiety, depression, somatization and substance misuse in primary care. Sub-threshold conditions (i.e. disorders not meeting full diagnostic criteria for mental disorders in DSM-IV or ICD-10) are prevalent and associated with significant costs and disability.[9] There remains significant controversy over the nature of depression and the adequacy of different systems for classifying and describing the phenomenon and distinguishing it from other problems and disorders.

Patients with long-term medical illness (particularly diabetes, coronary heart disease and stroke) have a high prevalence of major depressive illness.[12–15] Evidence suggests that both depressive symptoms and major depression may be associated with increased morbidity and mortality from such illnesses.[16]

A useful overview of the major environmental, social and interpersonal causes of depression is given by Gilbody and Gask.[17] Higher rates of attendance and treatment for depression are associated with socially disadvantaged populations: people living in deprived areas (especially the inner city but also deprived rural areas); people who are unemployed, and living on benefits; and victims of violence, either domestic violence or living in violent areas. Depression is also associated with a lack of social support, being more common among people who are divorced or separated; single parents (usually women); widowed elderly people; non-religious communities, and communities with fewer extended families, where people are more likely to be living alone. Women consult primary care professionals much more frequently than men, who, in the age range 20–45 years, rarely consult. Depression in primary care is often viewed in terms of the stress-vulnerability model,[18] which states that destabilization (getting symptoms) is the result of longlasting vulnerability factors (genetic risk, early life experience, physical illness and lack of social support) acting in concert with exposure to environmental stressors, usually one or more highly stressful events of which the most common are loss events (bereavement, loss of occupation, loss of health).

Outcomes of depression

Community-based epidemiological studies have confirmed that many people have recurrent or chronic depression,[19,20] but the risk of recurrence or chronicity in depressed primary care patients and the level of disability associated with this risk remain uncertain. There have been relatively few studies in this setting, and some of these studies have not collected repeated data throughout the follow-up period while others have relied on retrospective data.[21] However, what is beginning to emerge from the literature in this setting is a picture of major depression, in around 40–50% of those given the diagnosis, as a relapsing and remitting

Box 1.3 Diagnostic criteria for depressive disorders from the World Health Organization (WHO) ICD-10[10] and American Psychiatric Association DSM-IV[11]

	ICD 10 Depressive disorder	DSM-IV Major depressive disorder
Clinical significance	Some difficulty in continuing with ordinary work and social activities, but will probably not cease to function completely in mild depressive episode; considerable difficulty in continuing with social, work or domestic activities in moderate depressive episode; considerable distress or agitation, and unlikely to continue with social, work or domestic activities, except to a very limited extent in severe depressive episode	Symptoms cause clinically significant stress or impairment in social, occupational or other important areas of functioning
Duration of symptoms	A duration of at least 2 weeks is usually required for diagnosis for depressive episodes of all three grades of severity	Most of day, nearly every day for at least 2 weeks.
Severity	Depressed mood, loss of interest and enjoyment and reduced energy leading to increased fatigability and diminished activity in typical depressive episodes; other common symptoms are: (1) Reduced concentration and attention (2) Reduced self-esteem/self-confidence (3) Ideas of guilt and unworthiness (4) Bleak and pessimistic views of the future (5) Ideas or acts of self-harm or suicide (6) Disturbed sleep (7) Diminished appetite For **mild depressive episode**, 2 of most typical symptoms of depression and 2 of the other symptoms are required. For **moderate depressive episode**, 2 of 3 of most typical symptoms of depression and at least 3 of the other symptoms are required. For **severe depressive episode**, all 3 of the typical symptoms noted for mild and moderate depressive episodes are present and at least 4 other symptoms of severe intensity are required	Five or more of following symptoms; at least one symptom is either depressed mood or loss of interest or pleasure: (1) Depressed mood (2) Loss of interest (3) Significant weight loss or gain or decrease or increase in appetite (4) Insomnia or hypersomnia (5) Psychomotor agitation or retardation (6) Fatigue or loss of energy (7) Feelings of worthlessness or excessive or inappropriate guilt (8) Diminished ability to think or concentrate, or indecisiveness (9) Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or suicide attempt or a specific plan

condition. In a large World Health Organization study in primary care, depression emerged as a chronic disorder: one year after entry to the study, about 60% of those treated with medication, and 50% of the milder depressions, still met criteria for depression.[22]

Ronalds and colleagues[23] followed up patients in British general practice with a diagnosis of depression, anxiety or panic disorder for a period of six months. Good outcome was predicted by mild depression at initial assessment, high educational level and being in employment. At follow-up the most important predictor of improvement was reduction in marked difficulties over the six months. Recognition and management by the primary care professional was most frequent in patients with severe disorder, but such patients were least likely to improve because of the severity of their depression and marked social difficulties.

Costs of depression

The costs associated with depression in primary care arise in part due to increased consultation and the use of healthcare resources directly related to the management of depression. This is often compounded when depression goes unrecognized and patients present with physical rather than psychological symptoms.[24] Patients with depression also commonly have co-morbid physical disorders, and the presence of depression is associated with poor outcome of physical disorders and increased resource utiliztion,[12] including costly referrals to secondary care.[25] The economic burden of depression is also felt within society at large, through the burden that falls on carers and dependants, and through lost productivity and life years. The annual costs of depression are most commonly quoted from two studies as being US$83 billion in the USA[26] and £9 billion in the UK.[27]

Economists examine the burden of illness within 'cost of illness studies'[28] where the various costs associated with illness are estimated through a range of readily available data. These studies aim to estimate how much a society spends on a particular disorder, and where that money is spent. Cost of illness studies generally differentiate between 'direct', 'indirect' and 'intangible costs'. Direct costs include medical (e.g. outpatient, inpatient and pharmaceutical costs) and non-medical costs (e.g. transport and social services). Indirect costs include loss of productivity due to absence from the workplace or reduced productivity at the workplace caused by morbidity (morbidity costs) and premature death (mortality costs). Intangible costs result from the restriction of the quality of life of the sufferer and their families. Because an accurate quantification in monetary terms is difficult, they are often not considered in cost-of-illness studies.

A useful overview of this topic is presented by Luppa and colleagues.[29] They identified 24 studies from a range of healthcare settings (mostly the USA and Europe) and one major cross-national study from a range of European countries.[30] These studies measured the direct and indirect costs associated with depression. Using a variety of methods to provide some consistency and comparability between studies, they presented data on 'costs per depressed case' based on the reported prevalence data and costs per inhabitant.[31] The direct costs associated with depression

ranged from US$244 to US$2488 per year. In terms of indirect costs, costs per case varied widely between countries and healthcare settings, namely from US$94 to US$5361. Differences resulted from inclusion of different costs (absenteeism from work, reduced capacity at the workplace, inclusion of housework) as well as from the value of the earnings used. Mortality costs per case were similar across countries (US$371 per year in the UK and between US$235 and US$388 per year in the USA).

These studies demonstrate that depression is associated with a substantial increase in costs, leading to a high economic burden. They have proved useful in raising the importance of depression within wider health, social and economic decision making: in the UK for example, the demonstration of the economic burden associated with depression has been instrumental in securing increased investment for depression services.[32] However, these studies give no direct guidance as to how depression should be managed in an effective and efficient way.

Depression in primary care: 'pathways to care'

A key to understanding how patients either receive or fail to receive the care they need comes from studying the epidemiology of common mental health problems and the flow of patients from the community through various healthcare settings. The most influential of these is the 'pathways to care' model first described by Goldberg and Huxley (Figure 1.1).[33,34]

The pathways to care model has five 'levels' and three 'filters'. Of all those individuals in the community, a high proportion consult their doctor in any one year, while a lesser number suffer an episode of mental ill health during the same time span. These patients pass the first filter ('the decision to consult'). Of those reaching the primary care services, a proportion of patients are recognized by the primary care clinician as suffering from disorder ('conspicuous psychiatric morbidity') and thus pass the second filter ('recognition by the primary care professional'). Passing the third and fourth filters involves referral to specialist mental health services or admission to a specialist hospital. Although there may be exceptions to this referral process, and variations depending on the local structure of services,[35] it provides an adequate general model for mental health in most primary care-led services.

Stigma within society and poor knowledge about the nature of mental health often prevents people from consulting with problems in the first instance.[33] For those who do consult, a wealth of evidence has indicated that recognition of disorders is less than optimal,[36,37] and that, furthermore, there is wide variation in recognition rates between primary care clinicians.[38] Patients who are recognized often do not receive quality of care in line with current guidelines, either in relation to pharmacological treatments or the provision of evidence-based non-pharmacological interventions.[39,40,41] Finally, provision of specialist services (such as psychological therapists working on-site in primary care) often varies widely.[42,43]

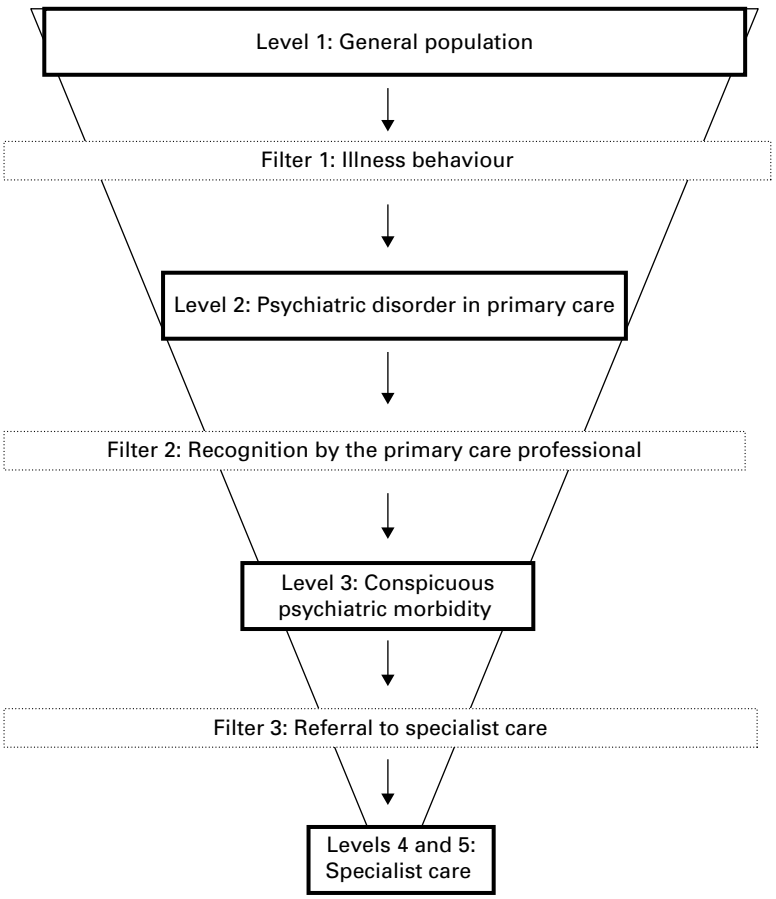

Figure 1.1 The pathways to care model.[33]

The presentation of depression in primary care

As we move from community settings to primary care settings, the prevalence of major depression increases from 3–5% to about 5–10%.[34,44]

Diagnosis is a less precise (and less frequent) activity in primary care than it is in specialist care. Primary care professionals are more likely to think in terms of problems than diagnoses. They are more likely to make a diagnosis of depression if they believe they can manage and treat it: diagnosis tends to follow management decisions, not precede them.[45] In the USA, primary care professionals are often trained to separate patients by level of severity of symptoms, and to carry out full mental health diagnostic assessment only for patients with significant or persistent symptoms.[46]

When compared with formal psychiatric diagnoses, depression frequently remains undetected and untreated,[47] because of co-morbidity with physical illness

or presentation of physical symptoms by the patient. However, although this finding has led to considerable criticism of primary care workers, there is evidence that depression which is unrecognized by primary care workers is less severe[48] and has a more favourable outcome.[22]

Depression and the doctor–patient relationship in primary care

In a study of adults with a diagnosis of depression in primary care in the UK,[49] some exhibited an unquestioning attitude to quality of care for their problems. A recurring theme among those with depression was the sense of 'wasting the doctor's time', and a sense that it was not possible for doctors to listen to them and understand how they felt.

Khan and colleagues,[50] who primarily looked at experiences in the UK setting, noted that external sources of stress or conflict were drawn upon most frequently to account for the presence of depression. These included conflict with work colleagues or family, long-term conditions, events in childhood, material disadvantage and racism.[51–54] Rather than emphasizing symptoms or feelings of depression, personal experience of depression was characterized by expressions of being unable to cope, and in particular disturbances to everyday functioning and social roles.[55,56] Patients' descriptions of the cause of their problems notably differed from the psychological or biomedical explanations underlying conventional treatments such as psychological therapy and antidepressants.

Policy goals in primary care mental health

Previous sections have highlighted the prevalence of depression and the burden that accompanies it, and outlined the way in which depressed patients interact with primary care services. The potential role of primary care services should be clear. However, setting policies about how best to deliver primary care services requires a statement of goals (and priorities among goals), as well as a statement of the best way of achieving those goals.

In terms of overall goals, the World Health Organization[7,57] suggests that all mental health policies are anchored by four goals: access; equity; effectiveness; and efficiency.

- *Access*: Service provision should meet the need for services in the community, and the right to obtain treatment should depend on need for services, not ability to pay or geographical location. This is especially important in the case of depression with reference to Goldberg and Huxley's 'pathways to care' model. There are problems in access to care in primary care, related to the fact that people do not consult as a consequence of stigma or inadequate knowledge, and a significant proportion of disorders presenting in this setting are not recognized