

8 Mental Ill Health in Primary Care

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1 Summary

Statement of the problem

Mental ill health is common. However, whilst the risk of developing any disorder is high, the type and severity of disorder varies. Most mental health is mild and self-limiting, a significant proportion is chronic and causes moderate disability and a small proportion of people suffer life-long, severely disabling illness. Whatever the type and severity, the majority of mental ill health seen by health services initially presents to, and is managed by, primary care practitioners.

Mental health policy has, until recently, focused heavily on the need to provide a range of services for those with the most severe mental illness. However, the National Service Framework for Mental Health makes primary mental health care of central importance by setting two standards that relate directly to the delivery of mental health care by primary care practitioners. There is also a requirement to develop local referral protocols and for mental health promotion to be implemented. In addition, *The NHS Plan* makes reference to primary care mental health by creating new graduate primary care mental health workers.

The effect of mental ill health on the individual, their relatives and society is profound. For the individual it can affect quality of life, the ability to work and maintain social relationships and even to live an independent life. Mental illness also makes a significant contribution to premature mortality. For families and carers, mental ill health can be a significant burden. For society, the cost of mental ill health is significant as is its impact on employment.

Sub-categories

Mental ill health in primary care ranges from symptoms that don't reach case definition for a disorder, to clear cases of mental disorder which range significantly in severity and the disability they cause. It is this wide spectrum that makes it hard to categorise mental ill health in primary care into simple groupings for service planning. Levels of care as described by Goldberg and Huxley and the ICD-10 PC (primary care) diagnosis will be used in this chapter to help group the issues under consideration.

Prevalence and incidence

Two national UK prevalence surveys have been carried out. These surveys suggest that at any one point in time approximately 16% of the general population may be suffering from a diagnosable neurotic disorder and 0.4% from a psychotic illness. There are significant differences in prevalence in sub-sections of the population. It is well known that indicators of social deprivation, such as unemployment and homelessness, are associated with an increased prevalence of mental ill health. The burden of illness in any particular general practice will therefore reflect the socio-demographics of the geographical area served by that practice. Risk factors for development of mental disorder include relationship difficulties, learning disabilities, ethnicity, pregnancy and the postnatal period, bereavement and social isolation. Many of these factors are more prevalent in inner city populations. The co-existence of mental ill health with physical disorder, other mental disorders, substance misuse and social problems is also common.

The number of cases seen by any given primary care team will reflect both the population served and practice-related factors. The actual numbers of cases that are detected, diagnosed and treated reflect a complex interplay of attitudes, behaviours and knowledge and the resultant nature of the interaction between the patient and the health professional.

Service provision

Primary care is diverse in terms of its organisation, the services offered and the professionals involved. The services for patients with mental ill health that can be provided by primary care practitioners include health promotion; assessment and detection/diagnosis; management, advice and information, treatment including medication, psychological interventions or complementary therapies and referral; follow-up and continuing care of chronic and recurring disease; rehabilitation after illness; and co-ordination of services.

Professionals working in general practice relevant to mental ill health include general practitioners, practice nurses, health visitors, midwives, community psychiatric nurses, clinical psychologists, psychiatrists, psychiatric social workers and psychotherapists. Various agencies outside the practice are also involved, including voluntary organisations and self-help groups.

A variety of models of joint working between specialist mental health, social services and primary health care teams (PHCTs) have been described, although these models describe innovative schemes that are not widely distributed. In many areas links between PHCTs and specialist mental health services are only through referral. These routes may be heavily congested, or even blocked, for those that do not have severe mental illness. The availability of explicit referral criteria or of shared care arrangements, at least in relation to depression, is sparse. Primary care, specialist mental health services and the voluntary sector may work in relative isolation from each other, particularly in the management of less severe mental health problems.

Effectiveness

Determination of the effectiveness of interventions and service models for primary care mental health provision can be difficult and mainly focuses on the severe end of the spectrum of mental health problems. Caution is required in extrapolating the evidence for efficacy in populations in contact with specialist mental health services to patients seen in primary care. In addition, there is relatively little published on the views of people using primary care mental health services, which are an important source of information to help judge the effectiveness of services.

This section summarises the evidence of effectiveness of: health promotion interventions and prevention of mental ill health; the assessment, detection and diagnosis of mental ill health; and the management of mental ill health (including GP care, pharmacological interventions, psychological interventions, self-help and complementary therapies). It also considers improving the assessment, detections and management of mental illness in primary care.

Models of care

There is a consensus that the provision of primary mental health care could be improved but how improvements should be brought about cannot be agreed. The reality is that there is no one model that will suit all practices and all patients equally, given the diverse nature of primary care and primary care practitioners. The most appropriate model for any particular PHCT is likely to be determined by a number of factors including local demography and prevalence of mental ill health; current organisation of specialist mental health services and the interest of local psychiatrists in primary care issues; the type and local availability of psychological interventions; alternative resource availability; the PHCT's interest in mental health issues and their willingness to extend their roles; and time availability of members of the PHCT to extend their role.

There are some basic questions that need to be addressed by PCTs and individual practices in developing a model of care: which mental health services they wish to provide in the primary care setting; what mix of skills they require to do so and which services they wish to obtain from external agencies. In order to help answer these questions, basic needs assessment must take place at the practice level. This information should be used in conjunction with wider needs assessment work, and mapping of local resource availability (money, people, skills and services). In order for local needs assessment to be useful it should take a holistic, multidisciplinary approach, recognising that many people with mental ill health identify their most pressing needs as employment, housing and personal relationships.

Areas that need to be addressed by a model of care for mental ill health in primary care include the effective assessment of patients, improved detection levels of mental ill health, effective management of those patients identified, the roles of relevant members of the PHCT, the interface between primary and specialist care and the involvement of the voluntary sector and community groups.

2 Introduction and statement of the problem

Introduction

Mental ill health is common and comprises disorders that range in severity from transient reactions to life events to enduring conditions affecting many aspects of psychological and social functioning. Types of disorder include mental illness, personality disorders and substance misuse. Community surveys suggest that at any point in time 23% of the population have psychological symptoms and 14–18% suffer from a mental disorder.^{1,2} Over the period of a year this rises to up to 30% of the population. Lifetime risks are significantly higher. Mental ill health will therefore affect all of us at some time; if not ourselves directly, then friends, family or work colleagues.

Whilst the risk of developing any disorder is high, the type and severity of disorder varies enormously. Most mental ill health is mild and self-limiting, much of it not reaching caseness for diagnosis of disorder. A significant proportion is chronic and causes moderate disability, whilst a small number of people suffer

life-long, severely disabling illness. Anxiety and depression affect the largest number of people, often occurring in conjunction with relationship and social problems, substance misuse or physical illness.

The majority of all mental ill health seen by health services presents to, and is managed by, primary care practitioners. As with all disorders seen in primary care, some will be dealt with entirely within the primary care setting, for example the majority of cases of depression, whilst others, such as the most severe cases of depression and many cases of schizophrenia, will also involve care provided by specialist mental health services. Inevitably, there is overlap between this chapter and the severe mental illness chapter (HCNA First series, Second edition, 2004 – chapter by John Wing). This chapter concentrates on non-psychotic disorders. Primary care provision for severe mental illness is addressed in the severe mental illness chapter, and is not repeated here. This chapter also does not cover child and adolescent disorders, learning disabilities, substance misuse (drug and alcohol) or the elderly. Most of these groups are discussed in other chapters published in *Health Care Needs Assessment: The epidemiologically based needs assessment reviews*, First series, Second edition, 2004 edited by Andrew Stevens, James Raftery, Jonathan Mant and Sue Simpson (Oxford: Radcliffe Publishing).

Policy context

Mental health policy has, until recently, focused heavily on the need to provide a range of community and inpatient services for those with the most severe illness. Specialist mental health and social services therefore prioritise these patients. The Department of Health's *Health of the Nation Key Area Handbook for Mental Illness* suggests that the role of primary care should be to help with the detection and monitoring of severe disorders and to take responsibility for the care and treatment of those with less severe illness.³ It also suggests that primary care professionals have a role in preventive activities such as education and advice giving. *Modernising Mental Health Services* highlights the need for primary care to provide mental health services and to collaborate with specialist services.⁴ This reinforces the significant emphasis of recent NHS policy on partnership.⁵ The *National Service Framework (NSF) for Mental Health* makes primary mental health care of central importance by setting two standards that relate directly to the delivery of mental health care by primary care practitioners.⁶

Standard two says that any service user who contacts their primary health care team with a common mental health problem should have their mental health needs identified and addressed, be offered effective treatments, including referral to specialist services for further assessment, treatment and care if they require it. Standard three says that any individual with a common mental health problem should be able to make contact around the clock with the local service necessary to meet their needs and receive adequate care, and be able to use NHS Direct for first level advice and referral on to specialist helplines or to local services.

The responsibility for implementing standards two and three is with Primary Care Trust (PCT) chief executives. There is also a requirement to develop local referral protocols for depression, eating disorders, anxiety, postnatal depression, schizophrenia, those requiring psychological therapies and drug and alcohol dependence. The standard set for mental health promotion has further implications for primary care practitioners.

The NHS Plan makes specific reference to primary care mental health by creating new graduate primary care mental health workers.⁷ One thousand will be trained in brief therapy techniques of proven effectiveness and employed to help GPs manage and treat mental health problems. The Plan also states that there should be a significant increase (500 across the country by 2004) in community mental health staff (now called gateway workers). These staff may work with primary care teams, NHS Direct and/or accident and emergency departments to respond to people who need immediate help.⁸

Suicide reduction remains a national priority; standard seven in the *Mental Health NSF* relates solely to it and a Suicide Prevention Strategy for England was published by the Department of Health in September 2002.

The needs of carers, including those that care for people with mental ill health, is covered in *Caring about carers – national strategy for carers*, and is also a specific standard area within the *Mental Health NSF*.⁹ The *NHS Plan* pledges to employ 700 more staff nationally to increase breaks for carers and to strengthen carer networks.

Commissioning

The majority of patients with mental ill health in primary care do not have severe disorders. This can create tension between primary care practitioner's need for advice and support in managing this group and local specialist mental health and social services that prioritise those with severe mental illness. Balancing these competing demands presents both commissioners and providers with a considerable challenge.

A minority of PCTs have taken on community mental health services in contrast to other community services.¹⁰ Evaluation of extended and total fundholding suggested that priorities for primary care commissioning were to:

- increase the number of mental health professionals attached to primary care
- increase the number of outreach clinics provided by mental health practitioners
- improve communication and information exchange with secondary care services.¹¹

User involvement, systematic approaches to needs assessment and focusing on the severely mentally ill were lower priorities in most sites analysed. Analysis of the commissioning arrangements in primary care groups in 2000 suggested that the requisite management structures and skills were in relatively short supply.¹² Evaluation of new commissioning arrangements, particularly impact on those with severe mental illness, will be essential. The way in which strategic health authorities and PCTs work together to ensure adequate services for the relatively small numbers of the most severely ill will also need to be assessed.

The burden of disease

The effect of mental ill health on the individual, their relatives and society is profound. International assessment of the extent of mortality and disability caused by different diseases suggests that depression is the greatest burden of disease for women and alcohol misuse the leading cause of disability amongst men in developed regions.¹³

Impact on the individual

Mental ill health may affect all aspects of an individual's life, producing diminution in quality of life, inability to work, maintain social relationships or live an independent life. People with chronic mental health problems, particularly mood disorders, suffer more impairment in their quality of life than individuals with chronic physical conditions such as arthritis, diabetes and back pain and there are clear inter-relationships^{14,15} (see 'Comorbidity' in section 4).¹⁶

The functional disabilities experienced by people with different disorders may vary. The UK Psychiatric Morbidity Surveys suggest that people with psychotic illness are most disabled with respect to activities of daily living, particularly activities that require systematic thinking, such as managing money.¹⁷ About half of those with depression, phobias and obsessive compulsive disorders suffer significant interference with

the ability to care for themselves, hold down a job or maintain family relationships. People with mixed anxiety and depression are also affected, but to a lesser degree.

Mortality

Mental illness makes a significant contribution to premature mortality. It shortens lives by increasing the risk of suicide and of premature death from physical causes. Overall, the number of excess deaths from natural causes is as great as that from suicide. People with eating disorders or substance misuse are at highest risk, followed by people with schizophrenia and depression.

The majority of people who commit suicide have some form of mental disorder, most frequently depression, at the time of death. It is as yet unclear why there is an association between mental illness and increased mortality from physical conditions.¹⁸ A number of factors are likely to be involved; increased risk behaviours (e.g. smoking), self-neglect, adverse environments, poor professional monitoring of physical health and/or a causal association between mental and physical ill health.¹⁹ The way in which the latter can be explained is not well understood, but in depression for example, there has been shown to be an association between coronary artery disease than cannot be easily explained by other factors.²⁰ In the US Epidemiological Catchment Area Studies this held true for sub-syndromal depression, as well as major depression.²¹ There is an increasing body of evidence linking emotional stress to changes in the functioning of the immune system that may then have an impact on physical health.²²

Impact on families and carers

Caring for people with mental ill health can be a significant source of strain on individual carers and their families.²³ The total extent of informal care provided by families and friends is significant, but unquantified. Analysis of a group of people who had started antidepressant medication for major depressive disorder suggested that at least 15% of them received help from family and friends with household activity, at an average of 8.5 hours/week.²⁴

Impact on society

Financial

The monetary cost of mental disorder is significant in terms of time off work, social security payments, consultations and drug costs. The calculation of the total cost of mental ill health is complex, given the wide range of services that may be utilised, the impact on all aspects of social functioning and on the lives of carers and families. One attempt to calculate the total cost for England and Wales, gave a figure of £32.1 billion/year, £11.8 billion due to lost productivity and employment and NHS services costing £4.1 billion (1996/7 prices).²⁵ The authors acknowledge that this is likely to be a lower bound estimate as some costs, such as housing benefit claims or elements of the criminal justice system, were not included. Primary care expenditure, from the Department of Health programme budget costing exercise, has been estimated at 3.6% of total NHS expenditure on all mental illness categories (1996).²⁶

Other costing exercises have tended to concentrate on specific diagnostic categories. In 1991, the direct costs for the treatment of depression were estimated at £420 million annually for England and Wales. Of that cost, 40% was accounted for by inpatient admission and drug costs were estimated at 11%.²⁷ The indirect cost of lost productivity was estimated to exceed £3 billion. In 1992, estimates suggested that the overall cost of schizophrenia was £2.6 billion. The health/social care costs for England were £810 million. Although the proportion is decreasing, this represented more than 5% of the total NHS inpatient costs.²⁸

Employment

The effect of mental illness on the ability to maintain normal work activities is particularly pronounced.²⁹ Up to 40–50% of days off work are thought to be secondary to stress-related problems.³⁰ The CBI and Department of Health estimate that 80 million working days are lost every year as a result of anxiety and depression.³¹ The OPCS Psychiatric Morbidity Surveys quantified the number of people out of work or permanently unable to work who had a mental illness (**Table 1**). The figures show the significant impact of both neurotic and psychotic disorders on the ability to maintain work, 10–20% of people in private households being permanently out of work irrespective of diagnosis.

Table 1: Mental ill health and work.

Disorder	Percentage of people in work	Percentage of people permanently unable to work
No disorder	71	2
Any neurosis	56	12
Obsessive/compulsive disorders	50	20
Psychosis living in private households – i.e. 82% of people with psychosis	39	21
Phobias	36	20
Suicidal thoughts	27	16
Psychosis living in long-term accommodation for those with mental illness	14	63
Neurosis living in long-term accommodation for those with mental illness	13	52

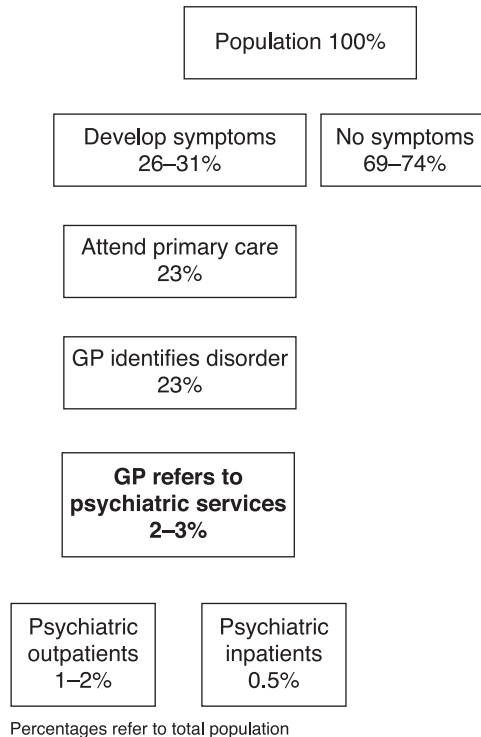
Source: OPCS survey¹

3 Sub-categories

Emotional symptoms are very common in primary care, but do not necessarily mean that the sufferer has a mental disorder. Mental ill health in primary care ranges from sub-syndromal symptoms, i.e. not reaching case definition for disorder, to clear cases of mental disorder which range significantly in severity and the disability they cause. It is the existence of this spectrum that makes it hard to categorise mental ill health in primary care into simple groupings for service planning. At its simplest this is demonstrated by the difficulties in determination of prevalence figures. Determination of the prevalence of disorder is obviously fundamentally determined by the way in which disorder is defined. Studies often use psychiatric classification systems, DSM or ICD, to establish diagnosis, or a severity rating scale to dichotomise individuals into those above or below a threshold. This is problematic, as there is considerable evidence that less severe psychiatric morbidity, commonly seen in primary care, seldom separates out into discrete diagnostic entities.^{32,33} It may be better to imagine a continuum where anxiety and depression, for example, behave as highly correlated aspects of the same disorder.^{34,35} This view is strengthened by the evidence that the health and social burden of less severe, sub-syndromal, symptoms is considerable.^{36–39}

This is acknowledged through the development of the ICD-10 PC (primary care) which uses a new nosology for mental ill health in primary care under 24 condition headings.⁴⁰

Alternate approaches to diagnostic groupings might be to look at levels of care, as described by Goldberg and Huxley.⁴¹ This model shows the relationship between prevalence of disorder and movement through levels of care; the individual recognising their ill health, consulting their GP and the action taken. Estimates of the proportion of individuals found at each tier are shown in **Figure 1**.



Source: adapted from Goldberg & Huxley.⁴¹

Figure 1: Patient flows for adult mental ill health

This provides a useful way of understanding the key relationships within the system of care, but again does not provide categories that easily inform service planning. Both levels of care and ICD-10 PC diagnosis will be used in this chapter to help group the issues under consideration. The main body of the text will address the community and primary care levels and filters of care, discussing mental ill health broadly. Some of the major groups from ICD-10 PC – depression, unexplained somatic complaints, anxiety, adjustment and eating disorders – are discussed in the appendices with cross-references in the main text.

4 Prevalence and incidence

Population prevalence is determined by community-based surveys. The majority of cases of mental illness detected in community surveys are unknown to specialist mental health services, although many will present to primary care (**Figure 1**).

Two national UK prevalence surveys have been carried out.^{1,42} Prevalence figures for various diagnoses are shown in **Table 2**. Estimates of the numbers of individuals in an average general practice list of 1800 patients are also shown.

Table 2: Population and estimated general practice prevalence of mental disorder.

Diagnosis	Weekly prevalence per 1,000 adults aged 16–64	Number of patients aged 16–64 on GP list of 1,800 (assumes 63% of GP list is aged 16–64)
Mixed anxiety and depression	77	87
Generalised anxiety	31	36
Depressive episode	21	24
All phobias	11	13
Obsessive-compulsive disorder	12	14
Panic disorder	8	9
All neuroses	160	182
Functional psychoses	4.4	5
Eating disorders	100	

Source: OPCS survey¹

These surveys suggest that at any one point in time approximately 16% of the general population may be suffering from a diagnosable neurotic disorder and 0.4% from a psychotic illness. Some commentators suggest the figures for neurotic disorder is high as sub-syndromal illness is included. There are significant differences in prevalence in sub-sections of the population. The major factors that affect prevalence are discussed in the following sections.

Factors affecting prevalence

The number of psychiatric cases in a population is strongly associated with the general characteristics of the population from which they are drawn.⁴³ It is well known that indicators of social deprivation, such as unemployment and homelessness, are associated with an increased prevalence of mental ill health.⁴⁴ The burden of illness in any particular general practice will therefore reflect the socio-demographics of the geographical area served by that practice. At its most gross, this is reflected in the differences between urban and rural areas (**Table 3**).

Table 3: Variations in prevalence of mental disorder in adults aged 16–64 living in private households in Great Britain between rural and urban areas in the UK (prevalence per 1000 adults).

Disorder		Urban	Semi-rural	Rural
Neuroses	Women	216	156	150
	Men	133	117	78
Psychoses	Women	5	5	1
	Men	6	5	3

Source: OPCS survey¹

Socio-demographic factors

There are many variables that are associated with an increased risk of an individual developing mental ill health. At a population and practice level this may help to identify high-risk groups. Some of the characteristics of adults at high risk of developing mental disorder are shown in **Table 4**.

Table 4: Risk factors for development of mental disorder.

- Relationship difficulties; divorce/separation
- Unemployment
- Learning disabilities
- Membership of certain ethnic groups
- Refugees/asylum seekers
- Pregnancy and the postnatal period
- Single parenthood
- Bereavement
- Long-term caring
- Substance misuse
- Social isolation
- Chronic, painful or life-threatening conditions
- Disabilities, especially visual/hearing impairment
- History of sexual/physical abuse
- Homelessness

Source: adapted from Mental health promotion in high risk groups⁸³

Many of the characteristics highlighted are more prevalent in inner city populations, explaining some of the increased morbidity. These and other variables are reflected in composite measures of deprivation, such as the Jarman index, which also correlate with high levels of mental ill health.⁴⁵

Comorbidity

The co-existence of mental ill health with physical disorder, other mental disorders, substance misuse and social problems is common. There is a strong, and not yet fully understood, relationship between mental ill health and physical illness (*see* 'Impact on the individual'). Forty percent of those with psychotic disorders and half those with neurotic disorders suffer long-standing physical complaints.⁴⁶ People with chronic physical illness also suffer from high rates of mental ill health, particularly depression; the rates reported

vary from 25 to 50%.⁴⁷ The prevalence of psychiatric disorder in medical patients has been estimated to be in the region of 20%.⁴⁸ Surveys also suggest that about 40% of new medical outpatients have symptoms that cannot be easily explained by physical illness.⁴⁹ At the extreme end of the spectrum are those with somatiform disorder who may attend a variety of specialists, with multiple complaints (*see* Appendix 3).

Prevalence in primary care populations

Up to 20% of the general population may have a neurotic disorder, whereas 25–50% of the people in a GP's waiting room do.^{50,51} Frequent attenders in particular show high levels of disorder.⁵² Other estimates suggest that up to 50% of those attending show at least some symptoms of depression, even if not amounting to disorder.⁵³ This contrasts with the figures reported in the UK GP Morbidity Surveys, which are much lower, around 7% of registered patients consulted for a mental illness within a survey year.⁵⁴ The majority of these consultations are for depressive illness. This highlights the relatively low detection/diagnosis and reporting rates from primary care (*see* 'Assessment, detection and diagnosis'). One in five new consultations in primary care are for somatic symptoms for which no specific cause can be found.⁵⁵

Factors affecting prevalence in primary care

The number of cases seen by any given primary care team will reflect both the population served (*see* 'Factors affecting prevalence' above) and practice-related factors. The actual number of cases that are detected, diagnosed and treated reflect a complex interplay of attitudes, behaviours and knowledge and the resultant nature of the interaction between the patient and the health professional (*see* 'Assessment, detection and diagnosis' and 'Management' in section 6).

Practice-related factors

There are a number of practice-related factors that are known to influence the numbers of patients with mental ill health attending a particular general practice.⁵⁶ The practice:

- is in a socially deprived area
- is near to group homes for people with mental illness or shelters for people who are homeless
- has partners with an interest in mental disorder
- has a significant refugee or homeless population
- is close to a psychiatric hospital that is closing.

This can lead to a skewed spread of morbidity; in one part of Central London, 32% of psychiatric service users with the most severe illness were registered with 4% of the GPs.⁵⁷

5 Services available

Introduction

Primary care is diverse in terms of its organisation, the services offered and the professionals involved. The services for patients that can be provided by primary care practitioners include:

- health promotion
- assessment and detection/diagnosis
- management, which may include follow-up and 'watchful waiting', advice and information, for example on self-help (sign posting), treatment including medication, psychological interventions or complementary therapies and referral
- follow-up and continuing care of chronic and recurring disease
- rehabilitation after illness
- co-ordination of services.

The Royal College of General Practitioners defines the core primary health care team (PHCT) as comprising general practitioners, practice nurses, community nurses, health visitors, practice managers and administrative staff. It is acknowledged that it may also be appropriate to define other staff, such as counsellors, as part of the team depending on the circumstances.⁵⁸

This section describes the professional groups that may be involved in providing primary care mental health services, the interface between primary care and specialist mental health services and voluntary sector services.

Professional groups

The number of staff working in general practice rose by 20% between 1992 and 1997.⁵⁹ A survey of representative practices in England and Wales in 1992 showed the following professionals (in addition to general practitioners, GPs) to be working on site in general practices: practice nurses (97% of practices), health visitors (83%), community psychiatric nurses (CPNs, 34%), clinical psychologists (12%), psychiatrists (9%), psychiatric social workers (6%), psychotherapists (3%).⁶⁰ A study of 82 practices in West and East Surrey reported that professionals who provided mental health services in primary care included health visitors, midwives, practice nurses and counsellors, as well as GPs. Various agencies outside the practice are also involved, including voluntary organisations and self-help groups.⁶¹ Receptionists may also have a role in mental health provision, as they are often the first point of contact between the public and the primary health care team.

Generic primary care practitioners

General practitioners

In 1999, there were approximately 33 000 GPs in England and Wales. An increase across the whole UK of 17% since 1985.⁶² The number of female GPs and female GP registrars increased significantly. In 1999, 57% of GP registrars were female.

There is an increasing trend towards multi-partner practices. In 1997, there were approximately 9500 partnerships in England and Wales. Only 10% of practices were single-handed in England and 23% in

Wales.⁶³ In 1991/2, GPs across the country saw approximately 78% of the population at least once during the year. The proportion of the population consulting had risen by 7% since 1981/2.⁶⁴

The role of the GP includes illness detection, diagnosis, prescribing, support, advocacy, information giving, monitoring health status, referral to other services and providing continuing care.

GPs vary greatly in how much training relating to mental ill health they have received. Studies consistently show a low uptake by GPs of education related to mental health/illness. A survey of 190 randomly selected GPs from 95 Health Authorities in England and Wales showed that only 35% had undertaken any course on mental health in the last three years.⁶⁵ Recent courses undertaken are often related to severe mental illness.⁶⁶ Only half of all GP trainees have completed a psychiatric training post. Many report that their training was a little value in helping them to meet the mental health needs of patients in a primary care setting. Training in psychological therapies and counselling has been highlighted as a gap.⁶⁷

Primary care nurses

Primary care nurses include practice nurses, health visitors, district and school nurses (the term 'community nurse' is being increasingly used to refer to district nurses). The provision of mental health education for primary care nurses is sparse, with the exception of training health visitors in detecting and managing postnatal depression.

- **Practice nurses:** There are approximately 40 000 practice nurse posts in the UK, a whole-time equivalent number of between 25 000 and 30 000, approximately the same as the number of GPs. Their role usually includes health promotion activities, new registration checks, assisting with immunisations and some disease-specific clinics. In some practices they may also be involved in supervising computer-administered psychological treatment. Practice nurse work patterns vary tremendously, but between 13% and 43% state that early identification of anxiety and depression is a routine task.^{68,69} They are asked for and offer advice and support, but report inadequate training for this aspect of their role. The gaps identified related to depression, anxiety and psychotropic medication.^{70,71} Many practice nurses administer depot antipsychotic medication, a role for which many have no appropriate training.⁷² A small minority have received formal mental health training.⁷³
- **Health visitors:** In 1996, there were approximately 9600 health visitors in England and Wales.⁷⁴ They provide health promotion advice and education, particularly for families with children under 5. A Scottish survey showed that 69% of health visitors had some training in mental health, most frequently relating to postnatal depression and the use of the Edinburgh postnatal depression scale, but also in anxiety management, counselling and bereavement. The majority said that they had a role in detecting mental ill health. This was mainly postnatal depression, but depression in general, assessment of the elderly, bereavement and marital problems were also mentioned.⁷⁵
- **District nurses:** In 1994, there were approximately 8500 district nurses in England.⁷⁶ Their role includes looking after the chronically ill, frail and those discharged from hospital. As a consequence they see many patients who are at risk of mental ill health, particularly arising from disability, chronic ill health or bereavement. They rarely receive mental health related training.

Pharmacists

Pharmacists can work as part of the PHCT or as community practitioners. They can help with prescribing advice for both other practitioners and patients.

Mental health practitioners

The closure of large psychiatric hospitals has contributed to the increase in community working by mental health professionals, including the increasing numbers working in primary care settings. This movement into primary care has been described as the 'silent growth of a new service'.⁷⁷ The impact on primary care workload is difficult to estimate, although there are some suggestions that, at least for some practices, it has led to an increase.^{78,79} Links between general practices and mental health professionals are now common, but unevenly spread across the country. Some practices, often large, innovative ones, have multiple links with several types of professional, while others have no links at all.⁸⁰ It has been suggested that the frequency of links relate more to a GP's interest in mental health and/or the physical capacity of the premises than to local need.⁸¹

Community psychiatric nurses (CPNs)

National policy has encouraged CPNs to target people with severe mental illness. Many, however, work with less severe disorders.⁸² A growing number of CPNs have been trained in assertive community treatment and psychosocial interventions for people with schizophrenia. Few have formal training in methods suitable for non-psychotic patients. One survey suggested that 41% of CPNs engaged in counselling in general practice had no formal qualifications in counselling, problem solving, cognitive/behavioural approaches or other psychotherapies.⁸³

Psychiatrists

The numbers of psychiatrists nationally rose by a factor of 3.5 between 1966 and 1995. The ratio of psychiatrists to GPs consequently changed over the same period from 1:32.2 to 1:12.5.⁸⁴

The current training of psychiatrists rarely includes formal attachments in primary care, or training in consultation, liaison and supervision skills that may assist in relating to and advising primary care staff.

Psychologists, counsellors and psychotherapists

The way in which these professional groups are employed in primary care varies enormously. They may be directly employed by the practice, be self-employed with contracts that are held by individual practices or be part of managed services. Alternatively, individuals may be part of specialist mental health services providing services to PHCTs.

The number of professionals employed, particularly counsellors, has increased rapidly since GP fundholding. Access to psychological therapies across the country, however, remains very varied with significant waiting lists in many areas.⁸⁵ Counsellors and psychologists are more often found in large, multi-partner, ex-fundholding practices. This distribution is likely to change with the growth of PCTs. Space availability within practices may, however, remain a limiting factor. Approximately half the practices in England employ some type of counsellor, the most commonly employed provider of primary care psychological interventions.

The experience and training of professionals providing psychological interventions is varied. Consequently, so are the types of interventions. An early study of a small number of counsellors suggested that a significant minority did not have appropriate formal training.⁸⁶ Research that is more recent suggests that the majority are appropriately trained and supervised.⁸⁷

Occupational therapists (OTs)

The work of OTs is increasingly based in the community. It is likely that GPs welcome this, although there may be lack of clarity over the nature of interventions that OTs can provide.⁸⁸ Generally OTs in primary care focus on the ability of individuals to execute activities of daily living effectively, efficiently and meaningfully. This might include helping reduce social and environmental stressors by improving coping strategies, input into employment training or enhancing social skills and networks.^{89,90}

The primary/specialist care interface

A variety of models of joint working between specialist mental health, social services and PHCTs have been described (Table 5).⁹¹ By and large, however, these models describe innovative schemes that are not widely distributed. In many areas, links between PHCTs and specialist mental health services are only through referral. These routes may be heavily congested, or even blocked, for those that do not have severe mental illness. The formal liaison schemes that do exist often focus on the provision of shared care for the most severely ill.⁹²

The availability of explicit referral criteria or of shared care arrangements, at least in relation to depression, is sparse.⁹³ Primary care, specialist mental health services and the voluntary sector may work in relative isolation from each other, particularly in the management of less severe mental health problems.⁹⁴

Community and voluntary groups

There are a variety of self-help groups for people with mental ill health and their carers. *Saneline* maintains an extensive database that provides information about local resources. They also operate a national mental health helpline which offers practical information to anyone coping with mental illness whether a sufferer, carer, family member or professional. The *Help for Health Trust* is another national source of information on self-help groups. *NHS Direct* also gives out mental health information. The *National Council for Voluntary Organisations* publishes an annual Voluntary Agencies Directory. Most national voluntary organisations are listed, indexed by subject, and those with local groups are clearly marked. The computer-held version of ICD-10-PC includes national organisations; primary care workers can add information on local self-help and voluntary sector agencies under each condition heading.

Positive examples of close partnership working between individual general practices and community organisations or volunteer members of the practice population do exist, but are relatively unusual.⁹⁵

Some voluntary organisations have developed schemes combining mutual support and educational programmes based on psychological interventions of known effectiveness, although the actual programmes may not have been evaluated. Table 6 describes some of these.

Table 5: Summary of the models of joint working between secondary mental health and social services and GPs.^{2,38,432-3}

Model	Description
Model 1: Secondary care-based CMHTs liaise with primary care	<p>Mechanisms for doing this include:</p> <ul style="list-style-type: none"> • The regular liaison meeting: A senior mental health professional attends the PHCT's meeting. Discussion focuses mostly on the management of individual patients. • The relocation of outpatient clinics from hospital to community sites. Most widely used by psychiatrists, who see both new and follow-up patients. Treatment may be relatively independent of the GP (shifted outpatient model). • The 'attached mental health professional': Professionals attached to primary care, but still employed by secondary care services. The opportunity exists for the attached professionals to be used for consultation rather than direct patient care, but this seems to be the exception rather than the norm.
Model 2: The integrated 'consultation liaison' model	<p>Specialised services are provided through secondary care with the express aim of improving the quality of the PHCT-CMHT relationship and developing the capacity of the PHCT to work effectively with people with less severe mental health problems. Components may include: joint case registers of the long-term mentally ill, development of good practice protocols, liaison practitioners attached to practices, joint audit of care, and CMHTs sectorised around practice lists rather than geographical areas.</p>
Model 3: The 'specialist function' approach	<p>The CMHT divides into specialist teams providing specific functions. These typically include crisis intervention and support, assertive outreach, continuing care, primary care liaison and psychological therapies. This latter team has the responsibility for leading the development of the relationship with PHCTs and providing services within primary care settings for people with non-severe mental illness.</p>
Model 4: The integrated model within primary care	<p>A primary care-led model which involves most aspects of community mental health care being integrated within the primary care team. Characteristics of this model include a key worker (usually a CPN) who, although part of the CMHT, is integrated into the primary care team. This person usually acts as key worker for patients in the practice, and has a role in other aspects of care, e.g. continuing education of generalist nurses. CMHTs are aligned to practice lists and there is sessional psychologist and/or counsellor time provided within the practice for the management of people with less severe mental disorders.</p>

Table 6: Voluntary and community groups offering self-help programmes.

Group	Description
Manic Depression Fellowship	With the aim of helping people prevent relapse, the Fellowship has recently developed a structured, evaluated, 10-session training programme (available for purchase) to train trainers in the self-management of manic depression. It covers awareness, coping strategies and self-medication.
Triumph over Phobia	Provide a national network of structured self-help groups using self-exposure (behaviour therapy) techniques with the aim of turning members into ex-members. People with phobias and obsessive-compulsive disorders learn, in a supportive group environment, how to measure, monitor and reduce their anxiety levels.
No Panic	Telephone helpline (01952 590545), self-help groups and telephone groups for sufferers of phobias, obsessive-compulsive disorders and other anxiety disorders, including tranquilliser withdrawal. Self-help techniques are based on cognitive-behavioural therapy.
Hearing Voices Network	There is some evidence that self-help coping methods can help users in dealing with their voices; this is particularly relevant for the large minority of people for whom medication is not effective in this respect. Details of Hearing Voices groups and of training packages for professionals who work with people who hear voices. Hearing Voices Network. Dale House, 35 Dale Street, Manchester M1. Tel: 0161 228 3896.
Eating Disorders Association	Provide a 10-week telephone self-help programme to bulimic women under the medical supervision of their GP. Participants must be normal weight for height and not abusing alcohol or drugs. The bulimic patient contacts the EDA and pays £150, which covers 45 minutes of targeted counselling by telephone weekly for 10 weeks, plus follow-up calls after one month and then three-monthly for two years. The patient agrees to eat three meals a day, keep a diary to record food and feelings, attend the GP surgery weekly to be weighed and write the weight in the diary before sending it to the EDA counsellor. GPs can suggest to suitable patients that they consider entering the scheme and may fund their programme. Contact with EDA must be made by the patient on 01603 621414 (helpline). Sackville Place, 44 Magdalen Street, Norwich NR3 1JU.

6 Effectiveness

Introduction

The limitations of research evidence

Determination of the effectiveness of interventions and service models for primary care mental health provision faces a number of difficulties that are outlined below.

- Most research is of treatments for definable, single, psychiatric conditions in inpatient or outpatient populations. Patients with less severe, mixed presentations and comorbid conditions, the kind most frequently seen in primary care, are often excluded.⁹⁶
- The typical patient taking part in research may be better motivated than a primary care patient, who may be more reluctant to accept a psychiatric diagnosis and may be less inclined to concur with suggested treatment plans.
- The nature and duration of consultations in primary and specialist mental health care differ. The average general practice consultation is nine minutes. The usual assessment consultation in a psychiatric outpatient clinic is significantly longer. In addition, in an outpatient clinic the patient has already been assessed as likely to have a psychiatric problem, at an initial appointment in primary care this has to be determined.
- The extent of morbidity in primary care suggests that interventions should be targeted at those most likely to benefit. There is still a relative paucity of research to inform prediction of poor outcome for an individual presenting with mental ill health, particularly depression and anxiety (see 'The outcome of disorder' below). The capacity to target interventions effectively is thus limited.

Considerable caution is therefore required in extrapolating the evidence for efficacy in populations in contact with specialist mental health services as against patients seen in primary care. For instance, it is known that antidepressants are effective in 60–70% of people who are treated for major depression in inpatient and outpatient settings. There is less research on the effectiveness of the same antidepressants in primary care settings.⁹⁷ It is likely that, to achieve similar rates of efficacy in this population, it would be necessary to mimic some of the characteristics of outpatient populations. This would include selecting for treatment only those patients with depression of sufficient severity (excluding those with mild depression), coupled with follow-up appointments to ensure that the medication is acceptable to the patient and actually being taken by them. Similar issues arise with respect to evidence for the effectiveness of psychological and other interventions.

The outcome of disorder

The evaluation of interventions in primary care requires some understanding of the natural history of the disorders that commonly present. Although still poorly understood, research suggests that half of all mental disorders seen in primary care are mild and transient. The other half of the common disorders (depression and anxiety) are chronic, recurrent and last longer than a year.⁹⁸ Research suggests a number of factors that may predict the resolution of disorder. Follow-up of 100 patients in Warwickshire, who were identified by their GPs as having psychiatric illness and who scored highly on the general health questionnaire (GHQ), showed 49% not to be cases at one year. Overall severity at entry was the best predictor of caseness at the end of the year. Other factors associated with continued disorder included reduced social support, previous psychiatric history, the presence of physical illness and increasing age.⁹⁹

An understanding of the chronic and relapsing nature of mental ill health in primary care, particularly depression, is important. Control groups are essential in order to take into account the proportion of

illness that resolves spontaneously. Follow-up and treatment maintenance periods need to be adequate given the chronicity often seen.

The views of people with mental ill health

There is relatively little published research on the views of people using primary care mental health services. An understanding of their views is, however, an important source of information to help judge service effectiveness.^{100,101} A study in Scotland elicited the views of members of general practice populations about the care that they expect and receive from primary care for less severe mental health problems.¹⁰² The following was found:

- most people in distress want someone to listen to them and give them time
- people derive benefit from mutual support, given by others in similar situations, although a sizeable proportion of individuals, particularly men, are reluctant to join groups
- people want a combination of different kinds of help
- men are less likely than women to look to their GP for help with emotional problems
- people expect their GP to provide a sympathetic ear and to be able to give advice
- medication is regarded with considerable caution
- people are widely aware of counselling, but are unlikely to seek it unless suggested by someone like their GP.

Published effectiveness research rarely includes consideration of these sorts of issues even at the simplest of levels, for example, giving gender breakdown.

Health promotion and prevention

The percentage of people in low-risk groups who develop mental disorder is significantly smaller than that in high-risk groups, but there are many more of them. A health promotion strategy that is targeted solely at high-risk individuals will therefore be limited in its capacity to reduce the overall prevalence of common mental disorders.^{103,104}

Strategies for the general population

Little research has been carried out in the general population. Successful preventive strategies often seek to increase the capacity of individuals to control their own lives and make maximum use of natural community support.¹⁰⁵

Some approaches have been shown to have beneficial effects.

- Promoting good social relationships, e.g. through social skills training. Relationship skills training for couples has been shown to reduce the rate of break-up and divorce.¹⁰⁶
- Developing effective coping skills, e.g. problem solving and parenting skills.¹⁰⁷
- Providing social support and making social changes, e.g. changing attitudes to bullying in schools. Multi-faceted, school-based programmes are suggested to reduce levels of bullying, vandalism, theft and truancy.¹⁰⁸
- Encouraging aerobic exercise may help mild to moderate depression and increase the capacity to deal effectively with stress¹⁰⁹ (see Appendix 1).

Strategies for high-risk groups

The evidence for effective interventions is better in high-risk groups. The following interventions have been shown to have benefits.¹¹⁰

- Antenatal and postnatal support groups have been shown to reduce postnatal depression significantly in first-time, vulnerable mothers.
- Widow to widow self-help groups have been shown to accelerate progress through stages of normal grieving.
- Promoting coping skills and offering respite care has been shown to reduce levels of strain in people caring for highly dependent relatives.
- Job search and problem-solving skills have been shown to benefit depressed, financially strained, unemployed adults with low assertiveness.
- Teaching specific parenting skills to parents of 7–8-year-old boys, identified as disruptive in school, has been shown to reduce the number of subsequent problems.

However, a population-based approach of social interventions targeted at high-risk individuals has been less successful at producing a decrease in prevalence in common mental disorders.¹¹¹

Suicide prevention

The average GP only sees one case of suicide every 4–5 years.¹¹² Early studies showed that most people who committed suicide had seen their GP in the preceding four weeks.¹¹³ Research that is more recent suggests that this proportion may have dropped to under half, 20% seeing their GP in the previous week.^{114,115} This may relate to the number of suicides in young men, who visit their GP less frequently than other groups.

Approximately 25% of people who commit suicide in England and Wales have been in contact with mental health services in the previous year.¹¹⁶ It was judged that 85% were at little immediate risk at the time of their final contact with those services, highlighting the difficulties inherent in accurate clinical quantification of suicide risk.

A small, uncontrolled, study in Gotland, Sweden suggested that improving recognition and management of depression in general practice could reduce the suicide rate.¹¹⁷ However, at follow-up these effects appeared transient. A much larger British study was unable to demonstrate any connection between training GPs in recognition and management of depression and suicide rates¹¹⁸ (see ‘Staff training and education’ below).

Evidence on the effectiveness of GPs in preventing suicide is thus contradictory. Solely providing training for GPs in identifying people at risk of suicide is unlikely to have a significant impact on the suicide rate.

Physical health of people with mental illness

The effectiveness of the delivery of physical health care for people with mental illness by primary care practitioners is not well researched. It is, however, recognised that much physical illness in psychiatric patients is unrecognised and assessment and monitoring of physical health by specialist mental health services is generally unsatisfactory.¹¹⁹ A US study suggests that using a structured approach can be effective in detecting physical illness in patients with schizophrenia. However, the subsequent impact on outcome is unclear.¹²⁰ Primary care practitioners are well placed to provide physical health monitoring and continuing care.

Assessment, detection and diagnosis

Studies suggest that, on average, GPs detect about half of the people with mental disorder (according to screening questionnaire) who present to them.^{121,122} What in actuality ‘detection’ represents is complex and related to both GP and patient factors (*see below*). Average detection rates hide wide variations between individual doctors and rates improve over time, with repeat consultations.¹²³ There is relatively less research on detection by other primary care practitioners. The rate of detection of depression by practice nurses has been reported as 23% and by health visitors 50%; the rate for district nurses is unknown.^{124,125}

GP-related factors

Case definition

Most patients seen in primary care do not have a neat constellation of symptoms that conform to case definitions. GPs have identified inadequate nosology as a factor influencing the apparent low detection of mental disorder.¹²⁶ Some authors suggest that variance in detection relates primarily to GPs differing attitudes to ascribing a psychological component to illness aetiology.¹²⁷ GPs may be reluctant to label patients, fearing rejection by the patient, given the inevitable stigma associated with a psychiatric diagnosis.^{128,129} In addition, multiple visits and assessments mean that diagnosis and management strategies are not determined at a single point in time. It may be that it is the severity of symptomatology, rather than a diagnosis, which determines management.

GP attributes and behaviour

Certain behaviours on the part of the GP are more likely to elicit symptomatology, both somatic and psychological, than are others. The factors associated with the accurate detection of mental disorder include, establishing eye contact, clarifying the presenting complaint, direct questioning about psychosocial matters and making frequent empathetic responses.¹³⁰ Doctors who are good detectors also seem to be better at giving information and advice.¹³¹ Poor interviewing skills, in conjunction with short consultations, may reduce the rate of detection of psychosocial problems.^{132,133}

GP knowledge and training

It has been suggested that both post-graduate training in psychiatry and an interest in psychiatry improve the capacity of GPs to detect mental ill health. Doctors with high levels of psychological sensitivity, however, also score better in tests of factual knowledge of medicine, suggesting a generalised, rather than specific, competence.^{134,135}

Patient-related factors

Presentation

Detection is affected by the way in which patients present their problems. Generally, the combination of physical complaints and mental ill health impedes recognition of the latter.^{136–139} In one study GPs recognised half of the patients who complained of somatic symptoms who could be persuaded to reframe them in psychological terms, but only 19% of those who complained of somatic symptoms who were

highly resistant to recognising the psychological component. Only 11% of those who presented with physical illness and coincidental mental health problems were recognised.¹⁴⁰

Other aspects of presentation are also important. Patients who tend to normalise their symptoms, i.e. minimise their importance, are common in general practice and are less likely to have their depression and anxiety diagnosed.¹⁴¹

Other factors

Higher rates of identification of psychological disorder have been reported in women, the middle age groups and the unemployed.^{142–146} Severe disorders tend to be recognised more frequently.^{147–154}

Doctor/patient interaction

The interaction between doctor and patient is clearly important in the detection and management of disorder. It has been suggested that patients give more cues to the doctor when the doctor uses an open interview style, good eye contact etc.¹⁵⁵

It is also possible that patients self-impose restraints on the length of consultations that could impede recognition of mental ill health.¹⁵⁶

Management

General practitioner care

Given the transitory nature of most mental ill health in primary care, the most appropriate management strategy in cases where there is no clear-cut disorder may well be to continue to provide good quality 'treatment as usual'. This may include listening, reassurance, information giving, negotiating the causes of symptoms, advising about coping strategies, homework diaries and follow-up visits. This sort of follow-up approach is sometimes referred to as 'watchful waiting'. Whilst this area is relatively under-researched, one study suggests that this approach may be effective for about half the people with 'minor affective disorders'.¹⁵⁷

'Treatment as usual' is often used as a control group for studies of mental health interventions in primary care (see 'Psychological interventions' below). A meta-analysis of studies comparing treatment (including counselling, behavioural therapy and general psychiatry) by mental health professionals in general practice surgeries with 'treatment as usual' has suggested that mental health professionals of all kinds have a 10% greater success rate than the 'treatment as usual' group.¹⁵⁸ Further research in this area is needed.

Pharmacological interventions

The effectiveness (shown in RCTs) of the major groups of drugs used in the treatment of mental ill health in general practice is summarised below.

- Antidepressants are effective, at least when used in recommended doses, although there remains controversy over the relative cost-effectiveness of different classes of drugs. Antidepressants are most effective in severe episodes of depression. Concern over the adequacy of primary care prescribing with respect to both dose and duration is regularly highlighted in research.¹⁵⁹ Some practitioners advocate low-dose prescribing. However, robust evidence for its effectiveness is lacking (see Appendix 1).¹⁶⁰

- Antipsychotic drugs are effective for the treatment of initial episodes of psychosis, for maintenance of remission and for the treatment of relapse.
- Mood stabilising drugs, such as lithium and carbamazepine, are effective in bipolar disorder.
- Anxiolytics, predominantly benzodiazepines, are useful in the very short-term treatment of anxiety disorders or as short-term hypnotics (*see* Appendix 2).

Primary care nurses and pharmacotherapy

Primary care nurses are often involved in depot neuroleptic administration. Their current effectiveness in this role must be questioned as it has been found that they may not be actively involved in monitoring symptomatology or drug side effects. In addition, in many cases, their knowledge of schizophrenia, its treatment and of drug side effects may be limited. This suggests the need for training, if they are to provide this function.^{161,162}

Practice nurses may also be involved in follow-up of patients on antidepressants. Some studies have suggested that there is little difference in adherence to medication and outcome in patients followed-up by nurses and GPs.^{163,164} However, an RCT has suggested that nurse-led drug counselling and information leaflets can improve outcome for those with major depression.¹⁶⁵ Trained practice nurses can also increase the proportion of patients who receive psychotherapy or pharmacotherapy for major depression.¹⁶⁶

Psychological interventions

A wide range of psychological interventions is available, and clear evidence for the effectiveness of some.^{167,168} The short-term effectiveness of cognitive/behavioural techniques, problem solving, interpersonal therapy and counselling in eating disorders, depression and anxiety disorders has been shown (*see* relevant appendices). Cognitive approaches may also be effective in the prevention of relapse, as well as an initial treatment for mild to moderate depression.¹⁶⁹ Longer-term outcomes for effective therapies in primary care are, however, less clear.

The effectiveness of counselling in primary care has received considerable attention and continues to provoke debate, although there is now more research in the field. Research has suggested the following.

- Counselling without additional interventions such as practical help, mutual self-help or training in coping skills has not been shown to produce sustained benefits in high-risk groups.¹⁷⁰
- Brief counselling compared with routine GP care in an RCT found that GPs were as effective as counselling. Patients, however, preferred the counselling.¹⁷¹
- CPNs providing unstructured, supportive counselling to patients in primary care showed no benefit over routine GP care and intervention was costly.¹⁷²
- Brief counselling by an experienced mental health professional compared with antidepressant use in primary care showed no significant differences in effectiveness between the two groups (RCT).¹⁷³
- Similarly, a brief problem-solving approach has been suggested to be as effective as pharmacotherapy for major depression in primary care at 12-week follow-up (RCT).¹⁷⁴
- More rigorously applied non-directive counselling compared to cognitive-behavioural counselling (in combination with antidepressants if prescribed by the GP) and usual GP care showed better self-reported outcomes for both therapy groups at four months, but not at 12, with no significant increase in cost.¹⁷⁵

The apparent effectiveness of brief therapy approaches is important because of their potential to be widely applied in the primary care setting. Further work is needed on the impact of patient preference, (usually for counselling, which can reduce randomisation in published trials), the impact of severity on outcome,

comparison of generic counselling with more standardised specific approaches, long-term outcomes, cost-effectiveness and primary care practitioners as therapists.

Therapist characteristics

Although there is clear evidence for the effectiveness of some psychological therapies, this is in part determined by their being delivered by appropriately trained and supported professionals. **Table 7** summarises the key characteristics of effective therapists. Research suggests that the single best predictor of a positive outcome is the establishment of a good 'therapeutic alliance' or working relationship between therapist and client.

Table 7: The factors that make psychological therapists effective.

Factor	Comments
Effective intervention is used	The effectiveness of different types of mental health professional depends not on the professional group to which they belong but on whether they are trained to provide interventions of proven effectiveness.
Quality of delivery of the intervention	Effectiveness is linked to the training and experience of the practitioner in the therapies used. It is not linked to the possession or otherwise of a professional mental health qualification.
Therapist and patient able to make a 'therapeutic alliance'	Not all therapists can work with all patients. There is some evidence that better outcomes are achieved where patient and therapist come from similar backgrounds. This has particular implications for therapy for people from minority ethnic communities.
Patient characteristics and preferences taken into account	Matching patients to their preferred treatment results in fewer treatment drop-outs and better clinical outcomes. Patients may prefer a shorter treatment or may be more or less willing to explore their life experiences.

Self-help

Some voluntary self-help groups have developed self-help programmes, others are available for use on computers or are taught in classes in general practice. Research is still at an early stage, but promising results include:

- Interactive, CD-ROM cognitive behavioural therapy and assisted bibliography for anxiety have been developed and piloted in GP surgeries. A small amount of staff supervision is required. A similar approach, BT Steps, uses the telephone to provide computerised help for people with obsessive-compulsive disorder.^{176,177}
- Use of a self-help manual is an effective first step in the treatment of bulimia. In a study comparing individual cognitive/behavioural therapy, the use of a self-help manual and a waiting list control group, almost as many people using the self-help manual obtained full remission as the therapy group (see Appendix 5).¹⁷⁸
- Teaching self-care skills (relaxation, stress management, meditation, nutrition and exercise) to people with anxiety and medical conditions thought to have a psychological basis may lead to significant improvements. These were maintained at one-year follow-up (see Appendix 2).¹⁷⁹

Self-help approaches appear to be popular with patients and can extend clinician capacity. They are not, however, a substitute for professional help. Further evaluation of their use in primary care is required, using larger study numbers and examining their cost-effectiveness.¹⁸⁰

Complementary therapies

Research, policy and practice in relation to the use of complementary and alternative therapies for a wide range of mental health problems was reviewed in 1998.¹⁸¹ The strongest effectiveness evidence currently available is for hypericum or St John's Wort (which has monoamine oxidase inhibitor properties), with some evidence for exercise and transcendental meditation (*see Table 8*).^{182,183} More robust research, with larger sample sizes and longer follow-up periods, is needed to confirm reported findings.

Table 8: The effectiveness of complementary therapies.

Type of therapy	Disorder	Outcomes	Type of research
Transcendental meditation	Anxiety and distress, including PTSD	Reduction of anxiety, significantly more effective than relaxation methods	Case reports and clinical trials
Acupuncture	Anxiety and depression	Claimed as effective as amitriptyline	RCTs, but doubts expressed as results of Chinese research are said to be always positive
Hypericum (St John's Wort)	Mild to moderate depression	As effective as antidepressants, fewer side effects	Review of RCTs
Healing	Chronic anxiety and depression	Improved scores on quality-of-life questionnaire	Small outcome study, no control group
Massage	Anxiety and depression	Lower anxiety and depression scores	Small, controlled trials
Aromatherapy – citrus oils	Severe depression	Replaced antidepressants in sample group	Small, controlled but not blind trial
Reflexology	Anxiety	Drop in self-rated anxiety	Small, controlled trial
Hypnotherapy	Bulimia	As effective as CBT	Small, controlled trial
Exercise and yoga	Anxiety and depression	Reduced depression using BDI, reduced stress	Review of RCT, but methodological limitations

Improving assessment, detection and management in primary care

Current approaches to reducing the individual and public health burden of mental ill health depend largely on attempts to increase recognition rates and apply treatments more effectively through primary care.^{184,185} Improving detection is only a valid activity if it can be shown that outcome is also improved. There is some evidence that this is the case, although it is disputed.¹⁸⁶ A European, naturalistic study on the

impact of detection and treatment of depression in primary care showed that at one year follow-up 60% of those treated were still cases, as were 50% of those that were not detected, although these cases were less severe.¹⁸⁷ A smaller study suggested that patients with major depressive disorder, who were not recognised, had a worse outcome at three months than those prescribed moderate doses of antidepressants.¹⁸⁸ Similarly, patients whose GPs were optimistic about their outcome and did not prescribe antidepressants fared worse than those who were treated.¹⁸⁹

Studies looking at methods for changing clinical practice consistently indicate that a range of different methods are likely to have more effect than any one intervention on its own.¹⁹⁰ There are many approaches to changing practice including: educational materials, conferences, outreach visits, utilising local opinion leaders, patient-mediated interventions, reminders, marketing, local consensus processes, guidelines, audit and feedback. Evaluation of different approaches suggests that the effectiveness of interventions may be improved by:

- using the practice premises as the venue for continuing education, so that activities can focus on using practitioners' own experience¹⁹¹
- ongoing training schemes, with learning reinforced at intervals¹⁹²
- ensuring that education is 'owned' and desired by the learner, is connected to any changes in service provision and is accepted by the team as a whole
- delivering training to the whole PHCT, rather than individuals.¹⁹³

Attempts to improve detection and treatment of mental ill health have adopted a number of approaches:

- screening
- training and education, particularly education from 'experts' using educational materials such as consensus statements or clinical practice guidelines^{194,195}
- consultation/liaison by specialist mental health practitioners¹⁹⁶
- audit and feedback¹⁹⁷
- multi-faceted interventions.

The following sections address some of these approaches in greater detail.

Screening

Many opportunities exist in primary care to screen for mental ill health, for example at new patient, well woman, well man, elderly and antenatal checks and during child health surveillance. Research suggests the following:

- few GPs use formal screening tools for depression or assessment of suicide risk¹⁹⁸
- screening for risk factors for depression and anxiety during, for example, new patient interviews is acceptable to both patients and practitioners¹⁹⁹
- however, case finding for depression and anxiety, using screening questionnaires such as the GHQ or HAD, followed by GP treatment of identified cases, has not been shown to lead to improved outcome when used routinely^{200,201}
- the Edinburgh postnatal depression scale is widely used by health visitors and community midwives and it offers a reliable method of detecting clinically significant depression in postnatal women.^{202,203}

The lack of demonstrable effectiveness for routine, unselected screening is likely to be the result of a number of factors.²⁰⁴

- Recognition by clinicians of the high rate of false positives produced by screening questionnaires and their consequent reluctance to use them.

- Clinicians may be unsure how to manage cases identified. Feedback on cases found by screening is found to be most effective when accompanied by an educational programme and another agency taking responsibility for management.
- There may be methodological issues of cross-contamination, i.e. because the clinician is aware that they will receive screening information feedback on some patients they may manage all patients differently, thus diluting any benefit.

Despite these negative findings some suggest that screening questionnaires may be useful by helping GPs confirm a diagnosis, agree that diagnosis with the patient and for monitoring progress.^{205,206}

Staff training and education

Research suggests that improvements can be made in clinicians' ability to detect disorder. This is at least true for selected groups of doctors, undergoing intensive packages of education, which have acquisition of skills as their foundation.

- Before and after evaluation of intensive video feedback education with small groups of GPs and GP trainees shows that psychiatric skills can be improved. Improvement in clinical outcome has also been shown for patients with depression and anxiety. Patients felt that their problems were better understood.²⁰⁷ The length of interviews apparently does not differ between the trained and untrained groups.²⁰⁸
- Training GPs in re-attribution skills, i.e. helping patients recognise the psychological causes of apparently physical problems, can result in significant improvements in both the symptoms and social functioning of patients. Reduction in health care expenditure can also be achieved through reduction in referrals of nearly a quarter, without corresponding increases in primary care costs.²⁰⁹
- Skills to improve the assessment and management of suicide risk can be taught, and GP confidence increase.²¹⁰

It is unclear, however, whether these approaches can be generalised to less motivated practitioners and to larger groups. Experience with more didactic approaches to education has, despite initial optimism, not been shown to have lasting effects. Some uncontrolled studies have suggested that it might be possible to deliver effective educational programmes to larger groups.

- In Sweden, all GPs on the island of Gotland ($n=18$, population 60 000) were educated using a didactic seminar approach delivered by a psychiatrist.²¹¹ A reduction in sick leave for depression, hospital referrals and suicide rates was shown compared to the mainland. There was also an increase in antidepressant prescribing which was maintained over four years.
- In the UK, a nurse-led, practice-based educational programme was been shown to produce a 7% increase in the recognition of the psychological nature of illnesses by GPs.²¹²

The results of the Hampshire Depression Project have not been so promising.²¹³ The project covered 60 practices in Hampshire and aimed to increase adherence to a depression management protocol. After participation in the seminars 80% of GPs agreed that they would change their management of depression. No differences between educated and control groups in the GP's recognition of depression were found. The group of patients who were recognised as depressed by the GPs were more likely to have improved six weeks later if their GP had recently completed the seminar education, but at one year there was no difference between groups. Similar negative findings have been reported from the US.²¹⁴

These findings emphasise that the production of guidelines and didactic teaching are unlikely to be sufficient to make a significant impact on the outcomes of mental ill health in primary care. Future educational programmes might usefully concentrate on skill acquisition and better management rather than detection alone (*see* 'Consultation/liaison' below). Other issues that need to be addressed are the

reliance of many training courses on the enthusiasm of a particular researcher/trainer delivering training to a motivated, self-selected group of participants. This has implications for further dissemination by less motivated trainers and to less motivated learners.²¹⁵

Consultation/liaison

In contrast to the educational model of improving care there have been good outcomes from two randomised-controlled studies in Seattle using a multidisciplinary model; intensive patient education, behavioural interventions from a psychologist, medication adherence counselling and alternating visits between primary care physician and psychiatrist.^{216,217} The outcome of major depressive disorder was clearly improved up to seven months later. The same research team has also shown, in a randomised trial, that systematic follow-up and care management advice by telephone can significantly improve outcomes in GP treatment of depression (intensity of antidepressant treatment and in clinical outcomes). Simple monitoring and feedback about cases did not produce this effect.²¹⁸ The cost-effectiveness of such models for the UK is unclear. Despite improved outcomes, it is unlikely that the intensive mental health professional model would be routinely affordable. Treatment costs have been estimated to increase from £187.50 to £375 per patient.^{219,220} Care manager support by telephone is, however, significantly less costly (approximately £50 per patient) and may therefore be more generally applicable.

Multi-faceted interventions

It seems that models that target several aspects of disease management, at least for depression, may prove most beneficial.²²¹

Training in psychological interventions

Primary care practitioners can be trained to deliver effective, specific, brief psychological therapies effectively. The capacity to develop primary care practitioners to deliver appropriate psychological interventions is important given the pressure on specialist mental health services.

General practitioners

GPs have been trained to use behavioural and educational interventions successfully in depression, somatisation and obsessive/compulsive disorder.^{222,223} GPs receiving extensive instruction in cognitive/behavioural approaches have been shown to produce good patient outcomes. However, GPs receiving only brief training have been shown not to be more effective in helping patients with depression.²²⁴

Practice and community nurses

The following interventions have been reported to be effective when delivered by nursing staff:

- assessment and management of patients with generalised anxiety, phobia and panic attacks using a range of anxiety management skills²²⁵
- structured problem-solving treatment for major depression in primary care (delivered by practice nurses)²²⁶

- nurse-administered behaviour therapy, which been shown to be significantly more effective in primary care for phobic and obsessive compulsive disorders than ‘care as usual’, with gains still apparent at one-year follow-up²²⁷
- non-directive counselling leading to significant improvement in the mental health of mothers at three months compared with controls, using trained health visitors and the Edinburgh postnatal depression score.²²⁸

The primary/specialist care interface

There are many evaluations of particular service models of primary/specialist care mental health working, but no comparative evaluations. It is probable that the success of a particular model will depend on factors such as local ownership and leadership. Particular models may not, therefore, be transferable in their entirety. The process of involving all parties and reaching agreement on the model to be adopted is therefore important. One clear and important finding, from a review of a large variety of models of organisation at the interface undertaken in Seattle, is that links must be both personal, involving face-to-face communication between clinicians, and maintained over a prolonged period.²²⁹ No ‘one shot’ intervention is successful, as gains are lost once the intervention ends.

Evaluation of various models suggests the following.

- Psychiatrists tend to favour the consultation/liaison model, whereas GPs and PHCTs rate provision within primary care as more satisfactory than services provided elsewhere.²³⁰
- GPs’ attitudes to shared care models have probably become less favourable over time.²³¹
- Moving the base of community mental health teams to primary care may be associated with an increase in the caseload of specialist mental health workers, both in the long-term mentally ill and patients with less severe disorder.²³²
- Introduction of a link worker system between a community mental health trust (CMHT) and practices in inner London showed no improvement in staff morale in comparison to a non-integrated service.²³³
- Basing CPNs in general practice (retaining strong links with the CMHT) and employing nurse behavioural therapists (who provided specific treatments mainly for patients with severe neurotic illnesses) resulted in the majority of CPN visits being to patients with major psychosis. It is not clear if the focus of the CPNs on the severely mentally ill was facilitated more by their relationship with the CMHT or by the existence of the alternative resource provided by the nurse behaviour therapists.²³⁴

Community and voluntary groups

It is likely that the growing number of volunteer schemes in general practice contributes positively to the mental health of the practice population, but this has not been formally studied. This is particularly likely given the interest of patients in mutual support. There is some evidence from an RCT that the voluntary sector can benefit those with psychosocial problems who present to primary care.²³⁵

Specific disorders

Table 9 outlines the effectiveness of interventions for depression, anxiety disorders, eating disorders and unexplained somatic complaints. Further detail is in the relevant appendices.

Table 9: Summary of the effectiveness of interventions for specific disorders.

Diagnosis	Prevalence	Efficacy of drug treatment	Efficacy of non-drug treatments
Anxious depression	High	A I-1	A I-1
Pure depression	Medium	B I-2	A I-1
Generalised anxiety	Medium	B II-1	A I-1
Panic disorder	Low	A I-1	A I-1
Obsessive compulsive disorder	Very low	A I-1	A I-1
Phobias	High	C IV	A I-1
Unexplained medical symptoms	High	A I-1 (if depressed)	A I-1
Eating disorder – mild	High	C IV	A I-2
Eating disorder – severe	Very high	C IV	B III
Adjustment disorder	High	None	None
Bereavement	Low	None	BIII

Source: adapted from Goldberg and Gourney (1997)⁸⁴

7 Models of care and recommendations

Introduction

There is a consensus that the provision of primary mental health care could be improved. There is, however, often disagreement about how that improvement should be brought about. It is somewhat simplistic, but not inaccurate, to say that the view of many primary care staff has been that improvements should come via more staff in primary care, whether counsellors, clinical psychologists or CPNs, and the view of some secondary care professionals and some academics is that improvement should come about via training primary care professionals in mental health care. The rationale for the latter approach has been the mathematics of the numbers of mental health professionals compared to the number of people with mental ill health. The reality is that there is no one model that will suit all practices and all patients equally, given the diverse nature of primary care and primary care practitioners. The most appropriate model for any particular PHCT is likely to be determined by a number of factors:

- local demography and prevalence of mental ill health, including the numbers with serious mental illness, which may be affected by factors such as the number of nursing homes or institutions
- current organisation of specialist mental health services and the interest of local psychiatrists in primary care issues
- the type and local availability of psychological interventions
- alternative resource availability, including local voluntary sector provision, self-help groups etc.
- the PHCT's interest in mental health issues and their willingness to extend their roles
- time availability, i.e. the reality that members of the PHCT could extend their role.

Local discussion of these issues is essential in order to develop primary mental health care.

PCT/practice activities

Essential PCT and practice-based activities to develop mental health services include:*

- needs assessment
- team working, communication and networking both with PHCT members and other agencies
- supervision, teaching and professional development
- developing guidelines and protocols, information management and developing and maintaining patient resources.

Irrespective of the model of care that may exist or be desired, there are some basic questions that need to be addressed by PCTs and individual practices: which mental health services they wish to provide in the primary care setting; what mix of skills they require to do so; and which services they wish to obtain from external agencies. In order to help answer these questions, basic needs assessment must take place at the practice level. This should include:

- analysis of current prescribing of psychotropic drugs
- analysis of referrals to specialist and other mental health services
- analysis of CPA data
- mapping of current mental health caseloads of primary care practitioners
- reviewing information on patients known to have severe and enduring mental illness (prescribing information, CPA data, review of caseloads, mental illness diagnosis from practice computer etc.)
- ensuring that there is an accurate register of patients under the care of specialist mental health services
- reviewing the roles, skills and training needs of the PHCT in relation to mental health issues.

This information should be used in conjunction with wider needs assessment work and mapping of local resource availability (money, people, skills and services). In order for local needs assessment to be useful it should take a holistic, multidisciplinary approach, recognising that many people with mental ill health identify that their most pressing needs are employment, housing and personal relationships.^{236,237}

Assessment, detection and management

Research that might guide redesigning services in primary care is, as yet, at an early stage. Studies on training have focused on improving recognition and prescribing for depression or on the feasibility of primary care staff extending their role to provide particular, time-limited, short-term psychological interventions. The factors already outlined, as well as resource availability, will dictate the extent to which these may be adopted. There is some evidence to suggest that developing the PHCT's understanding of caseload management and exploring the potential for referrals within the team can create better use of resources.²³⁸ Equally, the involvement of the whole practice team in managing common mental disorders may lead to improved patient outcomes and an increased sense that mental health care is 'under control' and therefore less stressful. Local skill-based courses on common mental disorders may therefore be appropriate. Using a chronic disease management model may improve management for those with severe illness, although motivation and resources within the practice are likely to have an impact on how effective this can be.²³⁹

Generally, the management of service change in primary care can learn from generic approaches to change management. For example, implementation of multi-agency change is assisted by the use of

* NatPaCT has been established to assist PCTs in becoming 'fit for purpose'.

external facilitators; time out for planning meetings; drawing up detailed action plans; commitment from senior management and effective communication.²⁴⁰

The detection and management of physical ill health in those with severe and enduring mental illness should be addressed. Opportunistic health promotion is possible given the relatively high consultation rate for this group of patients.²⁴¹ The development of special health promotion clinics addressing a range of issues such as exercise, screening for physical ill health, smoking and medication side effects is an alternative approach.

General practitioners

It is clear that no matter how specialist mental health care is organised, a significant amount of general practitioner time will be spent in dealing with mental ill health. It is therefore reasonable to suggest that all GPs have training in the detection and management of those disorders, such as anxiety, depression and somatisation, that they will see commonly. Skill-based approaches seem to show the most promise with respect to training and changing practice. It may also be reasonable to offer longer consultations to people with psychological or social problems; patients appreciate longer booking intervals.²⁴² Given that consultation length, open consulting style and continuity of care may all contribute to improvements in detection and management, methods of developing and monitoring them should be discussed. GPs with a special interest in mental health could also be employed within multi-partner practices and/or across PCTs.

Primary care nurses

There have been many suggestions for the role that primary care nurses could usefully play in mental health care, for example using problem-solving techniques and monitoring medication. However, a recent Scottish study showed that, with few exceptions, GPs do not favour practice nurses taking on a further mental health role. In addition, whilst district nurses are aware of, and sympathetic towards, mental health ill health, they too are under time pressures and their caseload often requires that priority is given to physical procedures. Health visitors may be better placed to expand their mental health role, as some already have training in mental health issues and many would like to extend their mental health role.

In order that changing/extending the role of primary care nurses is a valid endeavour, further research is needed. So far only training health visitors in the use of the Edinburgh postnatal depression scale and non-directive counselling has been shown to definitely improve patient outcomes.

Whilst extending roles may be desirable it is also clearly important to support nurses in the roles they already carry out, in particular practice nurses that are engaged in giving depot injections and assessing those with less severe mental illness.²⁴³

Some have advocated the development of primary mental health nurses who have a unique set of skills and expertise.

Psychological therapies

Overall, it is clear that there is a need to increase the availability of psychological interventions for patients in primary care.

The research literature suggests that there are a number of recommendations that can be made with respect to the provision of psychological interventions in primary care.

- No one therapist is likely to be able to deal with the full range of problems and disorders seen in primary care. A service needs to offer a variety of types of intervention and a variety of gender and

background of practitioner. Taking account of the client's view is an important part of the decision to treat.

- Therapists working as individuals in primary care need to be trained in a variety of types of intervention and be able to adapt their approach to the patients' needs.
- Skilled assessment at the point of referral is crucial to a successful outcome.
- The range of therapies available locally should include cognitive/behavioural and problem-solving approaches.
- Counsellors and therapists need to be appropriately trained and accredited and with regular ongoing clinical supervision.
- Special arrangements or services may be required for members of ethnic minorities.
- Skilled therapists should treat complex conditions.
- Clinical audit and service evaluation should be integral parts of service provision. The development of a core outcome measure for psychological therapies should aid this.²⁴⁴

General Practitioners

GPs can provide effective interventions with appropriate training. However, competing priorities/interests and the need for training may mean that this will only be appropriate for some.

Counsellors

With appropriate training and supervision counsellors can provide specific psychological interventions to people with disorders such as chronic fatigue, drug and alcohol misuse, milder eating disorders, somatisation and phobias. They could also play a role in education and support of other PHCT members.

Graduate mental health care workers

The precise role of the new graduate mental health care workers is currently being defined.²⁴⁵ The potential for these workers to provide effective interventions may offer one avenue for expanding services for individuals suffering mild or moderate mental ill health caused by emotional, social and domestic difficulties. Befriending, support groups and the provision of practical and emotional support to people who are elderly, socially isolated, bereaved or recently unemployed might prove more cost-effective than specialist mental health care. There may also be a role for them in helping practice team work such as audit, maintenance of registers and outcome measurement. They could also help to develop wider mental health networks with other organisations and agencies.

A new professional organisation for counsellors, Counsellors in Primary Care, is currently setting standards (see www.cpc-online.co.uk).

The primary/specialist care interface

The varied nature of both general practice and of CMHTs means that the key word in ensuring adequate liaison and good working practices is flexibility. Teams at both primary and secondary care levels will have to find the most appropriate ways to work together. It is possible to make some generalisations about where certain disorders may be managed (**Table 10**), but the specifics will need to be agreed locally.

Table 10: Disorder, treatment effectiveness and management settings.

Group of disorders	Types of disorder	Chance of spontaneous remission	Primary/secondary care management
Severe mental illness for which a range of treatments is appropriate	Schizophrenia, bipolar, severe eating and organic disorders	Unlikely to remit spontaneously and associated with major disability	Care should usually involve both primary and secondary care practitioners, family involvement and other agencies
Well defined disorder – effective pharmacological and psychological treatments available	Depression ± anxiety, some anxiety disorder	May remit, but relapse common, associated with disability and some cases become chronic	Primary care management usually sufficient, chronic or treatment resistant cases should be reviewed by the CMHT
Defined disorder where psychological therapies may be effective, but drugs have a more limited role	Unexplained somatic complaints, panic disorder with agoraphobia, fatigue states	Spontaneous remission can occur with all these disorders, but chronicity develops in a substantial proportion	Rarely treated in primary care, a small proportion treated by CMHTs Increased availability of psychological therapies in primary care would allow many to be effectively managed
Specific mental health interventions not necessary	Adjustment disorders, bereavement reactions	Usually resolve spontaneously	Supportive help from primary care/self-help groups/voluntary sector usually sufficient

Source: adapted from Goldberg and Gourney (1997)⁸⁴

A number of practical activities have been found, in practice, to improve liaison, communication and clinical care.²⁴⁶ These include:

- liaison workers operating between primary and specialist mental health care: clear job descriptions, identified time to carry out the liaison role and support systems are essential
- joint strategies for improving communication between the teams
- jointly agreed referral criteria
- shared care protocols for specific conditions (similar to those developed for diabetes), including jointly agreed strategies for responding to crisis situations
- joint case registers of people receiving care from both teams
- provision of advice to GPs about patients whose care remains with the GP
- provision of training to primary care staff in the recognition and management of mental disorders
- joint health promotion between practice nurse and CPN
- service directories to assist in identifying local sources of help.

Models of working can be combined, for example, link workers and separate function community mental health teams. Others provide psychological therapies and support to the PHCTs in the use of psychological interventions for less severe mental ill health. Where CMHTs have developed separate functions, there is a danger of the team providing psychological and social therapies to primary care patients becoming

overwhelmed. It should therefore be combined with clear referral protocols, plus a programme of support and education to the PHCTs.

The PHCT and social work

A responsive working relationship between primary care and social services may be facilitated by:²⁴⁷

- care managers being attached to PHCTs
- coterminosity of boundaries
- a local 24-hour mental health officer service
- a rapid response to requests for help in crises or breakdown of care packages
- a contact telephone number in every care plan.

Where social workers are fully integrated into CMHTs, GPs may relate to social workers as key workers for their patients.

Non-specialist social workers are often involved with families where less severe mental ill health is present. In these cases there is unlikely to be any formal mechanisms for communication and liaison with GPs. Consequently local discussion should take place to determine how best to facilitate information exchange.

Voluntary and community groups

Improving links between primary care and the voluntary sector may also be of benefit for those with less severe mental ill health. It is likely that there would need to be an attitudinal shift and greater availability of information about the effectiveness of local services to enable GPs to make best use of such resources. Establishing personal contacts may be helpful as a starting point to overcoming barriers.*

8 Outcome measures

Much has been written about quality in primary health care and the approaches that can be taken to improving it.²⁴⁸ PCTs have a role in defining, accounting for and improving the quality of mental health provision under clinical governance, whether provided by primary care or by specialist mental health services. Fundamental to the success of clinical governance will be the extent to which there is sharing of beliefs and values, appropriate training to ensure that practitioners can undertake this work and the establishing of structures and processes needed to monitor and co-ordinate quality.²⁴⁹ The generation and monitoring of standards of care is clearly a key part of this agenda. Given that no one model of care can be recommended, it is likely that this process will concentrate on process and outcome rather than structure. The measurement of quality for primary care mental health interventions and services is still in its infancy.²⁵⁰ Attitudes to appropriate measures differ between different stakeholders. A recent Delphi Survey found agreement on only 26% of measures. However, some measures could be used to form the basis for local discussion.²⁵¹ A number of approaches to developing primary care mental health services have been published recently.**

* *How to work with self-help groups: Guidelines for professionals* by Judy Wilson (1996) is a useful resource.

** Primary care mental health education (PrimHE), Dr Chris Manning (www.primhe.org).

Whilst all issues need to be addressed at a local level, it may be helpful for the following areas to be considered for quality monitoring.

Needs assessment

- Local needs assessment, including incorporation of the views of users and carers.
- Availability of a directory of local services.

Assessment, detection and management

- Consultation length and content.
- Continuity of care, patients being followed up by the same GP for at least an episode of illness.
- Benzodiazepine prescribing.
- Lithium prescribing and monitoring.
- Antidepressant prescribing, including dosage.
- Repeat prescriptions of antipsychotic medication and recording if no new assessment has taken place.
- Protocols and training for practice nurses administering depot injection.
- Protocols and training for HVs in postnatal depression.
- Physical health checks for patients with long-term mental ill health.
- Patients with mental ill health for whom social issues have not been addressed (relationships, housing, employment etc.).
- Shared care plans with specialist mental health services.
- Proportion of primary care staff with training in interviewing techniques, e.g. problem-based interviewing.
- Proportion of GPs and other primary care practitioners with recent training in the detection and management of depression, anxiety, unexplained somatic complaints or eating disorders.
- PHCT involvement in Mental Health Act assessment and CPA.
- Training for reception staff in mental health awareness/dealing with bizarre/aggressive behaviour.
- Psychological interventions – the proportion of primary care practitioners who:
 - provide psychological interventions and have had accredited training in a modality that has shown to be effective for their client group
 - receive regular supervision
 - are members of relevant professional bodies.
- Access to a range of psychological interventions in primary care/the community.

The primary/specialist care interface

- Proportion of patients with severe and/or long-term mental ill health not known to mental health services.
- Availability of locally agreed policies and procedures.
- Development of local management guidelines.
- Existence of shared care registers.

9 Information and research requirements

The extent to which mental health research has been undertaken in a primary care setting has increased in recent years, but there are still considerable gaps in knowledge. Broad areas for further research include the following.

Prevalence

- Improved understanding of clinical constructs for conditions to inform epidemiological research.
- Longitudinal studies to give a clearer picture on clinical course of disorder.
- Comparison of patients between primary and secondary care.

Assessment, detection and management

- Improved understanding of the impact of iatrogenic, social, financial and legal constraints on patient behaviour and clinical decision making.
- Evaluation of education and training on the behaviours of practitioners.
- Interventions suitable for mild and mixed disorders as they present in clinical practice.
- The components of 'as usual care' that make it effective.
- The cost-effectiveness of medical and non-medical interventions.
- The efficacy of low dosage antidepressants.
- The management of depression secondary to physical illness.
- The management of chronic disorder.
- The patient perspective on effectiveness, and how to increase concordance between patient and clinician views.
- The effectiveness of alternative and complementary therapies that patients report to be helpful.

The primary/specialist care interface

- Effectiveness of different skill mix and models of mental health provision in primary care and their interface with specialist mental health care.

Appendix 1: Depression

Introduction

The high prevalence and chronicity of depression is a major public health problem in all countries, not just the industrialised west.²⁵² Depression is consequently a costly disorder.²⁵³ In the US high health care costs have been shown for depressed patients two to three years after identification by screening, \$1500 per person more than non-depressed patients.²⁵⁴ Antidepressant prescribing alone costs the National Health Service approximately £88 million per annum, increasing by 116% between 1990 and 1995.²⁵⁵

In the UK at least 80% of patients identified with depression are treated entirely in primary care.²⁵⁶ The commonest presentation is of mixed anxiety and depression, with many patients also having alcohol problems.

There is continued concern at the relatively low levels of recognition and treatment received by patients, despite major national campaigns such as the Defeat Depression Campaign.²⁵⁷

Terminology and classification

‘Depression’ and ‘anxiety’ are words with such everyday usage that it is particularly important to be clear about what is meant when discussing epidemiology and related issues. The ICD-10 for primary care includes:

- depression – F32
- mixed anxiety and depression – F41.2.

There has been a shift in terminology over recent years away from reactive and endogenous depression to categories based on severity. The term ‘major depression’ refers to depression complying with diagnostic criteria that usually warrants specific treatment, often with medication. ‘Dysthymia’ refers to long-term, low-grade depressed mood (minor depression, sub-syndromal depression). The terms ‘unipolar’ and ‘bipolar’ are also used, the latter referring to depression that occurs in conjunction with manic episodes. Diagnosis should always be thought of in conjunction with disability and chronicity, which are major determinants of quality of life for the individual.

Aetiology

There is an extensive literature on the aetiology of depression, particularly in women. Psychosocial variables and the impact of life events are particularly important. There is an important genetic component for major depression.

Life event research suggests that the following factors are important in the generation of depression.²⁵⁸

- **Vulnerability factors:** Loss of mother before the age of 11, three or more children at home, lack of an intimate confidant, lack of outside employment and childhood adversity are all considered important. Internal vulnerability factors, such as low self-esteem, are also important and may be generated by early life experiences.
- **Provoking agents:** For example, major life events that are severe in terms of long-term contextual threat and unpleasantness. These events often involve the experience of loss.
- **Coping styles:** These may mediate the impact of a life event, despite the existence of vulnerability factors.

Other factors that may be important in the aetiology of depression are co-existing medical conditions, particularly those that are chronic and painful. Other psychiatric disorders such as learning disabilities or dementia may also increase the risk of depression.

Understanding aetiology can highlight groups that are at risk and therefore require extra vigilance and thought with respect to detection and preventive activities.

Epidemiology

The prevalence of disorder must be understood within the context of the difficulties inherent in fitting most primary care mental ill health into categorical grouping (*see* section 2) and the consequent importance of sub-syndromal cases.

Prevalence

Depression is the most prevalent form of mental disorder in primary care patients throughout the world.²⁵⁹ In surveys of general practice as many as 25–30% of attendees have been found to have anxiety or depressive symptoms severe enough to interfere with day-to-day functioning. The UK OPCS Surveys show a prevalence of 7.7% for mixed anxiety and depression and 2.1% for depressive episodes. This translates into an average GP having at any one point in time (**Table A1.1**):

- 180 working age adults with an anxiety disorder, non-psychotic depression or both²⁶⁰
- 40 older people with depression.

Bipolar disorder is considerably less common. Estimates of lifetime prevalence are in the order of 1%.

Table A1.1: The prevalence of depression and anxiety in the average general practice.

Diagnosis	Weekly prevalence per 1,000 adults aged 16–64	Number of patients aged 16–64 on GP list of 1,800*
Mixed anxiety and depression	77	87
Depressive episode	21	24

*Assumes 63% of GP list is aged 16–64.

Source: OPCS survey⁹

Factors affecting prevalence

Gender

Most research shows that depression is twice as prevalent in women as in men (**Table A1.2**).²⁶¹

Table A1.2: The prevalence of depression and anxiety in men and women.

Diagnosis	Prevalence per 1,000 women	Prevalence per 1,000 men
Mixed anxiety and depression	99	54
Depressive episode	25	17

Source: OPCS survey⁹

Ethnicity

There is some evidence to suggest differential rates in minority ethnic groups, but study numbers are small.²⁶²

Socio-economic variables

There are many socio-economic variables, particularly those relating to deprivation, such as unemployment, homelessness and urban living, that are associated with depression. About half the variance in prevalence in any general practice can be related to indices of deprivation.²⁶³

Mortality

Depression is associated with considerable excess mortality, especially suicide; approximately 15% of people with major depression will commit suicide.

Effectiveness of services and interventions

The proportion of patients with depression who are accurately identified and who receive appropriate treatment and care is a reasonable comment on the overall effectiveness of service provision. If the findings of some studies are generalisable then the picture is dismal: for instance, only 25% of all cases of depression and 9% of cases of anxiety and depression were receiving any intervention.²⁶⁴ It must be borne in mind that, given the rate of spontaneous remission, not all cases should be receiving intervention, other than appropriate follow-up/‘watchful waiting’.²⁶⁵

The outcome of disorder

Understanding the natural history of depression is important in determining whether interventions are effective or not. Overall, it is estimated that up to 10–25% of those with major depression will develop chronic depression (at least two years’ duration).²⁶⁶ The US Medical Outcomes Study of outpatients showed that those with dysthymia 54% had a major depressive episode during the two-year follow-up period.²⁶⁷ Lower relapse rates might be expected in primary care given that the overall severity of depression is less than that seen in psychiatric outpatients. Functional impairment in dysthymia is, however, comparable to that in major depressive disorder, although symptom severity is less.²⁶⁸

Detection and diagnosis

Recognition rates for GPs varies from 7–70%; most studies report rates between 30% and 40%.²⁶⁹ Practice nurses average 23% recognition in cases of depression and health visitors, compared to GHQ scores, average 50%.^{270,271} Comorbid anxiety seems to increase the likelihood that depression will be diagnosed.^{272,273} Physical problems appear to impede recognition.^{274–276}

A study of 18 414 consecutive attenders to a representative group of GPs found that the doctors missed one case of clinically significant depression in every 28 consultations.²⁷⁷ In most of these cases, they were aware of emotional disturbance, but they did not think it to be clinically significant. In about one third of all the missed cases the patient scored only 1 point above the threshold for case definition. Considering the absence of a gold standard diagnostic definition of depression, the general practitioners in this study did

not appear to perform as badly as other studies suggest. A significant proportion of the missed cases however may be people who suffer from chronic and disabling illness.

As with all mental ill health, the reason for depression not being diagnosed reflects a complex interplay of factors; some that reside in the patient, some in the practitioner and some in their interaction (*see* 'Prevalence in primary care populations' in section 4).

Management

Table A1.3 outlines the effectiveness of specific interventions available for the treatment of depression. Appropriate management also involves follow-up, advice giving etc. (*see* 'Prevalence in primary care populations' in section 4). In many cases depression should be treated as a chronic disease, with appropriate chronic disease management such as management protocols and disease registers.

Table A1.3: The effectiveness of interventions in the management of depression.

Disorder	Interventions of known effectiveness	Interventions requiring more research
Acute	<ul style="list-style-type: none"> • Antidepressants for severe and moderate depression, but unclear evidence of effectiveness of medication in acute mild depression (A I-1, op mainly, some primary care research) • Cognitive/behavioural therapy, interpersonal therapy, structured problem-solving (A I-1 primary care research) • Better evidence for mixed anxiety and depression than pure depression 	<ul style="list-style-type: none"> • Targeted counselling (where the client group and technique are specific) for mild and moderate depression, some RCT evidence • Less evidence for non-specific, untargeted counselling • Extracts of hypericum for mild and moderate depression: a meta-analysis of randomised controlled trials (RCTs) showed that extracts of hypericum are significantly superior to placebo and similarly effective to standard antidepressants in mild and moderate depression (A I-1)
Maintenance	<ul style="list-style-type: none"> • Maintenance drug therapy or cognitive/behavioural therapy (B I-1) 	<ul style="list-style-type: none"> • Exercise: better quality research required (C I-2) • Further work on relapse prevention and the relative roles of CBT and drug therapy
Dysthymia (mild depression lasting 2 years)	<ul style="list-style-type: none"> • Cognitive/behavioural therapy; interpersonal therapy; structured problem solving (B I-2) • Antidepressants in outpatient populations (B II-1) 	<ul style="list-style-type: none"> • Chronic disease management approaches

Pharmacological interventions

There are four main groups of antidepressants:

- tricyclic antidepressants (TCAs), e.g. amitriptyline, imipramine and lofepramine (a modified tricyclic)
- selective serotonin re-uptake inhibitors (SSRIs), e.g. fluoxetine (Prozac)
- monoamine oxidase inhibitors (now seldom used)
- newer, expensive, mixed action drugs such as venlafaxine and mirtazapine.

Tricyclics and SSRIs are the most widely prescribed. There are a number of factors that need to be understood when considering the effectiveness and cost-effectiveness literature.

- The two groups have different dosage schedules. Tricyclics have to be titrated up to a known therapeutic dose, usually above 100 mgs per day, whilst SSRIs can be started at a therapeutic dose.
- They have different side effects. Tricyclics have a range of receptor blocking actions, commonly causing dry mouth, constipation, postural hypotension and sedation. SSRIs induce nausea and headache.
- They have different costs. The older tricyclics are much cheaper to prescribe. Generic imipramine is the cheapest, a typical new tricyclic costing eight times as much, and the least expensive SSRI being twice as expensive again.
- They have different toxicities. Tricyclics are associated with 4% of all suicides, in overdose causing cardiac arrhythmias, with the exception of lofepramine, which appears relatively safer in overdose. SSRIs are also relatively safer in overdose.

Prescribing guidelines

There is good consensus about some aspects of prescribing antidepressants. Several guidelines concur about the diagnostic indications for antidepressants and the need for correct dosage and duration of treatment.²⁷⁸ It is thus possible to construct general comments on prescribing in primary care.

- Treatment should be given for episodes of moderate depression. The presence of four symptoms lasting more than two weeks appears to be a useful rule of thumb to identify those who will respond to a tricyclic better than a placebo.^{279,280}
- This applies to antidepressants given in full therapeutic dose. The dose for which there is evidence from clinical trials of superiority over placebo is more than 100 mgs of a tricyclic.²⁸¹ The SSRIs all have evidence for efficacy in secondary care patients at or below the lowest tableted dose.
- The dose that is effective for an individual patient should be continued for four to six months after recovery from a first episode. If there has been a history of recurrence, it should be continued for significantly longer.

Randomised controlled trials have shown that adequate treatment according to established guidelines gives a clinical outcome for major depression that is superior to usual treatment.^{282,283}

The role of low dose prescribing is unclear. The usual dose of tricyclics in general practice is 50 mgs, GPs report improvements at these low doses and meta-analysis suggests that high and low doses do not confer altered effectiveness, although drop-out rates increase with dose. Clearly further research is needed.²⁸⁴

Cost-effectiveness

There is little consensus about the merits of different classes of drug as first line treatment. There have been a large number of studies comparing the SSRIs and tricyclics. However, there have been relatively few in primary care, using a representative sample of depressed patients or addressing health economic outcomes. Meta-analyses cannot overcome the methodological limitations of these original studies but may be used to estimate differential efficacy and compliance under relatively ideal prescribing conditions. Bearing in mind the pitfalls of extrapolation from such data to routine practice, meta-analyses suggest that the SSRIs and tricyclics are of roughly equal efficacy when the latter are given in full dose.^{285,286} Translating this to routine clinical practice, however, is far from simple; where variable adherence has a significant impact, drop-out rates for SSRIs are 3–4% lower than for tricyclics.

It has consequently been difficult to demonstrate a clear cost-effectiveness advantage to either SSRIs or tricyclics, once all NHS costs are taken into account. A US HMO-based study compared fluoxetine with

desipramine or imipramine and found that those randomised to fluoxetine had fewer adverse effects, but no greater quality of life.²⁸⁷ The extra prescribing costs of fluoxetine were offset by fewer outpatient visits. It has therefore been suggested that the more expensive SSRIs are cost-effective because they have a higher rate of treatment success, which leads to a reduction in the non-medication costs of disproportionately expensive specialist care.²⁸⁸ It also seems the case, however, that differences in outcome between active drug and placebo are reduced in less severe depression, which is commonly seen in primary care.²⁸⁹ Meta-analyses of published randomised controlled trials suggest that the modified tricyclic, lofepramine, may be a safe and cost-effective alternative to the SSRIs.

Further information from RCTs is likely to be available in the next few years. Furthermore, some SSRIs have lost their patent protection and generic versions will be available at a lower cost. This is likely to make the use of tricyclics as first line treatment less cost-effective and attractive.

Treatment adherence

The extent to which any course of treatment is adhered to is probably determined predominantly by the health beliefs of the public and their doctors. After five years of a national public education campaign only 24% of the public thought someone with depression should be offered antidepressants and 74% thought they were addictive.²⁹⁰ Fears of dependence are therefore common.^{291,292} Similarly, despite the campaign antidepressants are often prescribed at a dosage and for a duration that does not comply with guidelines.

Follow-up sessions by a nurse may improve continuation with medication, outcomes and patient satisfaction, as can the use of telephone care manager support in conjunction with follow-up^{293,294} (see section 6).

Psychological therapies

There is growing evidence for the effectiveness of cognitive-behavioural, interpersonal and problem-solving approaches in primary care. There is relatively less evidence for non-directive counselling. Other psychotherapeutic approaches do not have sufficient empirical data to either prove or disprove their effectiveness. These approaches can all be used over a relatively short period (less than 20 sessions) and therefore lend themselves well to the primary care setting. There is evidence showing that patients often prefer psychological treatments to drugs, this presenting difficulty for randomisation in some trials.²⁹⁵

There is increasing evidence from RCTs of the effectiveness for cognitive approaches for major depression in primary care, although the evidence for benefit is not as clear-cut as it is for outpatient populations.^{296,297} Meta-analysis has suggested that cognitive therapy is equivalent to either behavioural therapy or antidepressants for mild to moderate depression.²⁹⁸ The impact of cognitive approaches on relapse prevention is not clear. Meta-analysis has suggested that five out of the eight trials included showed a preventative effect of cognitive therapy on relapse rate.²⁹⁹ Most studies show a higher response rate and some reduction in relapse when cognitive approaches were used in combination with pharmacotherapy, at least in outpatient populations.^{300,301}

In a small number of studies, interpersonal therapy has been shown to be effective, but it is far less prevalent as a clinical intervention than cognitive behavioural approaches.^{302,303} Meta-analyses suggest that cognitive-behavioural approaches and interpersonal therapy show superiority over psychodynamically oriented therapies.³⁰⁴

Brief problem-solving approaches have also been evaluated in primary care. A study comparing outcomes between a psychiatrist and a trained GP treating patients with major depression suggested that outcomes were as good as those produced by adequate antidepressant treatment and twice as effective as placebo.³⁰⁵ A further study by the same group suggested that the combination of problem solving with antidepressant medication was no more effective than either treatment alone.³⁰⁶ In both studies a

significant number of referred patients were excluded, as their depression was not severe enough. An international trial showed problem solving to reduce caseness and improve subjective functioning in comparison to a control group at four months (in individuals with depression or adjustment disorders, identified by a community survey).³⁰⁷ At 12 months, however, difference only remained for subjective improvement.

The effectiveness of non-directive counselling remains contentious. Some studies have suggested that it is no more effective than 'as usual' GP care.³⁰⁸ However, more recently, comparison of non-directive counselling, cognitive/behavioural therapy and 'as usual' GP care suggested benefit for both psychological therapies at four months (approximately 30% were also being prescribed antidepressants, approximately half those in the 'as usual' care group), but no difference in self-reported outcome at one year for those with moderately severe depression.³⁰⁹ Economic evaluation in this study suggested short-term cost-effectiveness, but no long-term difference in cost between the three groups.³¹⁰ A recent study comparing generic counselling with antidepressants in primary care for mild to moderate depression, suggested that counselling was as effective, although those taking antidepressants got better more quickly.³¹¹ However, as many patients expressed a preference for one treatment or the other, sample sizes were small and there may be longer-term outcomes that are different between the groups.

St John's Wort (Hypericum)

Hypericum has received increasing publicity as an over the counter preparation with antidepressant action. It has monoamine oxidase inhibitor qualities. A meta-analysis of randomised controlled trials showed that extracts of hypericum are significantly superior to placebo and similarly effective to standard antidepressants in mild and moderate depression.^{312,313} A recent German randomised, double blind, placebo-controlled trial with eight week follow-up showed that a standardised dose of hypericum extract was more effective than placebo and as effective as 100 mgs imipramine (reduction in self-rated and standardised rating scores) for treating moderate depression in general practice.³¹⁴ Further research has shown equivalence with imipramine at 150 mgs dose.³¹⁵ This study suggested that patients tolerate hypericum better. Further research comparing higher doses of antidepressants over longer periods taking into account patient preference is clearly needed.

Exercise

There is some research to suggest that exercise may be helpful as an adjunct in the treatment of depression.³¹⁶⁻³¹⁸ However, meta-analysis of RCTs up until 1999 concluded that the effectiveness of exercise in reducing the symptoms of depression could not be definitely determined because of a lack of good quality research.³¹⁹

Summary

- Depression is very common in primary care populations, particularly in women.
- It is often associated with physical illness and other mental disorders, particularly anxiety.
- It is a long-term, relapsing condition for many sufferers and should be treated as a chronic disease.
- It can be effectively treated with both pharmacological and psychological interventions, but is often missed and un-/under-treated.
- Alternative approaches to management exist, with increasing evidence for the effectiveness of hypericum and equivocal literature for exercise.

Appendix 2: Anxiety disorders

Introduction

The symptoms of anxiety, such as worry, restlessness, reduced concentration and poor memory are extremely widespread and may be presenting symptoms for a wide range of disorders, both physical and psychological. These symptoms represent the action of the autonomic nervous system on the body and can therefore affect all aspects of physiology. People with anxiety disorders also have specific and recurring psychological symptoms, fears that they recognise as being irrational or unrealistic and intrusive.

Symptoms of anxiety are commonly short-term and self-limiting in reaction to a stressful event. For a significant number of people, however, anxiety disorders are long-term and cause significant disability.

The majority of sufferers can be managed in general practice and do not require referral to specialist services.

Terminology and classification

Anxiety disorders include generalised anxiety disorder (GAD), phobias, panic, obsessive compulsive disorder and somatoform disorders. ICD-10 for primary care covers these disorders in the following categories:

- phobic disorder – F40
- panic disorder – F 41.0
- generalised anxiety disorder – F 41.1.

It is unclear how useful specific categories are for those patients presenting to primary care, as comorbidity of two or more anxiety disorders is common, as is the co-existence of anxiety and depression.³²⁰

Other disorders such as post-traumatic stress disorder (PTSD) and adjustment disorder are important parts of the spectrum of anxiety disorders. The latter term is used for the group of patients who present with an acute anxiety reaction who, prior to the provoking event, were in good mental health.

Aetiology

Risk factors for anxiety and related problems include personality type, cognitive, behavioural, familial and social variables. Environmental issues are also important, for example the fear of crime, particularly when in conjunction with other factors.

There is no clear genetic component to anxiety disorders, although ways of responding to events may be learnt by exposure to negative responses by family/social group members. As with depression, life events have been linked to the onset of anxiety. It is thought that events associated with threat, rather than loss as in depression, are of particularly relevance for anxiety disorders, for example in PTSD. In comorbid depression and anxiety, it seems that anxiety has an earlier onset and thus may predispose to depression.³²¹

Epidemiology

Prevalence

The assessment of prevalence is problematic given the high levels of comorbidity, particularly with depressive illness and between different types of anxiety disorders. In addition, many studies have not used reliable measures. The OPCS Surveys give prevalence rates for the community (**Table A2.1**). The numbers seen in general practice will, as with all disorders, be higher: around a sixth of patients consulting their GP are 'generally anxious'.³²² The prevalence of specific disorder is lower: an international multi-centre study suggests rates of GAD of 8.5%, agoraphobia 1.5% and panic disorder 2.2%. This gives an overall prevalence of 12.2% for defined anxiety disorders, only a minority of whom actually present complaining of anxiety.³²³ Some estimates suggest that one in every 20 people will develop GAD at some point in their lives.³²⁴

Table A2.1: The prevalence of anxiety disorders in the average general practice.

Diagnosis	Weekly prevalence per 1,000 adults aged 16–64	Number of patients aged 16–64 on GP list of 1,800*
Generalised anxiety	31	36
All phobias	11	13
Obsessive-compulsive disorder	12	14
Panic disorder	8	9

* Assumes 63% of GP list is aged 16–64.

Source: OPCS survey⁹

Comorbidity

Studies suggest that depression is associated with anxiety disorders in approximately half of cases.^{325,326} Severity and disability are increased significantly when GAD or panic are associated with depression, similarly for panic and agoraphobia.

Effectiveness of services and interventions

The outcome of disorder

Anxiety disorders are mainly chronic, almost by definition, as short-lived anxiety reactions to life events are categorised as adjustment disorders. Follow-up in the US Epidemiological Catchment Area Study suggests that their chronicity is somewhat less than schizophrenia and the same as affective disorders.^{327,328} Severity may be a reasonable predictor of prognosis. In a study of a spectrum of non-severe mental ill health, symptoms were likely to be still present at six months if they remained severe one month after initial consultation with the GP.³²⁹

Detection and diagnosis

The WHO international study already quoted found that patients with GAD plus depression and patients with agoraphobia plus panic were more likely to seek medical help and be recognised by GPs as having

psychiatric problems than other forms of anxiety.³³⁰ In an earlier study, GPs diagnosed an anxiety disorder in 7.8% of normal controls, 39% of people with sub-threshold GAD, 33% of people with GAD, 47.9% of patients with GAD plus depression; 38.7% of patients with agoraphobia, 53.3% of patients with panic disorder and 64.3% of patients with agoraphobia and panic.³³¹ It seems that GPs are more likely to detect those with greater severity and disability.

The reasons for such findings are speculative, but must include patients presenting with physical symptoms and the common mixed presentation of ill-defined anxiety syndromes and social problems (*see* Appendix 3).

Management

There are well proven treatments for anxiety disorders using medication and psychological interventions. However, these treatments have not been well studied, or not studied at all, in primary care settings. It is therefore not possible to be sure of their effectiveness for the majority of the mixed presentation anxiety seen in primary care. An overview of effective interventions is found in **Table A2.2**.

Table A2.2: The effectiveness of interventions in the management of anxiety disorders.

Disorder	Interventions of known effectiveness	Interventions requiring more research
Panic, with or without agoraphobia	<ul style="list-style-type: none"> Some antidepressants: B I-1 Short-term use of anxiolytics (but relapse common on discontinuing medication): A I-1 	<ul style="list-style-type: none"> Targeted counselling for specific related psycho-social problems: evidence is variable
Generalised anxiety	<ul style="list-style-type: none"> Cognitive/behavioural therapies: A I-1 	<ul style="list-style-type: none"> Non-specific, untargeted counselling: evidence is unfavourable Non-specific relaxation
Obsessive-compulsive disorder	<ul style="list-style-type: none"> Some antidepressants Behaviour/cognitive therapies: A I-1 	

Pharmacological interventions

- Benzodiazepines:** A systematic review of RCTs of benzodiazepines showed that they are an effective and rapid treatment for GAD.³³² In a primary care setting, however, anxiolytic drugs such as the benzodiazepines seem no more effective in the management of less severe disorders, some of which will be anxiety disorders, than psychological approaches.³³³ The potential for benzodiazepine dependence and tolerance over time is now well recognised. These drugs therefore have a role in the short-term management of acute anxiety, prescribed for a limited number of days, but are not appropriate for long-term use.
- Antidepressants:** RCTs show antidepressants, particularly those working on the 5-HT system, e.g. SSRIs, to be effective to some extent in panic disorder and GAD, at least in secondary care populations.^{334,335} Tricyclics, SSRIs, monamine oxidase inhibitors and benzodiazepines are thought to have roughly comparable efficacy in the short term (8–12 weeks). Side effects of tricyclics may, however, prove problematic. Short-term use of medication commonly results in relapse. Longer-term use is recommended (12–18 months), after which period the relapse rate is not known. The best evidence for effectiveness is for imipramine, clomipramine, paroxetine and citalopram. However, this is not proven in primary care populations.³³⁶

- The role of antidepressants for the treatment of phobias is less clear. For social phobia, treatment with paroxetine may result in symptom improvement in the short term. Again, relapse rates are very high after discontinuation and after longer-term treatment are not known.^{337,338} Psychotherapeutic interventions have been shown more effective than medication (*see* below).
- **Buspirone:** A meta-analysis of drug studies suggests that in GAD buspirone had a much lower effect size than either benzodiazepines or antidepressants and its onset is slow (up to four weeks). Problems with dependence and withdrawal are minimal compared to benzodiazepines.³³⁹
- **Beta-blockers:** Beta-blockers, which negate the effects of the autonomic nervous system and hence ameliorate the physical symptoms of anxiety, may be helpful in the management of event specific anxiety, e.g. exam nerves.³⁴⁰ There is, however, no good RCT looking at use in GAD.

Psychological therapies

The effectiveness of cognitive/behavioural approaches in the management of a wide range of anxiety disorders has been well established by RCTs.³⁴¹

In GAD, cognitive-behavioural therapy (CBT) and anxiety management have been found the most effective of psychological treatments. Medication and psychological therapies were found equally effective in the short-term, but the gains of CBT and anxiety management were maintained at six months.³⁴²

In panic disorder an overview of the literature concluded that 85% of chronic patients stay well at between one- and two-year follow-up after treatment with CBT.³⁴³ In addition, where agoraphobic fear and avoidance is present along with panic, exposure (a behavioural treatment) proved to be twice as effective as alprazolam.³⁴⁴ There is also some evidence that treatment for panic disorder can be used effectively in primary care.³⁴⁵

Exposure plus cognitive therapy has been shown to be effective for social phobia and exposure plus CBT for agoraphobia.³⁴⁶

Structured problem-solving methods can help patients to manage current life problems or stresses which contribute to anxiety symptoms.³⁴⁷ Simple problem-solving counselling has been shown to be effective in primary care for a range of less severe mental ill health.³⁴⁸

Self-help

Consensus plus some – usually small – trials suggest that there are several self-help approaches that may be effective. A review of studies suggests that they show promise as first-line interventions for anxiety disorders in primary care, although more severely ill patients will require more specialist interventions.³⁴⁹ For example, giving an audiotope and booklet to patients with chronic anxiety can lead to reduced scores for depression as well as anxiety.³⁵⁰ Similarly, patients with GAD and panic disorder can be helped by receiving literature on anxiety in addition to the usual care from their GP³⁵¹ Learning self-help skills through reading, supported by contact with a clinician, may lead to significant symptom improvement. Increasing clinician contact led to greater numbers improving.³⁵² Computer-aided and telephone-guided programmes are also becoming available.

Patients with phobias may benefit from self-administered behavioural treatments, involving gradual exposure to feared objects or situations.

A controlled trial of a general practice based class teaching self-care skills, relaxation, stress management, medication, nutrition and exercise has also showed improvements for individuals, which were maintained at one year.³⁵³

Social support

Improving social supports by training informal providers (e.g. former clients) may be a cost-effective strategy for creating access to a range of services.³⁵⁴ This is the approach taken by self-help groups such as No Panic, Triumph over Phobia and the National Phobics Society.

Hypnosis and relaxation therapies

These complementary approaches are often reported as being of help in dealing with anxiety disorders.³⁵⁵ The evidence base is not well developed, although there is some evidence from small RCTs that suggests that they can reduce anxiety in response to stressful situations or for treating panic disorders in combination with cognitive approaches. Further good quality research is needed.^{356,357}

Summary

- Anxiety symptoms are very common and usually resolve spontaneously.
- Anxiety disorders are less common and may be associated with significant disability.
- Good evidence exists for the effectiveness of psychotherapeutic interventions, particularly cognitive-behavioural approaches.
- Some evidence exists for the effectiveness of drug therapies, complementary approaches, such as relaxation techniques and self-help.
- More research in primary care populations is needed.

Appendix 3: Unexplained somatic complaints

Introduction

Some people tend to present and explain psychosocial distress in terms of physical complaints and bodily dysfunction. Hence the use of the term ‘somatisation’, derived from the Greek word *soma* – the body. The fact that mental disorder may commonly present in this way in primary care is one explanation for the relative under-detection of frank psychiatric disorder.

The impact of unexplained somatic complaints on the use of health care resources is significant.^{358–360} For the NHS, estimates suggest that ‘signs, symptoms and ill defined conditions’ (some of which will be somatisation) are the fifth highest reason for consultation with general practitioners, the third largest category of hospital expenditure and the highest single source of outpatient expenditure.³⁶¹

Terminology and classification

Within ICD-10, somatoform disorders are in the F40 chapter, with other neurotic and stress-related disorders. Primary care ICD-10 contains the chapter ‘unexplained somatic complaints’ (F45).

In many clinical and research situations, it is difficult to distinguish between health-related anxiety (hypochondriasis), medically unexplained symptoms, actual somatoform disorder and those with physical symptoms and comorbid depression/anxiety, who present with somatisation.

There is a poorly understood overlap between somatoform disorders and medically unexplained symptoms, they are diagnoses of exclusion. There are many patients for whom no conventional diagnosis can be made for persistent symptoms or clusters of symptoms. Clearly, some will have disorder presenting in an unconventional way, some have disorder as yet undescribed, some a psychological cause for their symptoms and some will have both a physical and a psychological disorder.

It is also difficult to adequately categorise patients with unexplained medical symptoms. Many specialties have a category of functional illness to describe those conditions where it is thought that there is a significant psychological component, e.g. irritable bowel syndrome or fibromyalgia. Although there have been attempts to operationalise some of these conditions, there is often difficulty in describing a defining set of symptoms and consequently there is often overlap with other conditions.³⁶²

These difficulties have led to the questioning of the clinical validity of these disorders. It is likely that a mixed group of patients is being described as clinical course; outcome and utilisation of resources may be significantly different for individuals with the same label.

Epidemiology

A precise estimate of prevalence is hard to find given the definitional/classification difficulties described and the fact that research setting and ascertainment methodologies vary greatly.

The majority of patients with psychosocial problems in primary care present, at least initially, with physical symptoms.^{363,364} Some of these patients may also have co-existing physical illness, which, however, may not be the explanation for the symptoms presented. A Canadian study described the presentation of patients in primary care.³⁶⁵ Just under a third had a high score on a research depression scale, indicating significant depression or anxiety; of these only 15% could be classified as psychosocial presenters, i.e. this is how they initially presented their problem to the doctor. A further 34% described psychosocial causes for their physical symptoms and 26% accepted a psychosocial explanation for their problems when asked directly. The remaining 25% rejected the possibility that there could be a psychosocial

cause to their illness, i.e. true somatisers. True somatisers did not differ markedly in their socio-demographic characteristics, except that there were more men in the somatisation group. UK research has also shown high scores for depression and anxiety in a majority of patients identified by GPs as having long-standing medically unexplained symptoms. More women than men were identified in this study. This suggests that men's symptoms may not become chronic, they stop consulting their GPs, or that GPs have a bias towards identification of women.³⁶⁶

Appropriately, many general practice consultations do not result in a diagnosis. It is likely that many of these patients do not return and recover.³⁶⁷ Estimates for truly unexplained medical symptoms in general practice vary, but may be in the region of 20–25% of consultations.³⁶⁸ Up to 5% of patients in general practice are estimated to be frequent attenders with somatising symptoms.³⁶⁹ A proportion of these will have undiagnosed psychiatric disorder. A study from the Netherlands suggested that 45% of frequent somatising attenders had a depressive or anxiety disorder, often unrecognised.³⁷⁰ A US study of 55 patients with panic disorder referred by family doctors psychiatrists suggested that most had presented with somatic complaints, which had been misdiagnosed for months or years. Cardiac, gastrointestinal and neurological symptoms were the most common.³⁷¹

There is a high prevalence of medically unexplained symptoms in settings outside general practice such as gastroenterology, cardiology or gynecology outpatient clinics. Estimates of prevalence vary, but figures of 25% of attendees are not uncommon.³⁷² A proportion of these patients will have a predominantly psychosocial cause for their symptomatology or undiagnosed psychiatric disorder.

Effectiveness of services and interventions

The outcome of disorder

The terminological difficulties described have an impact on both ascertaining the outcome of disorder and the effectiveness of interventions. It is currently hard to identify individuals that will respond to conservative treatment and those who will go on to develop enduring difficulties. If identifiable, the latter group could be subject to early intervention, which could prevent the inappropriate and costly use of what may be unnecessary investigations and other resources.

Management

Explanation/information

Communication skills are of central importance for all health professionals: being able to listen, show an understanding of a patient's concerns and give information about health, illness and treatment in terms that can be understood. These skills are of particular importance when physical and mental ill health overlap. However, in one study patients with long-standing medically unexplained symptoms reported finding their GP's explanations of little help in understanding their condition.³⁷³ Most explanations were seen as a rejection of the patient's suffering. Explanations that were found to be empowering shared some features of cognitive treatment approaches, such as reattribution.

There is some evidence to suggest that improvements in management can be made. One study showed that GPs given advice (via a letter) on how to deal with people who somatise referred nearly a third fewer patients to secondary medical and surgical specialties.³⁷⁴ It is unclear, however, whether there was improved outcome for the patients.

Well-described advice on how best to manage these patients in primary care, using a mixture of understanding, advice and management plans, has been formulated.^{375–377} Primary care professionals can

be taught to improve recognition and management by using a reattribution model for symptoms.^{378,379} Four key stages have been identified:

- provide clear information about the negative physical examination and investigations, whilst acknowledging the reality of the physical symptoms
- state the relevant mood and associated symptoms and refer to the psychosocial factors identified
- explain the relationship between mood and physical symptoms/pain
- emphasise the positive aspects of treatment and provide reality-based reassurance.³⁸⁰

Evaluation of this approach suggests that training can decrease referral costs by 23% with no corresponding increase in primary care costs. Better outcomes in those patients, at least those who were prepared to consider a psychological explanation for their symptoms, have also been described.^{381,382}

Psychological therapies

Brief psychological therapies using cognitive or dynamic approaches may be effective in the management of somatisation.^{383,384} Problem-solving approaches may also be of use in primary care, but further effectiveness studies are needed.³⁸⁵ It is likely that patients with a very long history of symptoms and marked abnormal illness behaviour are unlikely to respond to brief intervention.

Pharmacological treatments

Antidepressant therapy should be tried in patients who have medically unexplained symptoms and who are depressed, if they will accept it. There is some evidence of the value of antidepressants, particularly tricyclics, in some patients with 'psychogenic' pain.³⁸⁶ A systematic review of randomised, controlled trials of the use of antidepressants in patients who were depressed with a range of coexisting physical illness also suggests that antidepressants are effective in relieving depression in this group.³⁸⁷

Summary

- Mental ill health commonly presents in general practice with physical complaints or somatisation.
- Some patients will then accept that there is a psychological problem, whilst others will not and a small number suffer from true somatoform disorder.
- This group of disorders is ill defined and consequently is difficult to research.
- Primary care practitioners can be taught to help patients to deal with their symptoms through a process of reattribution.
- Cognitive/behavioural and problem-solving interventions may be effective in some individuals.
- Antidepressants are appropriate in those who are depressed and will accept treatment.

Appendix 4: Adjustment disorder

Introduction

The term ‘adjustment disorder’ refers to a short-lived (a few weeks or months) episode of anxiety in reaction to a stressful event. A range of relatively non-specific symptoms are experienced, such as feeling overwhelmed, unable to cope, depressed, anxious, worried, having difficulty sleeping and interference with performance of usual daily routines. Symptoms may also be primarily somatic, e.g. headaches, gastrointestinal symptoms, chest pain and/or palpitations. In order to make a diagnosis of adjustment disorder there should be evidence that the symptoms would not have developed without the stressful event, i.e. the individual does not normally have symptoms of anxiety.

Terminology and classification

Clearly not everyone reacts to adverse life events in this way. However, the distinction between normality and disorder may be difficult to make. In fact, if the symptoms last over six months, then alternative diagnoses should be considered, such as depression, generalised anxiety disorder or panic disorder. Abnormal or traumatic grief reactions are a special form of adjustment disorder.

ICD-10 for primary care includes adjustment disorder under F43.

Epidemiology

Prevalence

Most cases of adjustment disorder will be seen in primary care, and prevalence rates are high. There is some evidence that different understandings of adjustment disorder contribute to misunderstandings between primary and secondary care clinicians. In a large primary care study, psychiatrists agreed with GPs that mental disorder was present in approximately 50% of cases. The other patients identified by GPs as having a disorder were mainly suffering from anxiety, worries, marital difficulties and other adjustment reactions, but whose symptoms were not of sufficient severity or duration to meet psychiatric diagnostic criteria.³⁸⁸

Effectiveness of services and interventions

The outcome of disorder

People undergoing certain kinds of stressful life events, such as divorce, unemployment or bereavement are at increased risk of developing a mental disorder and may also be vulnerable to developing physical illness.^{389,390}

People with adjustment disorder may experience high levels of distress in the short term. A US study examined the relationship between self-reported distress and mood disturbance in a primary care population.³⁹¹ It found that, in the primary care sample, most distressed patients did not have a mood disturbance of more than short-term duration and that distress without mood disturbance was associated with little impairment. It concluded that, for this group of people, it might be very difficult to show an advantage for active treatment over no intervention.

A small US follow-up study carried out in the 1970s reported the five-year outcome for 48 adults given a diagnosis of adjustment disorder in an outpatient setting: 71% (34) were completely well and had suffered

no further complications during the five years and 8% (4) were well, but had suffered depression or alcoholism in the intervening period. The remaining 22% (10) were found to be suffering from a specific disorder, usually major depression plus alcohol misuse and 4% (2) had committed suicide.³⁹² The outcome for adjustment disorder in primary care is likely to be significantly better, given that this study was of psychiatric outpatients. For a minority, however, symptoms may become chronic and future assessment for depression and/or alcohol misuse is likely to be important.

There are few studies that address how to identify those individuals who will go on to develop depression or anxiety disorders. The US study quoted above found that those who went on to develop major depression and had poorer outcomes at five years had more chronic symptoms at initial presentation.

There is good evidence from longitudinal studies on those individuals who are at risk of developing abnormal grief reactions. The factors, which increase risk, include:

- a history of mental disorder
- unexpected or violent death of a loved one, especially homicide or suicide or where the body is not present
- death of spouse or child
- ambivalence in the relationship between the dead person and the bereaved person
- lack of social support.³⁹³

Signs that the grief is becoming abnormal include severe depressive symptoms of retardation, guilt, feelings of worthlessness, hopelessness or suicidal ideation of a severity or duration that significantly interferes with daily living.

Management

Interventions for adjustment disorder have not been extensively studied, either in primary or secondary care. Most recommendations for management of adjustment disorder are therefore based on the experience of clinicians.

The management advised by a consensus of experienced clinicians comprises support and advice in primary care. A combination of education (e.g. about how anxiety can manifest itself physically), reassurance, advice on coping or problem solving, targeted supportive and practical help (e.g. welfare advice, relationship counselling) and passage of time is recommended. An invitation to return for a second consultation with the GP or nurse in a few weeks 'to see how things are going' may also help individuals get through the period of stress.^{394,395}

Not many primary care studies exist to either support or challenge this advice. It is likely that in the majority of cases specialist mental health service intervention does not confer additional advantage over care as usual in primary care.

Medication should be reserved for severe anxiety symptoms, when anxiolytics can be used for a few days, or if the individual meets the criteria for major depression, in which case they should be treated appropriately.

Self-help and the community/voluntary sector

Many organisations provide supportive help and information for people experiencing particular problems of living, such as bereavement and relationship problems.

Coping strategy advice, targeted supportive and practical help (e.g. welfare advice, relationship counselling) and the passage of time may all be helpful.

Management of bereavement

Approaches to supporting bereaved individuals in primary care are based on professional consensus. This would include ensuring that the individual had access to a confiding and supportive relationship with the opportunity to cry and talk about their loss and feelings. Avoiding prescribing benzodiazepines is also important, unless on a short-term basis where the individual is very distressed by severe insomnia. GPs or other members of the primary care team can also have a role in preparing the individual for a forthcoming bereavement.

There is some evidence from small, uncontrolled trial to suggest that, in high-risk groups, focused bereavement counselling may improve long-term outcome.³⁹⁶

Organisations such as Cruse can provide advice and focused bereavement counselling.

Summary

- Adjustment disorders are common, but not well researched.
- Supportive advice and follow-up may be of benefit.
- Appropriate treatment interventions should be provided for those that develop depressive or anxiety disorders.

Appendix 5: Eating disorders

Introduction

Eating disorders are common and include the conditions of bulimia nervosa, anorexia nervosa and binge-eating disorder. Obesity alone is not included in psychiatric diagnostic systems. At any one point in time up to 10% of the female population may be affected by some eating difficulties. There is a spectrum of severity from mild, self-limiting difficulty or disorder amenable to self-help to severe debilitating illness with significant mortality. Anorexia has the highest mortality of any single psychiatric illness, including deaths from medical complications, starvation and suicide.

Classification and terminology

Eating disorders, anorexia and bulimia, are included in both DSM-IV and ICD-10, although the criteria for diagnosis are somewhat different. DSM-IV also describes research criteria for binge-eating disorder. Eating disorders are included in the ICD-10 for primary care under F50.

The key components for diagnosis are described in the following sections.

Bulimia nervosa

Recurrent episodes of binge eating and compensatory behaviours to combat weight gain such as fasting, use of laxatives, self-induced vomiting or excessive exercise. The individual has an undue preoccupation with body shape and weight. Low self-esteem and low self-confidence are integral parts of the disorder.

Anorexia nervosa

Individuals typically avoid high calorie foods and are very preoccupied with food and meal preparation, leading to significant loss of body weight. Vomiting, the use of laxatives and obsessive exercise may all be part of the condition. Despite severe emaciation, individuals may continue to feel well, having a distorted body image.

Binge-eating disorder

This is a newer diagnostic concept included in the appendix of DSM-IV and as atypical disorder in ICD-10. It consists of recurrent episodes of binge eating not associated with inappropriate compensatory behaviours or occurring during an episode of anorexia or bulimia.

Epidemiology

Prevalence and incidence

Bulimia nervosa

The incidence rate varies with age. The average age of onset is 18 years with 25% developing disorder under age 16. In young women incidence rates of 52/100 000 have been found, 13/100 000 for the general population.³⁹⁷ The overall prevalence is approximately 1–3% of women or over 5% if partial syndromes are included.^{398,399} Figures of 0.25% have been found in young men.⁴⁰⁰ Women with a history of dieting are at significantly greater risk of developing the disorder.

Anorexia nervosa

In Britain, the incidence of disorder is 7/100 000, or 4000 new cases per year.⁴⁰¹ The prevalence in young women ranges from 0.1–1%.⁴⁰²

Binge-eating disorder

2% of community samples meet the criteria for BED.⁴⁰³

*Factors affecting prevalence***Time trends**

Bulimia nervosa was first described in 1979. During the period 1988 to 1993, there was an apparent threefold increase in cases presenting to primary care. It is difficult to know how much of this reflects increased recognition rather than changes in underlying incidence.⁴⁰⁴

There have also been reports that there has been an increase in incidence of anorexia, but again changes in recognition must be taken into account.

Socio-demographic factors

Ninety percent of cases of anorexia and bulimia are in women with a typical age of onset in the late teens. Cases are more prevalent in occupations where slimness is valued, e.g. dancers, models and performers. Binge-eating disorder (BED) shows a male to female ratio in occurrence of 3:2.

Anorexia has been found more commonly in lower social classes and bulimia has an even class distribution.^{405,406} Bulimia is more prevalent in large cities over other urban areas and rural communities.⁴⁰⁷

Comorbidity

Other psychiatric disorders are commonly associated with eating disorders. In bulimia there is a 36–70% lifetime risk of major depression; anxiety is similarly common.⁴⁰⁸ Approximately 30% of those with bulimia have a history of PTSD.⁴⁰⁹ Similar proportions have a history of anorexia. Depression is found in approximately 50% of those with anorexia.

Comorbidity is more likely in clinic than in community samples, with personality disorder, substance misuse and self-injury commonly found.⁴¹⁰

Physical complications affecting the gastro-intestinal, cardiovascular and gynaecological systems are also commonly found in both bulimia and anorexia.

Binge-eating disorder commonly occurs with obesity.

Effectiveness of services and interventions

Key issues in assessing the effectiveness literature are:

- compliance with treatment of all modalities may be low, with high drop-out rates, particularly for medication and some inpatient regimens
- some of the most severely affected may be excluded from treatment trials
- most trials are not in primary care populations
- follow-up times are often short.

Outcome of disorder

Bulimia nervosa

For those that receive treatment, 50–70% are symptom-free at 5–10 years, the median length of illness being 3–6 years. Mortality rates are between 0.3% and 1.1%.⁴¹¹ Poor outcomes are associated with the severity of bingeing, associated personality disorder and depression. A small number, 3–4%, develop anorexia or other eating disorders.

Anorexia nervosa

The median length of illness is six years. Thirty percent have a poor prognosis. Abnormally low serum albumin levels and a low body weight (60% of average) are predictors of poor outcome. Mortality rates are between 3% and 4%.

Binge-eating disorder

Little is known about outcomes. There is some suggestion that, of those treated, most have no disorder at six years.⁴¹²

Detection and diagnosis

As with other mental ill health, detection in primary care is low – primary care physicians detect between 12% and 50% of cases.^{413,414} The SCOFF questionnaire is a short tool designed to detect eating disorders and aid treatment. It has been shown to be efficient at detection of adult eating disorders in primary care.⁴¹⁵

Management

Bulimia nervosa

Cognitive behavioural therapy (CBT) is the most widely used treatment. It has been evaluated in both RCTs and systemic reviews.^{416,417} A usual course consists of between 16 and 20 sessions. At completion 40–60% of patients are symptom-free, with gains maintained at five years.⁴¹⁸ Self-help with some therapist support has also been found to be effective.⁴¹⁹ Interpersonal therapy has been shown to be as effective as cognitive behavioural therapy at one-year follow-up, although CBT showed earlier gains.⁴²⁰ Early studies using motivational enhancement suggest short-term outcomes similar to CBT.⁴²¹

Randomised controlled trials of medication, varying from appetite suppressants to opioid antagonists, antidepressants and mood stabilisers, have been undertaken. Systematic reviews of RCTs suggest that antidepressants may decrease bingeing and depressive symptoms in the short term, although long-term effects are less clear.^{422,423} The combination of CBT and antidepressants is more effective than antidepressants or placebo and probably equivalent to CBT alone.⁴²⁴

Complex cases with significant co-morbidity and/or histories of abuse are less likely to respond to simple treatment approaches as described and these cases are often excluded from treatment trials. More prolonged psychological interventions may be appropriate here, as with those who do not respond to short-term intervention. The role of day-care and inpatient care needs further evaluation, as do other psychological therapies such as dialectical behavioural and cognitive analytic therapies.

Anorexia nervosa

There are few RCTs to assess effectiveness. The age of the patient and the severity of disorder will usually determine which treatment is most appropriate. Brief, focused outpatient psychotherapy can be effective and prevent relapse for those less severely affected.⁴²⁵ Family therapy is often recommended for younger patients.⁴²⁶ Inpatient care may be necessary for those with severe weight loss. Regimes have changed significantly over the past 15 years with a move away from the more punishing approaches. Less punitive regimes are thought to be as effective as the older more coercive ones.⁴²⁷ Day care has also shown promising results. A small randomised trial of intensive inpatient treatment versus day care with CBT showed, at three-year follow-up, fewer relapses, more stable weight and fewer admissions in the day care group.⁴²⁸

Binge-eating disorder

CBT can help to reduce bingeing and is effective in pure self-help and therapist-guided programmes.⁴²⁹ Medication, including antidepressants, anorectic agents and opiate antagonists may also reduce bingeing in the short-term.

Models of service delivery

Large areas of the country have no access to dedicated NHS eating disorder services.^{430,431} This is reflected in significant private sector provision.

Different models of service provision exist, including local comprehensive community-based services to highly specialist treatment centres. A range of services is required, given the range of disorder. Specialisation is likely to be required for some patients, such as those with complex disorder or those who do not respond to initial treatment. There is a significant role for primary care, albeit with appropriately skilled practitioners and with support from specialist services.

Summary

- Eating disorders are common in the female population; they are much less common in the male population.
- CBT is an effective treatment for less severe cases of bulimia.
- Evidence for the effectiveness of treatments for anorexia and severe bulimia is more limited.

References

- 1 Singleton N, Bumpstead K, O'Brien M *et al.* *Psychiatric morbidity among adults living in private households 2000*. London: Stationery Office, 2001.
- 2 Goldberg D, Huxley P. *Common mental disorders: a biosocial model*. London: Routledge, 1992.
- 3 Department of Health. *Health of the Nation: mental illness key area handbook*. (2e). London: HMSO, 1994.
- 4 Department of Health. *Modernising Mental Health Services: safe, sound and supportive*. London: Department of Health, 1998.
- 5 Department of Health. *The New NHS: modern, dependable*. London: Department of Health, 1997.
- 6 National Health Service. *National Service Framework Mental Health: modern standards and service models*. London: NHSE, 1999.
- 7 National Health Service. *The NHS Plan: a plan for investment: a plan for reform*. Cm 4818-I. London: HMSO, 2000.
- 8 Department of Health. *Fast-forwarding Primary Care Mental Health: Gateway workers*. London: Department of Health, 2002.
- 9 HM Government. *Caring About Carers: a national strategy for carers*. London: HMSO, 1999.
- 10 Gask L, Croft J. Methods of working in primary care. *Adv Psyche Treatment* 2000; **6**: 442–9.
- 11 Lee J, Gask L, Roland M, Donnan S. *National Evaluation of total purchasing pilot projects*. London: King's Fund, 1999.
- 12 Sainsbury Centre for Mental Health/Royal College of General Practitioners. *Setting the Standard: the new agenda for primary care organisations commissioning mental health services*. London: SCM, 2001.
- 13 Murray C, Lopez A (eds). *A comprehensive assessment of mortality and disability from diseases; injury and risk factors in 1990 and projected to 2020. The global burden of disease and injury series*. Boston: Harvard University Press, 1996.
- 14 Spitzer RL, Kroenke K, Linzer M *et al.* Health related quality of life in primary care patients with mental disorders. Results from the PRIME MD 1000 Study. *JAMA* 1995; **274**(10): 1511–7.
- 15 Kisley, Gater R, Goldberg D. Results from the Manchester Centre. In: Ustun TB, Sartorius N (eds). *Mental illness in general health care: an international study*. Chichester: Wiley, 1996.
- 16 Stewart-Brown S. Emotional wellbeing and its relation to health. Editorial. *BMJ* 1998; **317**: 1608–9.
- 17 Meltzer H, Gill B, Petticrew M, Hinks K. *Economic activity and social functioning of adults with psychiatric disorders. OPCS surveys of psychiatric morbidity in Great Britain Report 3*. London: HMSO, 1995.
- 18 Harris EC, Barraclough B. Excess mortality and mental disorder. *Brit J Psyche* 1998; **173**: 11–53.
- 19 Hemingway H, Marmot M. Psychosocial factors in the aetiology and prognosis of coronary heart disease: systematic review of prospective cohort studies. *BMJ* 1999; **318**: 1460–7.
- 20 Dinan TG. The physical consequences of depressive illness. Editorial. *BMJ* 1999; **318**: 826.
- 21 Pratt LA, Ford LE, Crum RM *et al.* Depression, psychotropic medication, and the risk of myocardial infarction: prospective data from the Baltimore ECA follow-up. *Circulation* 1999; **94**: 123–9.
- 22 Stewart-Brown S. Emotional wellbeing and its relation to health. Editorial. *BMJ* 1998; **317**: 1608–9.
- 23 Knight BG, Lutzky SM, Macofsky-Urban F. A meta-analysis of interventions for caregiver distress: recommendations for future research. *Gerontologist* 1993; **33**: 240–8.
- 24 Kavanagh S, Fenyo A. Informal care and depression. *Mental Health Research Review* 1998; **5**: 56–8.
- 25 Patel A, Knapp M. Costs of mental illness in England. *Mental Health Research Review* 1998; **5**: 4–10.
- 26 NHS Executive. *Burdens of disease*. Leeds: NHSE, 1996.
- 27 Kind P, Sorensen J. The cost of depression. *Int Clin Psychopharm* 1993; **7**: 191–5.
- 28 Knapp MRJ. Costs of schizophrenia. *Brit J Psyche* 1997; **171**(6): 509–18.

- 29 Meltzer H, Gill B, Petticrew M, Hinks K. *Economic activity and social functioning of adults with psychiatric disorders. OPCS surveys of psychiatric morbidity in Great Britain Report 3*. London: HMSO, 1995.
- 30 Cooper C, Cartwright S. *Mental health and stress in the workplace, a guide for employers*. London: HMSO, 1996.
- 31 Confederation of British Industry/Department of Health. *Promoting mental health at work*. London: CBI/DoH, 1992.
- 32 Goldberg D, Huxley P. *Common mental disorders: a biosocial model*. London: Routledge, 1992.
- 33 Goldberg DP, Bridges K, Duncan-Jones P, Grayson D. Dimensions of neuroses seen in primary care settings. *Psychol Med* 1997; **17**: 461–70.
- 34 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H. Depression comorbid with anxiety: Results from the WHO study on psychological disorders in primary health care. *Brit J Psych* 1996; **168**: 38–43.
- 35 Lewis G. Dimensions of neurosis. *Psychol Med* 1992; **22**: 1011–18.
- 36 Spitzer RL, Kroenke K, Linzer M *et al*. Health related quality of life in primary care patients with mental disorders. Results from the PRIME MD 1000 Study. *JAMA* 1995; **274**(10): 1511–7.
- 37 Wells KB, Stewart A, Hays RD *et al*. The functioning and well-being of depressed patients. Results from the Medical Outcomes Study. *JAMA* 1989; **262**: 914–19.
- 38 Broadhead WE, Blazer DG, George LK, Tse CK. Depression, disability days and days lost from work in a prospective epidemiologic survey. *JAMA* 1990; **264**: 2524–8.
- 39 Wohlfarth TD, Van Den Brink W, Ormel J, Koeter MWJ. The relationship between social dysfunctioning and psychopathology among primary care attenders. *Brit J Psych* 1993; **163**: 37–44.
- 40 Ustun TB, Goldberg D, Cooper J *et al*. New classification of mental disorders with management guidelines for use in primary care. *Brit J Gen Pract* 1995; **45**: 211–15.
- 41 Goldberg D, Huxley P. *Common mental disorders: a biosocial model*. London: Routledge, 1992.
- 42 OPCS Social Survey Division. *OPCS Surveys of Psychiatric Morbidity: Private Household Survey*. London: HMSO, 1993.
- 43 Anderson J, Huppert F, Rose G. Normality, deviance and minor psychiatric morbidity in the community; a population-based approach to General Health Questionnaire data in the health and lifestyle survey. *Psychol Med* 1993; **23**: 478–85.
- 44 Lewis G, Booth M. Regional differences in mental health in Great Britain. *J Epidem Comm Health* 1992; **46**: 608–11.
- 45 Jarman B, Hirsch S. Statistical models to predict district psychiatric morbidity. In: Thornicroft G, Brewin C, Wing JK (eds). *Measuring mental health need*. London: Royal College of Psychiatrists, Gaskell, 1992.
- 46 Meltzer H, Gill B, Petticrew M, Hinks K. *Physical complaints, service use and treatment of adults with psychiatric disorders. OPCS surveys of psychiatric morbidity in Great Britain Report 2*. London: HMSO, 1995.
- 47 Francisco GS. An overview of post stroke depression. *NEJM* 1993; **90**: 686–9.
- 48 Mayou RA. *Consultation liaison psychiatry: an international perspective*. Psychiatry Clinical Update. Crawley: Upjohn, 1988.
- 49 Creed F, Marks B. Liaison psychiatry in general practice: a comparison of the liaison attachment scheme and shifted outpatient clinic model. *J Royal Coll Gen Pract* 1989; **39**: 514–17.
- 50 Meltzer H, Gill B, Petticrew M, Hinks K. *Physical complaints, service use and treatment of adults with psychiatric disorders. OPCS surveys of psychiatric morbidity in Great Britain Report 2*. London: HMSO, 1995.
- 51 National Mental Health Strategy. Royal College of Australian General Practitioners/Royal College of Australian & New Zealand Psychiatrists. *Primary care psychiatry: the last frontier. A report of the joint*

- consultative committee in psychiatry*. Royal College of Australian General Practitioners/Royal College of Australian & New Zealand Psychiatrists, 1998.
- 52 Bowers PJ. Selections from current literature: psychiatric disorders in primary care. *Fam Pract* 1993; **10**(2): 231–7.
- 53 Freeling P, Tylee A. Depression in general practice. In: Paykel ES (ed). *Handbook of affective disorders*. (2e). Edinburgh: Churchill Livingstone, 1992.
- 54 Office of National Statistics. *Key Health Statistics from general practice 1998*. London: National Statistics, 2000.
- 55 Bridges KW, Goldberg DP. Somatic presentation of DSM-III psychiatric disorders in primary care. *J Psychosom Res* 1985; **29**: 563–9.
- 56 Kendrick A. The role of general practitioners in the care of the long term mentally ill. *BMJ* 1991; **302**: 508–10.
- 57 Chelsea and Westminster Health Authority. *Better Services for Mental Health*. Newsletter Primary Care Led Purchasing of Mental Health Services Project. May 1998.
- 58 Royal College of General Practitioners. *The primary health care team*. RCGP Information Sheet No 21. London: Royal College of General Practitioners, 1998.
- 59 Royal College of General Practitioners. *Profile of UK Practices*. RCGP Information Sheet No 2. London: Royal College of General Practitioners, 1999.
- 60 Kendrick T, Sibbald B, Addington-Hall J, et al. Distribution of mental health professionals working onsite within English and Welsh general practices. *BMJ* 1993; **307**: 544–6.
- 61 Onyett S, Pidd F, Cohen A, Peck E. Mental health service provision and the primary health care team. *Mental Health Review* 1997; **1**(3).
- 62 Royal College of General Practitioners. *Profile of UK general practitioners*. RCGP Information Sheet No 1. London: RCGP, 2000.
- 63 Royal College of General Practitioners. *Profile of UK general practitioners*. RCGP Information Sheet No 1. London: RCGP, 2000.
- 64 Office of Health Economics. *Compendium of health statistics*. (2e). London: OHE, 1995.
- 65 Turton P, Tylee A, Kerry S. Mental health training needs in general practice. *Primary Care Psych* 1995; **1**: 197–9.
- 66 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 67 Turton P, Tylee A, Kerry S. Mental health training needs in general practice. *Primary Care Psych* 1995; **1**: 197–9.
- 68 Greenfield S, Stilwell B, Drury M. Practice nurses: social and occupational characteristics. *J Royal College GP* 1987; **37**: 341–5.
- 69 Thomas R, Corney R. The role of the practice nurse in mental health: a survey. *J Mental Health UK* 1993; **2**: 65–72.
- 70 Crossland A, Kai J. They think they can talk to nurses: practice nurses' views of their roles in caring for mental health problems. *Brit J GP* 1998; **48**: 1383–6.
- 71 Gray R, Parr, Plummer S et al. A national survey of practice nurse involvement in mental health interventions. *J Adv Nursing* 1999; **30**(4): 901–6.
- 72 Kendrick T, Millar E, Burns T, Ross F. Practice nurse involvement in giving depot neuroleptic injections: development of patient assessment and monitoring checklist. *Primary Care Psyche* 1998; **4**(3): 149–54.
- 73 Sainsbury Centre for Mental Health. *An executive briefing on primary care mental health services*. Briefing 19. SCMH/NHS Alliance: London, 2002.
- 74 Department of Health. *Health and personal social services statistics for England*. London: Stationery Office 1999.

- 75 Jones L, Sheehan C. Mental health and primary care: needs assessment research for the Health Education Board for Scotland. Final report 1999 (unpublished seeking permission to quote).
- 76 Department of Health. *Health and personal social services statistics for England*. London: Stationery Office, 1999.
- 77 Strathdee G, Williams P. A survey of psychiatrists in primary care. *J Royal Coll GP* 1984; **34**: 615–18.
- 78 Chisholm D. Use and cost of primary care services by people in residential mental health care. *Mental Health Research Review* 1998; **5**: 23–5.
- 79 Kendrick A. The role of general practitioners in the care of the long term mentally ill. *BMJ* 1991; **302**: 508–10.
- 80 Kendrick T, Sibbald B, Addington-Hall J *et al*. Distribution of mental health professionals working on-site within English and Welsh general practices. *BMJ* 1993; **307**: 544–6.
- 81 Thomas R, Corney R. A survey of links between mental health professionals and general practice in six district health authorities. *Brit J Gen Pract Spt* 1992.
- 82 Filson P, Kendrick T. Survey of roles of community psychiatric nurses and occupational therapists. *Psych Bull* 1997; **21**: 70–3.
- 83 Sibbald B, Addington Hall J. *The role of counsellors in general practice*. RCGP Occasional Paper No 74. London: RCGP, 1996.
- 84 Goldberg D, Gournay K: *The general practitioner, the psychiatrist and the burden of mental health care*. Maudsley discussion paper no. 1. London: Institute of Psychiatry, 1997.
- 85 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 86 Kendrick T, Sibbald B, Addington-Hall J *et al*. Distribution of mental health professionals working on-site within English and Welsh general practices. *BMJ* 1993; **307**: 544–6.
- 87 Mellor-Clark J, Simms-Ellis R, Burton M. *National survey of counsellors in primary care; evidence for growing professionalism*. London: RCGP, 2001.
- 88 Sparling E, Clark N, Laidlaw J. Assessment of the demands by general practitioners for a community psychiatric occupational therapy service. *Brit J Occ Therapy* 1992; **55(5)**: 193–6.
- 89 de Witt P, de Luca PM. Occupational therapy and primary care: the mental health perspective. *S African J Occ Therapy* 1995; **Nov**: 34–40.
- 90 Brewer P, Gadsen V, Scrimshaw K. The community group network in mental health: a model for social support and community integration. *Brit J Occ Therapy* 1994; **579(12)**: 467–70.
- 91 Department of Health. *Fast-forwarding primary care mental health: Gateway workers*. London: Department of Health, 2002.
- 92 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 93 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 94 Jones L, Sheehan C. Mental health and primary care: needs assessment research for the Health Education Board for Scotland. Final report 1999 (unpublished).
- 95 Goodrick I, Nisbett M, White D. *Goodwill in practice: the GP volunteer handbook*. London: Royal College of General Practitioners, 1997.
- 96 Ormel J, Tiemens BG. Recognition and treatment of mental illness in primary care: Towards a better understanding of a multi-faceted problem. *Gen Hosp Psyche* 1995; **17**: 160–4.
- 97 MacGillivray S, Arroll B, Hatcher S *et al*. Efficacy and tolerability of selective serotonin re uptake inhibitors compared with tricyclic antidepressants in depression treated in primary care: systematic review and meta-analysis. *BMJ* 2003; **326**: 1014–7.
- 98 Mann A, Jenkins R, Besley E. The twelve-month outcome of patients with neurotic illness in general practice. *Psychol Med* 1981; **11**: 535–50.

- 99 Lloyd KR, Jenkins R, Mann A. Long term outcome of patients with neurotic illness in general practice. *BMJ* 1996; **313**: 26–8.
- 100 Faulkner A. *Strategies for liking*. London: Mental Health Foundation, 2000.
- 101 Rogers A, Pilgrim D. *Experiencing psychiatry: Users views of services*. London: MacMillan Press Ltd, 1993.
- 102 Jones L, Sheehan C. Mental health and primary care: needs assessment research for the Health Education Board for Scotland. Final report 1999 (unpublished).
- 103 Weich S. Prevention of the common mental disorders: a public health perspective. *Psychol Med* 1997; **27**: 757–64.
- 104 Weich S, Churchill R, Lewis G, Mann A. Strategies for the prevention of psychiatric disorder in primary care in south London. *J Epidem Comm Health* 1997; **51**: 304–9.
- 105 Newton J. *Preventing mental illness in practice*. London: Routledge, 1992.
- 106 Markman HJ, Renick MJ, Floyd FJ, Stanley SM *et al*. Preventing marital distress through communication and conflict management training: a 4 and 5 year follow up. *J Consul Clin Psychol* 1993; **61**: 70–77.
- 107 Health Education Authority. *Mental health promotion: a quality framework*. London: HEA, 1997.
- 108 Olweus D. Bully/victim problems among school children: basic facts and effects of an intervention programme. In: Ruben KH, Pepler DJ (eds). *The development and treatment of childhood aggression*. Hillsdale NH: Lawrence Erlbaum Associates, 1989.
- 109 Health Education Authority. *Mental health promotion: a quality framework*. London: HEA, 1997.
- 110 NHS Centre for Reviews & Dissemination. Mental health promotion in high risk groups. *Effective Health Care Bulletin* 1997; **3**(3).
- 111 Weich S, Churchill R, Lewis G, Mann A. Strategies for the prevention of psychiatric disorder in primary care in south London. *J Epidem Comm Health* 1997; **51**: 304–9.
- 112 Tylee A, Priest R, Roberts A. *Depression in general practice*. London: Martin Dunitz Ltd, 1996.
- 113 Barraclough GM, Bunch J, Nelson B, Sainsbury P. A hundred cases of suicide: clinical aspects. *Brit J Psych* 1974; **125**: 355–73.
- 114 Vassilas D, Morgan G. General practitioners' contact with victims of suicide. *BMJ* 1993; **307**: 300–1.
- 115 Gunnell D. Recent studies of contacts with services prior to suicide. In: Jenkins R, Griffiths S, Wylie I, Hawton K *et al*. (eds). *The prevention of suicide*. London: HMSO, 1994.
- 116 Department of Health. *Safety first: Five-year report of the national inquiry into suicide and homicide by people with mental illness*. London: Department of Health, 2001.
- 117 Rutz W, von Knorring L, Walinder J. Long term effects of an educational program for general practitioners given by the Swedish committee for the prevention and treatment of depression. *Acta Psychiatr Scand* 1992; **85**: 83–8.
- 118 Thompson C, Kinmouth AL, Stevens L, Peveler R *et al*. Effects of a clinical practice guideline and practice based education on detection and outcome of depression in primary care: Hampshire depression project randomised control trial. *The Lancet* 1999; **355**: 185–91.
- 119 Phelan M, Stradins L, Morrison S. Physical health of people with severe mental illness. *BMJ* 2001; **322**: 443–4.
- 120 Jeste DV, Gladsjo JA, Lindamer LA, Lacro JP. Medical comorbidity in schizophrenia. *Schizophrenia Bulletin* 1996; **22**: 413–27.
- 121 Freeling P, Rao BM, Paykel ES, Sireling L *et al*. Unrecognized depression in general practice. *BMJ* 1985; **290**: 1880–3.
- 122 Tylee A, Freeling P, Kerry S. Why do general practitioners recognise depression in one woman patient yet miss it in another? *Brit J Gen Pract* 1993; **43**: 327–30.
- 123 Kessler D, Bennemith O, Lewis G, Sharp D. Detection of depression and anxiety in primary care: a follow-up study. *BMJ* 2002; **325**: 508–10.

- 124 Plummer S, Ritter S, Leach R *et al.* A controlled comparison of the abilities of practice nurses to detect psychological distress in patients who attend their clinics. *J Psych Mental Health Nursing* 1997; **4**: 221–3.
- 125 Briscoe M. Identification of emotional problems in postpartum women by health visitors. *BMJ* 1986; **292**: 1245–7.
- 126 Eisenberg L. Treating depression and anxiety in primary care. Closing the gap between knowledge and practice. *NEJM* 1992; **326**: 1080–4.
- 127 Shepherd M, Cooper B, Brown AC, Kalton GW. *Psychiatric illness in general practice*. Oxford: Oxford University Press, 1966.
- 128 Rost K, Smith GR, Mathews DB, Guise B. The deliberate misdiagnosis of major depression in primary care. *Arch Fam Med* 1994; **3**: 330–7.
- 129 Susman JL, Crabtree BF, Essink G. Depression in rural family practice: easy to recognise, difficult to diagnose. *Arch Fam Med* 1995; **4**: 427–31.
- 130 Goldberg DP, Jenkins L, Millar T, Faragher EB. The ability of trainee general practitioners to identify distress among their patients. *Psychol Med* 1993; **23**: 185–93.
- 131 Millar T, Goldberg DP. Link between the ability to detect and manage emotional disorders; a study of general practitioner trainees. *Brit J Gen Pract* 1991; **41**: 357–9.
- 132 Gask L, Sibbald B, Creed F. Evaluating models of working at the interface between mental health services and primary care. *Brit J Psych* 1997; **170**: 6–11.
- 133 Howie JGR, Porter AMD, Forbes JF. Quality and the use of time in general practice: widening the discussion. *BMJ* 1989; **298**: 1008–10.
- 134 Marks J, Goldberg D, Hillier V. Determinants of the ability of general practitioners to detect psychiatric illness. *Psychol Med* 1979; **9**: 337–53.
- 135 Joukamaa M, Lehtinen V, Karlsson H. The ability of general practitioners to detect mental disorders in primary health care. *Acta Psych Scand* 1995; **91**: 52–6.
- 136 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H. Depression comorbid with anxiety: Results from the WHO study on psychological disorders in primary health care. *Brit J Psych* 1996; **168**: 38–43.
- 137 Bridges KW, Goldberg DP. Somatic presentation of DSM III psychiatric disorders in primary care. *J Psychosom Res* 1985; **29**: 563–9.
- 138 Badger LW, DeGruy FV, Hartman J *et al.* Patient presentation, interview content and the detection of depression by primary care physicians. *Psychosom Med* 1994; **56**: 128–35.
- 139 Odell SM, Surtees PG, Wainwright NWJ *et al.* Determinants of general practitioner recognition of psychological problems in a multi-ethnic inner-city health district. *Brit J Psyche* 1997; **171**: 537–41.
- 140 Kessler D, Lloyd K, Lewis G, Pereira Gray D. Cross sectional survey of symptom attribution and recognition of depression and anxiety in primary care. *BMJ* 1999; **318**: 436–9.
- 141 Weich S, Lewis G, Donmall R, Mann A. Somatic presentation of psychiatric morbidity in general practice. *Brit J Gen Pract* 1995; **45**: 143–7.
- 142 Hoepfer EW, Ncyz, Kessler LG *et al.* The usefulness of screening for mental illness. *Lancet* 1984; **Jan 7** 1(8367): 33–5.
- 143 Marks JN, Goldberg DP, Hillier VF. Determinants of the ability of general practitioners to detect psychiatric illness. *Psychol Med* 1979; **9**: 337–53.
- 144 Boardman AP. The General Health Questionnaire and the detection of emotional disorder by general practitioners. A replicated study. *Brit J Psyche* 1987; **151**: 373–81.
- 145 Kirmayer LJ, Robbins JM, Dworkind M, Yaffe MJ. Somatization and the recognition of depression and anxiety in primary care. *Am J Psyche* 1993; **150**: 734–41.
- 146 Simon GE, Von Korff M. Recognition, management and outcomes of depression in primary care. *Arch Fam Med* 1995; **4**: 99–105.

- 147 Von Korff M, Shapiro S, Burke JD *et al.* Anxiety and depression in a primary care clinic. Comparison of diagnostic interview schedule, General Health Questionnaire and practitioner assessments. *Arch Gen Psych* 1987; **44**: 152–6.
- 148 Rand EH, Badger LW, Coggins DR. Towards a resolution of contradictions: utility of feedback from the GHQ. *Gen Hosp Psych* 1988; **10**: 189–96.
- 149 Gerber PD, Barrett J, Manheimer E *et al.* Recognition of depression by internists in primary care: a comparison of internist and ‘gold standard’ psychiatric assessments. *J Gen Intern Med* 1989; **4**: 7–13.
- 150 Coyne JC, Schwenck TL, Fechner-Bates S. Non-detection of depression by primary care physicians reconsidered. *Gen Hosp Psych* 1995; **7**: 3–12.
- 151 Tiemens BG, Ormel J, Simon GE. Occurrence, recognition and outcome of psychological disorders in primary care. *Am J Psych* 1996; **153**: 636–44.
- 152 Ronalds C, Creed F, Stone K *et al.* Outcome of anxiety and depressive disorders in primary care. *Brit J Psyche* 1997; **171**: 427–33.
- 153 Coyne JC, Klinkman MS, Gallo SM, Schwenck TL. Short-term outcomes of detected and undetected depressed primary care patients and depressed psychiatric patients. *Gen Hosp Psyche* 1997; **19**: 333–43.
- 154 Dowrick CF. Case or continuum? Analysing general practitioners’ ability to detect depression. *Primary Care Psychiatry* 1997; **1**: 255–7.
- 155 Goldberg DP, Jenkins L, Millar T, Faragher EB. The ability of trainee general practitioners to identify distress among their patients. *Psychol Med* 1993; **23**: 185–93.
- 156 Pollock K, Grime J. Patients perception of entitlement to time in general practice consultations for depression: quantitative study. *BMJ* 2002; **325**: 687–9.
- 157 Catalan J, Gath D, Edmonds G, Ennis J. The effects of non-prescribing of anxiolytics in general practice. *Brit J Psyche* 1984; **144**: 593–602.
- 158 Balestrieri M, Williams P, Wilkinson G. Specialist mental health treatment in general practice: a meta-analysis. *Psychol Med* 1988; **18**: 711–17.
- 159 Dunn RL, Donoghue JM, Ozminski RJ *et al.* Longitudinal prescribing of antidepressants in primary care in the UK: comparison with treatment guidelines. *J Psychopharmacol* 1999; **13**: 136–43.
- 160 Simon G, Lin EHB, Katon W, Saunders K *et al.* Outcomes of ‘inadequate’ antidepressant treatment in primary care. *J Gen Int Med* 1995; **10**: 663–70.
- 161 Gray R, Parr, Plummer S *et al.* A national survey of practice nurse involvement in mental health interventions. *J Adv Nursing* 1999; **30(4)**: 901–6.
- 162 Kendrick T, Millar E, Burns T, Ross F. Practice nurse involvement in giving depot neuroleptic injections: development of patient assessment and monitoring checklist. *Primary Care Psyche* 1998; **4(3)**: 149–54.
- 163 Wilkinson G. The role of the practice nurse in the management of depression. *Int Rev Psych* 1992; **4**: 311–16.
- 164 Mann A, Blizaed R, Murray J *et al.* An evaluation of practice nurses working with GPs to treat people with depression. *Brit J Gen Pract* 1998; **48**: 875–9.
- 165 Peveler R, George C, Kinmouth A-L *et al.* Effect of antidepressant drug counseling and information leaflets on adherence to drug treatment in primary care: randomised controlled trial. *BMJ* 1999; **319**: 612–5.
- 166 Root K, Nutting P, Smith JL *et al.* Managing depression as a chronic disease: a randomised trial of ongoing treatment in primary care. *BMJ* 2002; **325**: 934–7.
- 167 Roth A, Fonagy P. *What works for whom? A critical review of psychotherapy research.* New York: Guilford Press, 1996.
- 168 DoH Psychol therapies.

- 169 Gloaguen V, Cottraux J, Cucherat M, Blackburn IM. A meta-analysis of the effects of cognitive therapy in depressed patients. *J Affect Dis* 1998; **49**: 59–72.
- 170 NHS Centre for Reviews & Dissemination. Mental health promotion in high risk groups *Effective Health Care Bulletin* 1997; **3**(3).
- 171 Friedli K, King MB, Lloyd M, Horder J. Randomised controlled assessment of non-directive psychotherapy versus routine general practitioner care. *The Lancet* 1997; **350**: 1662–5.
- 172 Gournay K, Brooking J. Community psychiatric nurses in primary health care. *Brit J Psyche* 1994; **165**: 231–8.
- 173 Chilvers C, Dewey M, Fielding K *et al*. Antidepressant drugs and generic counselling for the treatment of major depression in primary care: randomised trial with patient preference arms. *BMJ* 2001; **322**: 722–5.
- 174 Mynors-Wallis LM, Gath DH, Day A, Baker F. Randomised controlled trial of problem solving treatment, antidepressant medication, and combined treatment for major depression in primary care. *BMJ* 2000; **320**: 26–30.
- 175 Ward E, King M, Lloyd M *et al*. Randomised control trial of non-directive counselling, cognitive behavioural therapy, and usual general practitioner care for patients with depression. 1. Clinical effectiveness. *BMJ* 2000; **321**: 1383–8.
- 176 Kupshik G, Fischer C. Assisted bibliographics: effective, efficient treatment for moderate anxiety problems. *Brit J Gen Pract* 1999.
- 177 Marks I. Computer aids to self-treatment of anxiety. *Progress in Neurology and Psychiatry* 1988: 35–7.
- 178 Treasure J, Schmidt U, Troop N *et al*. First step in managing bulimia nervosa. Controlled trial of therapeutic manual. *BMJ* 1994; **308**: 686–9.
- 179 McLean J, Pietroni P. Self Care – Who does best? *Soc Sci Med* 1990; **30**(5): 591–6.
- 180 Bower P, Richards D, Lovell K. The clinical and cost-effectiveness of self-help treatments for anxiety and depressive disorders in primary care: a systematic review. *Brit J Gen Pract* 2001; **51**: 838–45.
- 181 Wallcraft J. *Healing Minds*. Mental Health Foundation: London, 1998.
- 182 Linde K, Mulrow CD. St John's Wort for depression. In: *Cochrane Collaboration*. Oxford: The Cochrane Library, Update, 2001.
- 183 Lawlor DA, Hopker SW. The effectiveness of exercise in the management of depression: systematic review and meta-analysis of randomised controlled trials. *BMJ* 2001; **322**: 763–7.
- 184 Weich S. Prevention of the common mental disorders: a public health perspective. *Psychol Med* 27: 757–64.
- 185 Simon GE, Von Korff M. Recognition, management and outcomes of depression in primary care. *Arch Fam Med* 1995; **4**: 99–105.
- 186 Dowrick C, Buchan I. Twelve month outcome of depression in general practice: does detection or disclosure make a difference? *BMJ* 1995; **311**: 1274–6.
- 187 Goldberg D, Privett M, Ustun B *et al*. The effects of detection and treatment on the outcome of major depression in primary care. A naturalistic study in 15 cities. *Brit J Gen Pract* 1998; **48**: 1840–4.
- 188 Freeling P, Rao BM, Paykel ES, Sireling L *et al*. Unrecognized depression in general practice. *BMJ* 1985; **290**, 1880–3.
- 189 Zung WW, Magill M, Moore J, George DT. Recognition and treatment of depression in a family medicine practice. *J Clin Psyche* 1985; **44**: 3–6.
- 190 Oxman, Thomson, Davis, Haynes. No magic bullets: a systematic review of 102 trials of interventions to improve professional practice. *Can Med Ass J* 1995; **153**(10): 1423–31.
- 191 Kerwick SH, Jones RH. Educational interventions in primary care psychiatry: a review. *Primary Care Psyche* 1996; **2**: 107–17.

- 192 Rutz W, von Knorring L, Walinder J. Long term effects of an educational program for general practitioners given by the Swedish committee for the prevention and treatment of depression. *Acta Psychiatr Scand* 1992; **85**: 83–8.
- 193 Tylee A. Training the whole primary care team. In: Tonsella M, Thornicof G (eds). *Common mental disorders in primary care*. Routledge: London, 1999.
- 194 Paykel ES, Priest RG. Recognition and management of depression in general practice: consensus statement. *BMJ* 1992; **305**: 1198–202.
- 195 Stevens L, Thompson C. Consensus statement on the treatment of depression in primary care. *Primary Care Psych* 1995; **1**: 45–6.
- 196 Katon W, Robinson P, Von Korff M *et al*. A multi-faceted intervention to improve treatment of depression in general practice. *Arch Gen Psyche* 1996; **53**: 924–32.
- 197 Armstrong A. *The primary mental health care toolkit*. London: NHS Executive, 1997.
- 198 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 199 Armstrong E. Screening and assessment measures for the primary care team. *Int Rev Psych* 1998; **10**: 110–13.
- 200 Gilbody S, House AO, Sheldon TA. Routinely administered questionnaire for depression and anxiety: a systematic review. *BMJ* 2001; **322**: 406–8.
- 201 Lewis G: Case finding in primary care. In: Jenkins R, Ustun TB (eds). *Preventing mental illness: mental health promotion in primary care*. Chichester: Wiley, 1998.
- 202 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 203 Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10 item Edinburgh Postnatal Depression Scale. *Brit J Psyche* 1987; **150**: 782–6.
- 204 Gilbody S, House AO, Sheldon TA. Routinely administered questionnaire for depression and anxiety: a systematic review. *BMJ* 2001; **322**: 406–8.
- 205 Freeman, Gillam S, Shearin, Plamping D. *Community oriented primary care, depression and anxiety intervention guide*. London: King's Fund, 1997.
- 206 WHO.
- 207 Gask L, Goldberg D. Impact on patients care, satisfaction and clinical outcome of improving the psychiatric skills of general practitioners *Euro J Psyche* 1993; **7**: 203–18.
- 208 Scott J, Jennings T, Standart S *et al*. The impact of training in problem based interviewing on the detection and management of psychological problems presenting in primary care. *Brit J Gen Pract* 1999; **49**: 441–5.
- 209 Morriss R, Gask L, Ronalds C *et al*. Cost effectiveness of a new treatment for somatised mental disorder taught to general practitioners. *Fam Pract* 1998; **15**: 19–25.
- 210 Appleby L, Morriss R, Gask L *et al*. An educational intervention for frontline staff in the assessment and management of suicidal patients (the STORM project) *Psychol Med* 2000; **30**: 805–12.
- 211 Rutz W, von Knorring L, Walinder J. Long term effects of an educational program for general practitioners given by the Swedish committee for the prevention and treatment of depression. *Acta Psychiatr Scand* 1992; **85**: 83–8.
- 212 Hannaford PC, Thompson C, Simpson M. Evaluation of an educational programme to improve the recognition of psychological illness by general practitioners. *Br J Gen Pract* 1996; **46**: 333–7.
- 213 Thompson C, Kinmouth AL, Stevens L, Peveler R *et al*. Effects of a clinical practice guideline and practice based education on detection and outcome of depression in primary care: Hampshire depression project randomised control trial. *The Lancet* 1999; **355**: 185–91.
- 214 Lin E, Katon WJ, Simon GE, Von Korff M *et al*. Achieving guidelines for the treatment of depression in primary care. *Medical Care* 1997; **35**: 831–42.

- 215 Tylee A. Training the whole primary care team. In: Tonsella M, Thornicroft G (eds). *Common mental disorders in primary care*. London: Routledge, 1999.
- 216 Katon W, Robinson P, Von Korff M *et al*. A multi-faceted intervention to improve treatment of depression in general practice. *Arch Gen Psyche* 1996; **53**: 924–32.
- 217 Katon W, Von Korff M, Lin E, Walker E *et al*. Collaborative management to achieve treatment guidelines. Impact on depression in primary care. *JAMA* 1995; **273**: 1026–31.
- 218 Simon GE, Von Korff M, Rutter C, Wagner E. Randomised trial of monitoring, feedback and management of care by telephone to improve treatment of depression in primary care. *BMJ* 2000; **320**: 550–4.
- 219 Lave J, Frank R, Schulberg H, Kamlet M. Cost effectiveness of treatments for major depression in primary care. *Arch Gen Psyche* 1998; **55**: 645–51.
- 220 Von Korff M, Katon W, Bush T, Lin EHB *et al*. Treatment costs, cost offset, and cost effectiveness of collaborative management of depression. *Psychosom Med* 1998; **60**: 143–9.
- 221 Katon W, von Korff M, Lin E, Simons G. Rethinking practitioners role in chronic illness: the specialist, primary care physician and the practice nurse. *Gen Hosp Psyche* 2001; **23**: 138–44.
- 222 Mynors Wallis L, Gath D. Brief psychological treatments. *Int Rev Psyche* 1992; **4**: 301–5.
- 223 Gedenk M, Nepps P. Obsessive compulsive disorder diagnosis and treatment in the primary care setting. *J Am Board Fam Pract* 1997; **10**: 349–56.
- 224 King M, Davidson D, Taylor FD *et al*. Effectiveness of teaching general practitioners skills in brief cognitive behaviour therapy to treat patients with depression: randomised controlled trial. *BMJ* 2002; **324**.
- 225 Morris R, Gask L, Smith C, Battersby L. *Training practice nurses to assess and manage anxiety disorders*. Report to the NHSE, 1996.
- 226 Mynors-Wallis LM, Gath DH, Day A, Baker F. Randomised controlled trial of problem solving treatment, antidepressant medication, and combined treatment for major depression in primary care. *BMJ* 2000; **320**: 26–30.
- 227 Marks I. *Psychiatric nurse therapy in primary care: Research monographs in nursing series*. London: Royal College of Nursing, 1996.
- 228 Holden J, Sagovsky R, Cox J. Counselling in a general practice setting: a controlled study of health visitor intervention in treatment of postnatal depression. *BMJ* 1989; **298**: 223–6.
- 229 Katon W, Robinson P, Von Korff M *et al*. A multi-faceted intervention to improve treatment of depression in general practice. *Arch Gen Psyche* 1996; **53**: 924–32.
- 230 Onyett S. *The South Thames study: executive summary*. London: Centre for Mental Health Services Development, 1997.
- 231 Brown J *et al*. GPs responses to a primary care project aimed to integrate primary care and specialist mental health services. Submitted for publication.
- 232 Jackson G, Gater R, Goldberg D. A new community mental health team based in primary care: a description of the service and its effects on service use in the first year. *Brit J Psyche* 1993; **162**: 375–84.
- 233 Roberts T, Amonsah S, Downes-Grainger E *et al*. Integrating mental health services in Inner London: effects on staff.
- 234 Tyrer P, Hawksworth, Hobbs, Jackson. The role of the CPN. *Brit J Hosp Med* 1990; **43**: 439–42.
- 235 Grant C, Goodenough T, Haney I, Hine C. A randomised controlled trial and economic evaluation of a referral and facilitator between primary care and the voluntary sector. *BMJ* 2000; **320**: 419–23.
- 236 Murray S. Experiences with ‘rapid appraisal’ in primary care involving the public in assessing health needs, orientating staff, and educating medical students. *BMJ* 1999; **318**: 441–5.
- 237 Murray SA, Chick J, Perry B. Mental health, alcohol and drugs: constructing a neighbourhood profile. *Prim Care Psyche* 1996; **2**: 237–43.

- 238 Peck E. *Mental health service provision and the primary care team: emerging trends and critical questions*. CCMP 5(3): Pavilion Publications, 1997.
- 239 Scott J, Thorne H, Horn P. Effect of a multifaceted approach to detecting and managing depression in primary care. *BMJ* 2002; **325**: 951–4.
- 240 Sloper P, Mukherjee S, Beresford B *et al*. *Real change not rhetoric: putting research into practice in multi-agency services*. Policy Press 1999.
- 241 Cohen A, Phelan M. The physical health of patients with mental illness: a neglected area. *Mental Health Promotion Update*. London: Department of Health, Dec 2001.
- 242 Howie JGR, Porter AMD, Heaney DJ, Hopton JL. Long to short consultation ratio: a proxy measure of quality of care for general practice *Brit J Gen Pract* 1991; **41**: 48–54.
- 243 Mead, Bower, Gask L. Emotional problems in primary care: what is the potential for increasing the role of nurses? *J Adv Nurs* 1997; **26**: 869–90.
- 244 Barkham M, Margison F, Leacu C *et al*. Service profiling and outcome benchmarking using CORE-OM. Towards practice-based evidence in the psychological therapies. *J Con Clin Psychol*; **69(2)**: 184–96.
- 245 Department of Health. *Fast-forwarding primary care mental health: the role of graduate workers*. London: Department of Health, 2003.
- 246 Thompson, Strathdee G, Kelly (eds). *Mental health services development workbook*. London: Sainsbury Centre for Mental Health, 1996.
- 247 Department of Health. *Bridging the gap: a resource pack for successful joint working* London: Department of Health, 1998.
- 248 Rosen R. Improving quality in the changing world of primary care. *BMJ* 2000; **321**: 551–4.
- 249 Huntington J, Gillam S, Rosen R. Organisational development for clinical governance. *BMJ* 2000; **321**: 679–82.
- 250 Mann A, Tylee E. Evaluation of change in primary care practice. *Int Rev Psyche* 1998; **10**: 148–53.
- 251 Shield T, Campbell S, Rogers A *et al*. Quality indicators for primary care mental health services. *Qual Saf Health Care* 2003; **12**: 100–6.
- 252 Ustun TB, Sartorius N. *Mental illness in general health care*. Chichester: Wiley, 1995.
- 253 Stoudemire A, Frank R, Hedemark N *et al*. The economic burden of depression. *Gen Hosp Psych* 1986; **8**: 387–94.
- 254 Henk HJ, Katzelnick DJ, Kobak *et al*. Medical costs attributed to depression among patients with a history of high medical expenses in an HMO. *Arch Gen Psych* 1996; **53**: 899–904.
- 255 Martin RM, Hilton SR, Kerry SM, Richards NM. General practitioners perceptions of the tolerability of antidepressant drugs: a comparison of selective serotonin inhibitors and tricyclic antidepressants. *BMJ* 1997; **314**: 646–51.
- 256 Goldberg D, Huxley P. *Common mental disorders. A biosocial model*. London: Routledge, 1992.
- 257 Clinical Standards Advisory Group. *Services for patients with depression*. London: Stationery Office, 1999.
- 258 Brown GW, Bifulco A, Harris TO. Life events, vulnerability and onset of depression: some refinements. *Brit J Psych* 1987; **150**: 30–42.
- 259 Goldberg DP, Lecrubier Y. *Mental illness in general health care: an international study*. John Wiley & Sons, 1995.
- 260 Meltzer H, Gill B, Petticrew M, Hinks K. The prevalence of psychiatric morbidity among adults living in private households. *OPCS surveys of psychiatric morbidity in Great Britain Report 1*. London: HMSO, 1995.
- 261 Bebbington P. The origin of sex differences in depressive disorder: bridging the gap. *Int Rev Psych* 1996; **8**: 295–332.
- 262 Nazroo JY. Rethinking the relationship between ethnicity and mental health: the British Fourth National Survey of Ethnic Minorities. *Social Psychiatry & Psychiatric Epidemiology*. 1998; **33(4)**: 145–8.

- 263 Ostler K, Thompson C, Kinmonth AL, Peveler RC, Stevens L, Stevens A. Influence of socio-economic deprivation on the prevalence and outcome of depression in primary care: the Hampshire Depression Project. *British Journal of Psychiatry* 2001; **178**(1): 12–17.
- 264 Meltzer H, Gill B, Petticrew M, Hinks K. The prevalence of psychiatric morbidity among *adults living in private households*. *OPCS surveys of psychiatric morbidity in Great Britain Report 1*. London: HMSO, 1995.
- 265 Kendrick T. Prescribing antidepressants in general practice: watchful waiting for minor depression and full dose treatment for major depression. Editorial. *BMJ* 1996; **313**: 829–70.
- 266 Angst J. A regular review of the long-term follow-up of depression. *BMJ* 1997; **315**: 1143–6.
- 267 Wells KB, Burman MA, Rogers W *et al*. The course of depression in medical out patients. Results from the medical outcome study. *Arch Gen Psych* 1992; **49**: 788–94.
- 268 Howland RH. General health, health care utilization and medical co-morbidity in dysthymia. *Int Rev Psych* 1993; **23**: 211–38.
- 269 Docherty JD. Barriers to the diagnosis of depression in primary care. *J Clin Psych* 1997; **58**: 5–10.
- 270 Plummer S, Ritter S, Leach R *et al*. A controlled comparison of the abilities of practice nurses to detect psychological distress in patients who attend their clinics. *J Psych Mental Health Nursing* 1997; **4**: 221–3.
- 271 Briscoe M. Identification of emotional problems in postpartum women by health visitors. *BMJ* 1986; **292**: 1245–7.
- 272 Coyne JC, Schwenk TL, Fechner-Bates S. non-detection of depression by primary care physicians reconsidered. *Gen Hosp Psych* 1995; **17**: 3012.
- 273 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H. Depression comorbid with anxiety: results from the WHO study on psychological distress in primary health care. *Brit J Psych* 1996; **168**: 38–43.
- 274 Bridges KW, Goldberg DP. Somatic presentation of DSM III psychiatric disorders in primary care. *J Psychosom Res* 1985; **29**: 563–9.
- 275 Badger LW, DeGruy FV, Hartman J *et al*. Patient presentation, interview content and the detection of depression by primary care physicians. *Psychosomatic Med* 1994; **56**: 128–35.
- 276 Odell SM, Surtees PG, Wainwright NWJ *et al*. Determinants of general practitioner recognition of psychological problems in a multi-ethnic inner city health district. *Brit J Psych* 1997; **171**: 537–41.
- 277 Thompson C, Kinmonth AL, Stevens L, Peveler R *et al*. Effects of a clinical practice guideline and practice based education on detection and outcome of depression in primary care: Hampshire depression project randomised control trial. *The Lancet* 1999; **355**: 185–91.
- 278 Stevens L, Thompson C. Consensus statement on the treatment of depression in general practice. *Primary Care Psych* 1995; **1**: 45–6.
- 279 Hollyman JA, Freeling P, Paykel ES. Double blind controlled trial of amitriptyline among depressed patients in general practice. *J Royal Coll GPs* 1988; **38**: 393–7.
- 280 Paykel ES, Hollyman JA, Freeling P, Sedgewick P. Predictors of therapeutic benefit from amitriptyline in mild depression: a general practice placebo controlled study. *J Affect Disorders* 1988; **14**: 83–95.
- 281 Thompson C, Thompson CM. The prescription of antidepressants in general practice I: a critical review. *Human Psychopharmacology* 1989; **4**: 91–102.
- 282 Schulberg HC, Block MR, Madonia MJ *et al*. Treating major depression in primary care practice, eight month clinical outcomes. *Arch Gen Psych* 1996; **53**: 913–19.
- 283 Katon W, Robinson P, Von Korff M *et al*. A multi-faceted intervention to improve treatment of depression in primary care. *Arch Gen Psych* 1996; **53**: 924–32.
- 284 Bollin P, Pampallona S, Tibaldi G *et al*. Effectiveness of antidepressants. Meta-analysis of dose-effect relationships in randomised controlled trials. *Brit J Psyche* 1999; **174**: 297–303.
- 285 Song F, Freemantle N, Sheldon TA *et al*. Selective serotonin reuptake inhibitors: a meta-analysis of efficacy and acceptability. *BMJ* 1993; **306**: 683–7.

- 286 Hotopf M, Hardy R, Lewis G. Discontinuation rates of SSRIs and tricyclic antidepressants: a meta-analysis and investigation of heterogeneity. *Brit J Psych* 1997; **170**: 120–7.
- 287 Simon G, Von Korff M, Heiligenstein J *et al.* Initial antidepressant choice in primary care: effectiveness and cost of fluoxetine vs. tricyclic antidepressants. *JAMA* 1996; **275**: 1897–902.
- 288 Jonsson B, Bebbington P. Economic studies of the treatment of depressive illness. In: Jonsson B, Rosenbaum B (eds). *Health economics of depression*. Chichester: Wiley, 1993.
- 289 US Dept Health Human Services, Agency for Health Care Policy & Research.: *Depression in primary care. Treatment of major depression*. Clinical Practice Guideline no 5 1993. AHCPR publication 93–0551.
- 290 Paykel ES, Hart D, Priest R. Changes in public attitudes to depression during the defeat depression campaign. *Brit J Psych* 1998; **173**: 519–22.
- 291 MORI Poll, conducted for Defeat Depression Campaign. London: MORI, 1992.
- 292 MORI Poll, conducted for Defeat Depression Campaign, London: MORI, 1995.
- 293 Peveler R, George C, Kinmouth A-L, Campbell M *et al.* Effect of antidepressant drug counseling and information leaflets on adherence to drug treatment in primary care: randomised controlled trial. *BMJ* 1999; **319**: 612–5.
- 294 Simon GE, Von Korff M, Rutter C, Wagner E. Randomised trial of monitoring, feedback and management of care by telephone to improve treatment of depression in primary care. *BMJ* 2000; **320**: 550–4.
- 295 Paykel ES, Hart D, Priest R. Changes in public attitudes to depression during the defeat depression campaign. *Brit J Psych* 1998; **173**: 519–22.
- 296 Sheldon T, Freemantle N, House A *et al.* Examining the effectiveness of treatments for depression in general practice. *J Mental Health* 1993; **2**: 141–56.
- 297 Scott C, Tacchi MJ, Jones R, Scott J. Acute and one year outcomes of a randomised controlled trial of brief cognitive therapy for major depressive disorder in primary care. *Brit J Psych* 1997; **171**: 131–4.
- 298 Gloaguen V, Cottraux J, Cucherat M, Blackburn IM. A meta-analysis of the effects of cognitive therapy in depressed patients. *J Affect Dis* 1998; **49**: 59–72.
- 299 Gloaguen V, Cottraux J, Cucherat M *et al.* A meta-analysis of the effects of cognitive therapy in depressed patients. *J Affect Dis* 1998; **49**: 59–72.
- 300 Fava GA, Rafanelli C, Grandi S *et al.* *Arch Gen Psych* 1998; **55**: 816–20.
- 301 Paykel ES, Scott J, Teasdale JD *et al.* Prevention of relapse in residual depression by cognitive therapy. A controlled trial *Arch Gen Psyche* 1999; **56**: 829–35.
- 302 Schulberg HC, Block MR, Madonia MJ *et al.* Treating major depression in primary care practice. eight month clinical outcomes. *Arch Gen Psych* 1996; **52**: 913–19.
- 303 Kupfer DJ, Frank E, Perel JM *et al.* Five year outcome for maintenance therapies in recurrent depression. *Arch Gen Psych* 1992; **49**: 769–73.
- 304 US Dept Health Human Services, Agency for Health Care Policy & Research.: *Depression in primary care. Treatment of major depression*. Clinical Practice Guideline no 5 1993. AHCPR publication 93–0551.
- 305 Mynors-Wallis LM, Gath DH *et al.* Randomised controlled trial comparing problem solving treatment with amitriptyline and placebo for major depression in primary care. *BMJ* 1995; **310**: 441–5.
- 306 Mynors-Wallis LM, Gath DH, Day A, Baker F. Randomised controlled trial of problem solving treatment, antidepressant medication and combination treatment for major depression in primary care. *BMJ* 2000; **320**: 26–30.
- 307 Dowrick C, Dunn G, Ayuso-Mateos JL *et al.* Problem solving treatment and group psychoeducation for depression: multicentre randomised controlled trial. *BMJ* 2000; **321**: 1450–4.

- 308 Freidli K, King M, Lloyd M, Horder J. Randomised controlled assessment of non-directive psychotherapy versus routine general practitioner care. *The Lancet* 1997; **350**: 1662–5.
- 309 Ward E, King M, Lloyd M *et al.* Randomised controlled trial of non-directive counselling, cognitive-behaviour therapy and usual general practitioner care for patients with depression. I Clinical effectiveness. *BMJ* 2000; **321**: 1383–8.
- 310 Bower P, Byford S, Sibbald B *et al.* Randomised controlled trial of non-directive counselling, cognitive-behaviour therapy and usual general practitioner care for patients with depression. I Cost effectiveness. *BMJ* 2000; **321**: 1389–92.
- 311 Chilvers C, Dewey M, Fielding K *et al.* Antidepressant drugs and generic counselling for treatment of major depression in primary care: randomised trial with patient preference arms. *BMJ* 2001; **322**: 772–5.
- 312 Linde K, Mulrow CD. *St John's Wort for Depression*. Cochrane Review. Oxford: the Cochrane Library, 2001.
- 313 Thiede HM, Walper A. Inhibition of MAO and CoMT by hypericum extracts and hypericin. *Journal of Geriatric Psychiatry and Neurology* 1994; **7** (Suppl 1): S54–6.
- 314 Phillip M, Kohnen R, Karl-O H. Hypericum extract versus imipramine or placebo in patients with moderate depression: randomised multi-centre study of treatment for eight weeks. *BMJ* 1999; **319**: 1534–9.
- 315 Woelk H for the Remotiv/Imipramine Study Group. Comparison of St John's Wort and imipramine for treating depression: randomised controlled trial. *BMJ* 2000; **321**: 536–9.
- 316 Glenister D. Exercise and mental health: a review. *J Royal Soc Health* 1996; **Feb**: 7–13.
- 317 McCann L, Holmes D. Influence of aerobic exercise on depression. *J Pers Soc Psychol* 1984; **46**: 1142–7.
- 318 Health Education Authority. Physical activity and mental health: national consensus statements and guideline for practice. London: HEA, 2000.
- 319 Lawlor DA, Hopker SW. The effectiveness of exercise as an intervention in the management of depression: systematic review and meta-analysis of randomised controlled trials. *BMJ* 2001; **322**: 763–6.
- 320 Shear MD, Schulberg HC. Anxiety disorders in primary care. *Bulletin of the Menninger Clinic*. 1995; **59**: 2 (suppl A).
- 321 Reiger DA, Rae DS, Narrow WE *et al.* Prevalence of anxiety disorders and their co-morbidity with mood and addictive disorders. *Brit J Psych* 1998; **173** (Suppl 34): 24–8.
- 322 Lader MH. Guidelines for the management of patients with generalised anxiety. *Bull Royal Coll Psych* 1992; **16**: 560–5.
- 323 Weiller E, Bisserbe JC, Maier W, Lecrubier Y. Prevalence and recognition of anxiety symptoms in five European primary care settings: a report from the WHO study on psychological problems in general health care. *Brit J Psych* 1998; **173** (Suppl 34): 18–23.
- 324 Kessler RC, McGonagle KA, Zhao S *et al.* Lifetime and 12 month prevalence of DSM-II-R psychiatric disorders in the Untied States: results from the national comorbidity study. *Arch Gen Psyche* 1992; **51**: 8–19.
- 325 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H. Depression comorbid with anxiety: results from the WHO study on psychological distress in primary health care. *Brit J Psych* 1996; **168**: 38–43.
- 326 Reiger DA, Rae DS, Narrow WE *et al.* Prevalence of anxiety disorders and their co-morbidity with mood and addictive disorders. *Brit J Psych* 1998; **173** (Suppl 34): 24–8.
- 327 Reiger DA, Rae DS, Narrow WE *et al.* Prevalence of anxiety disorders and their co-morbidity with mood and addictive disorders. *Brit J Psych* 1998; **173** (Suppl 34): 24–8.

- 328 Kessler RC, McGonagle KA, Zhao S *et al.* Lifetime and 12 month prevalence of DSM-II-R psychiatric disorders in the United States: results from the national comorbidity study. *Arch Gen Psyche* 1992; **51**: 8–19.
- 329 Catalan P, Gath DH *et al.* The effects of not prescribing anxiolytics in general practice. *Brit J Psyche* 1984; **144**: 593–602.
- 330 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H. Depression comorbid with anxiety: results from the WHO study on psychological distress in primary health care. *Brit J Psych* 1996; **168**: 38–43.
- 331 Fifer SD, Mathias SD, Patrick DL *et al.* Untreated anxiety among adult primary care patients in a health maintenance organisation. *Arch Gen Psych* 1994; **51**: 740–50.
- 332 Gould RA, Otto MW, Pollack MH, Yap L. Cognitive behavioural and pharmacological treatment of generalised anxiety disorder: a preliminary meta-analysis. *Behav Ther* 1997; **28**: 285–305.
- 333 Catalan P, Gath DH *et al.* The effects of not prescribing anxiolytics in general practice. *Brit J Psyche* 1984; **144**: 593–602.
- 334 Kahn R, Mcnair D, Lipman R *et al.* Imipramine and chlordiazepoxide in depressive and anxiety disorders II Efficacy in anxious outpatients. *Arch Gen Psych* 1986; **43**: 79–85.
- 335 Rocca P, Fonzo V, Scotta M *et al.* Paroxetine efficacy in the treatment of generalised anxiety disorder. *Acta Psych Scand* 1997; **95**: 444–50.
- 336 American Psychiatric Association. Practice guideline for the treatment of patients with panic disorder. *Am J Psych* 1998; **155**: 5 (May suppl).
- 337 Stein MB, Chartier MJ, Hazen Al *et al.* Paroxetine in the treatment of generalised social phobia: open-label treatment and double-blind, placebo-controlled discontinuation. *J Clin Psychopharm.* 1996; **16**: 218–22.
- 338 Murray B, Stein M, Michael R *et al.* Paroxetine treatment of generalized social phobia (social anxiety disorder): a randomised controlled trial. *JAMA* 1998; **280**: 8.
- 339 Gould RA, Otto MW, Pollack MH, Yap L. Cognitive behavioural and pharmacological treatment of generalised anxiety disorder: a preliminary meta-analysis. *Behav Ther* 1997; **28**: 285–305.
- 340 Tyrer P. Use of beta blocking drugs in psychiatry and neurology. *Drugs* 1980; **20**: 300–8.
- 341 Roth A, Fonagy P. *What works for whom? A critical review of psychotherapy research.* New York: Guilford, 1996.
- 342 Gould RA, Otto MW, Pollack MH, Yap L. Cognitive behavioural and pharmacological treatment of generalised anxiety disorder: a preliminary meta-analysis. *Behav Ther* 1997; **28**: 285–305.
- 343 Roth A, Fonagy P. *What works for whom? A critical review of psychotherapy research.* New York: Guilford, 1996.
- 344 Marks I, Swinson RP. Alprazolam and exposure for panic disorder with agoraphobia; summary of London/Toronto results. *J Psych Res* 1990; **24**: 100–1.
- 345 Wade WA, Treat TA, Stuart GL. Transporting an empirically supported treatment for panic disorder to a service clinic setting; a benchmarking strategy. *J Con Clin Psychol* 1998; **66**: 231–9.
- 346 De Rubeis RJ, Crits-Cristoph P. Empirically supported individual and group psychological treatments for adult mental disorders. *J Con Clin Psychol* 1998; **66**(1): 37–52.
- 347 Hawton K, Kirk J Problem-solving. In: Hawton K, Salkovskis PM, Kirk J, Clark DM (eds). *Cognitive therapy for psychiatric problems.* Oxford: Oxford Medical Publications, 1989.
- 348 Catalan P, Gath E. Benzodiazepines in general practice a time for decision. *BMJ* 1985; **290**: 375–6.
- 349 Shear MD, Schulberg HC. Anxiety disorders in primary care. *Bulletin of the Menninger Clinic.* 1995; **59**: 2 (suppl A).
- 350 Donnan P, Hutchinson A, Paxton R *et al.* Self help materials for anxiety: a randomised controlled trial in general practice. *Brit J GP* 1990; **Dec.**
- 351 Sorby NGD, Reavley W, Huber JW. Self-help programmes for anxiety in general practice: controlled trial of an anxiety management booklet. *Brit J GP* 1991; **41**: 417–20.

- 352 Kupshik G, Fisher C. Assisted bibliotherapy: effective, efficient treatment for moderate anxiety problems. *Brit J GP* 1999; **Jan**.
- 353 McLean B, Pietroni R. Self care – Who does best? *Soc Sci Med* 1990; **30(5)**: 591–6.
- 354 Milne DL, Jones RQ, Walters P. Anxiety management in the community: a social support model and preliminary evaluation. *Beh Psychotherapy* 1989; **17**: 221–6 – quoted in Shear & Schulberg.
- 355 Vickers A, Zollman C. ABC of complementary therapies: hypnosis and relaxation. *BMJ* 1999; **319**: 1346–8.
- 356 Kirsch I, Montgomery G, Sapirstein G. Hypnosis as an adjunct to cognitive-behavioural psychotherapy. *J Con Clin Psychol* 1995; **63**: 214–20.
- 357 NIH Technology Assessment Panel on integration of behavioural and relaxation approaches into the treatment of chronic pain and insomnia. *JAMA* 1996; **276**: 313–8.
- 358 Smith GR. The course of somatisation and its effects on the use of health care resources. *Psychosomatics* 1994; **35**: 263–7.
- 359 Speckens A, van Hemert A, Bolk J, Rooijmans H, Hengeveld M. Unexplained physical symptoms: outcome and utilisation of medical care and associated factors. *Psychol Med* 1996; 45–52.
- 360 Reid S, Wessely S, Crayford T, Hotope M. Frequent attenders with medically unexplained symptoms: service use and costs in secondary care. *Brit J Psyche* 2002; **280**: 248–53.
- 361 NHS Executive. *Burdens of disease: a discussion document*. London: Department of Health, 1996.
- 362 Peveler R. Understanding medically unexplained symptoms: more progress in the next century than in this? *J Psychosom Res* 1998; **45**: 93–7.
- 363 Ustun TB, Privett, Costa de Silva. *Mental disorders in primary care: an executive summary of the WHO collaborative study on psychological problems in general health care*. Geneva: WHO, 1998.
- 364 Ustun TB (ed). *Mental disorders in primary care a World Health Organisation training package*. Geneva: WHO, 1998.
- 365 Kirmayer LJ, Robbins JM. Patients who somatize in primary care: a longitudinal study of cognitive and social characteristics. *Psychol Med* 1996; **26**: 937–51.
- 366 Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. *BMJ* 1999; **318**: 372–6.
- 367 Thomas KB. Temporarily dependent patients in general practice. *BMJ* 1974; **268**: 625–6.
- 368 Peveler RC, Kilkenny L, Kinmouth AL. Medically unexplained physical symptoms in primary care: a comparison of self-report screening questionnaires and clinical opinion. *J Psychosom Res* 1997; **42**: 245–52.
- 369 Schilte AF, Portegijis PJM, Blankenstein AH *et al*. Randomised controlled trial of disclosure of emotionally important events in primary care. *BMJ* 2001; **323**: 86–9.
- 370 Schilte AF, Portegijis PJM, Blankenstein AH *et al*. Randomised controlled trial of disclosure of emotionally important events in primary care. *BMJ* 2001; **323**: 86–9.
- 371 Katon W. Panic disorder and somatisation: review of 55 cases. *Am J Med* 1984; **77**: 101–6.
- 372 Creed F, Mayou R, Hopkins A. *Medical symptoms not explained by organic disease*. London: Royal College of Psychiatrists and Royal College of Physicians, 1992.
- 373 Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. *BMJ* 1999; **318**: 372–6.
- 374 Smith GR Jnr *et al*. A trial of the effect of a standardised psychiatric consultation on health outcomes and costs in somatising patients. *Arch Gen Psych* 1995; **52**: 238–43.
- 375 O'Dowd T. Five years of heartsink patients in general practice. *BMJ* 1988; **297**: 528–30.
- 376 Heartsink *BJGP* 1999; **49**: 230–3.
- 377 Gask L, Morriss R, Goldberg D. *Managing somatic presentation of emotional distress (reattribution; 2nd edition) videotape*. Manchester: University of Manchester, 1999.

- 378 Gask L, Goldberg D, Porter R, Creed F. The treatment of somatisation: evaluation of a training package with general practice trainees. *J Psychosom Res* 1989; **33**: 697–703.
- 379 Goldberg D, Ask I, O'Dowd T. The treatment of somatisation: teaching the skills of reattribution. *J Psychosom Res* 1989; **33**: 689–95.
- 380 Goldberg D, Benjamin S, Creed F. Abnormal illness behaviour In: *Psychiatry in medical practice*. London: Routledge, 1994.
- 381 Morris R, Gask L, Ronalds C *et al*. Cost-effectiveness of a new treatment for somatised mental disorder taught to general practitioners. *Fam Pract* 1998; **15**: 19–25.
- 382 Morris R, Gask L, Ronalds C *et al*. Clinical and patient satisfaction outcome of a new treatment for somatised mental disorder taught to general practitioners. *Brit J Gen Pract* 1999; **49**: 263–7.
- 383 Guthrie E. Psychotherapy of somatization disorders. *Current Opinion in Psyche* 1997; **9**(3): 182–7.
- 384 Speckens A, van Hemert A, Spinhoven P *et al*. Cognitive behavioural therapy for medically unexplained symptoms: a randomised controlled trial. *BMJ* 1995; **311**: 1328–32.
- 385 Wilkinson PB, Mynors-Wallis L. Problem solving in the treatment of unexplained physical symptoms in primary care: a preliminary study. *J Psychosom Res* 1994; **38**: 591–8.
- 386 Pilowsky I, Barrow CG. A controlled study of psychotherapy and amitriptyline used individually and in combination in the treatment of chronic intractable 'psychogenic' pain. *Pain* 1990; **40**: 3–19.
- 387 Gill D, Hatcher S. *A systematic review of the treatment of depression with antidepressant drugs in patients who also have physical illness*. Cochrane Review. Oxford: Cochrane Library, 2001.
- 388 Ustun TB, Privett, Costa de Silva. *Mental disorders in primary care: an executive summary of the WHO collaborative study on psychological problems in general health care*. Geneva: WHO, 1998.
- 389 NHS Centre for Reviews & Dissemination. Mental health promotion in high risk groups *Effective Health Care Bulletin* 1997; **3**(3).
- 390 Parkes CM. *Bereavement: studies of grief in adult life*. London: Tavistock and Pelican, New York, International Universities Press, 1986.
- 391 Coyne J, Schwenk T. The relationship of distress to mood disturbance in primary care and psychiatric populations. *J Consul Clin Psychol* 1997; **65**(1): 161–8.
- 392 Andreasen N, Hoenk P. The predictive value of adjustment disorders: a follow up study. *Am J Psych* 1982; **139**: 5.
- 393 Parkes CM. *Bereavement: studies of grief in adult life*. London: Tavistock and Pelican; New York: International Universities Press, 1986.
- 394 Treatment protocol project. *Management of mental disorders*. (Vol 1, 2e). Geneva: WHO Collaborating Centre for Mental Health and Substance Abuse, 1997.
- 395 Ustun TB, Privett, Costa de Silva. *Mental disorders in primary care: an executive summary of the WHO collaborative study on psychological problems in general health care*. Geneva: WHO, 1998.
- 396 Raphael B. Preventative intervention with the recently bereaved. *Arch Gen Psych* 1979; **34**: 1450–4.
- 397 Turnbull S, Ward A, Treasure J *et al*. The demand for eating disorder care: an epidemiological study using the general practice research database. *Brit J Psych* 1996; **169**: 705–12.
- 398 Whitehouse AM, Cooper PJ, Vize CV *et al*. The prevalence of eating disorders in three Cambridge general practices; hidden and conspicuous morbidity. *Brit J Gen Pract* 1992; **42**: 57–60.
- 399 Von Hoeken D, Lucas AR, Hoek HW. Epidemiology. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 400 Carlat DJ, Camargo CA. Review of bulimia nervosa in males. *Am J Psych* 1991; **154**: 1127–32.
- 401 Turnbull S, Ward A, Treasure J *et al*. The demand for eating disorder care: an epidemiological study using the general practice research database. *Brit J Psych* 1996; **169**: 705–12.
- 402 Von Hoeken D, Lucas AR, Hoek HW. Epidemiology. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 403 BED prevalence.

- 404 Turnbull S, Ward A, Treasure J *et al.* The demand for eating disorder care: an epidemiological study using the general practice research database. *Brit J Psych* 1996; **169**: 705–12.
- 405 Gard MCE, Freeman CP. The dismantling of a myth: a review of eating disorders and socioeconomic status. *Int J Eating Dis* 1996; **20**: 1–12.
- 406 Hay PJ, Bacaltchuk J. Bulimia nervosa. *BMJ* 2001; **323**: 33–7.
- 407 Hoek HW, Bartelds AI, Bosveld J *et al.* Impact of urbanisation on detection of eating disorders. *Am J Psych* 1995; **152**: 1272–8.
- 408 Herzog DB, Nussbaum KM, Marmor AK. Comorbidity and outcome in eating disorders. *The Psychiatric Clinics of America* 1996; **19**: 843–59.
- 409 Danksy BS, Brewerton TD, Kilpatrick DG, O’Neil PM. The national women’s study: relationship of victimisation and post traumatic stress disorder to bulimia nervosa. *Int J Eating Dis* 1997; **21**: 213–28.
- 410 Favaro A, Santonastaso P. Suicidality in eating disorders; clinical and psychological correlates. *Acta Psych Scand* 1997; **95**: 508–14.
- 411 Keller MB, Herzog DB, Lavori PW *et al.* The naturalistic history of bulimia nervosa: extraordinarily high rates of chronicity, relapse, recurrence and psychosocial morbidity. *Int J Eating Dis* 1992; **12**: 1–9.
- 412 Fichter MM, Quadflieg N, Gnutzmann A. Binge eating disorder: treatment and outcome over a six-year course. *J Psychosom Res* 1998; **44**: 385–405.
- 413 Welch SL, Fairburn CG. *Sampling bias and bulimia nervosa*. Paper presented at the 5th International Conference on Eating Disorders. Abstract 161. New York, 1992.
- 414 Whitehouse AM, Cooper PJ, Vize CV *et al.* The prevalence of eating disorders in three Cambridge general practices; hidden and conspicuous morbidity. *Brit J Gen Pract* 1992; **42**: 57–60.
- 415 Luck AS, Morgan F, Reid F *et al.* The SCOFF questionnaire and clinical interview for eating disorders in general practice: comparative study. *BMJ* 2002; **325**: 755–6.
- 416 Schmidt U. Treatment of Bulimia nervosa. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 417 Hay PJ, Bacaltchuk J. *Psychotherapy for bulimia nervosa and bingeing*. Cochrane Database. Oxford: Cochrane Collaboration 2001.
- 418 Fairburn CG, Welch SL, Doll HA *et al.* A prospective study of the outcome of bulimia nervosa and the long-term effects of three psychological treatments. *Arch Gen Psych* 1995; **54**: 509–17.
- 419 Thiels C, Schmidt U, Treasure J *et al.* Guided self-change for bulimia nervosa incorporating a self-treatment manual. *Am J Psych* 1998; **2155**: 947–53.
- 420 Agras WS, Walsh BT, Fairburn CG. A multi-centre comparison of cognitive-behavioural therapy and interpersonal psychotherapy. *Arch Gen Psych* 2000; **54**: 459–65.
- 421 Treasure JL, Katzman M, Schmidt U. Engagement and outcome in the treatment of bulimia nervosa: first stage of a sequential design comparing motivational enhancement therapy and cognitive behavioural therapy. *J Behav Res Ther* 1999; **37**: 405–18.
- 422 Mayer LES, Walsh BT. Pharmacotherapy of eating disorders. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 423 Bacaltchuk J, Hay P, Mari JJ. Antidepressants versus placebo for the treatment of bulimia nervosa: a systematic review. *Aust NZ J Psych* 2000; **34**: 310–17.
- 424 Schmidt U. Treatment of Bulimia nervosa. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 425 Treasure JL, Todd G, Brolly M *et al.* A pilot study of randomised trial of cognitive analytic therapy versus educational behavioural therapy for adult anorexia nervosa. *Beh Res Ther* 1995; **33**: 363–7.
- 426 Russell GFM, Szmukler G, Dare C, Eisler I. An evaluation of family therapy in anorexia and bulimia nervosa. *Arch Gen Psych* 1987; **44**: 1047–56.
- 427 Touyz SW, Beaumont PJ, Dunn SM. Behaviour therapy in the management of patients with anorexia nervosa. A lenient flexible approach. *Psychotherapy and psychosomatics* 1987; **48**: 151–6.

- 428 Freeman C. Cognitive therapy. In: Schmuckler G, Dare C, Treasure J (eds). *Handbook of eating disorders. Theory, treatment and research*. Chichester: John Wiley and Sons, 1995.
- 429 Levine MD, Marcus MD. The treatment of binge eating disorder. In: Hoek HW, Treasure JL, Katzman MA (eds). *Neurobiology in the treatment of eating disorders*. Chichester: John Wiley and Sons, 1998.
- 430 Royal College of Psychiatrists. *Eating disorders*. Council report CR15. London: RCO Psych, 1992.
- 431 Eating Disorders Association. *Eating disorders a guide to purchasing and providing services*. EDA, 1997.
- 432 Gask L, Sibbald B, Creed F. Evaluating models of working at the interface between mental health services and primary care. *Brit J Psych* 1997; **170**: 6–11.
- 433 Strathdee G, Sutherby K. *Review of the literature relevant to the development of a primary care strategy for mental health*. Report for Lambeth, Southwark and Lewisham Health Authority. Available from Health Service Research Unit, Institute of Psychiatry, 1993.