Management of adults with depression in primary care

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Abstract

Mental health problems, especially depression, represent a significant proportion of GP workload. This paper is a brief overview from a primary care perspective. Important differences exist between primary and specialist care; patients with a broader range of severity, physical comorbidity and social problems present to GPs. It is important to differentiate depression from self-limiting low mood or an adjustment disorder. Comorbid anxiety, physical health problems, age-related problems and alcohol or drug misuse may also complicate the picture. Furthermore, apparent 'depression' may be part of a more complex illness like bipolar disorder, requiring different management. Assessment involves exploration of severity, duration and course of symptoms, functional impact and risks to the person or others; asking about thoughts of self-harm is of major importance. Most people are managed in primary care but some require specialist input. Guidelines suggest a 'stepped-care' approach, with the least intensive treatment offered first (as appropriate) and 'stepping' up or down as required. Exercise, diet, psychological therapies and antidepressants all have roles in management. Proactive follow-up and support are key to effective treatment.

Background

Most adults with depression, with or without anxiety, are diagnosed and managed within primary care. These disorders are common: the estimated UK point prevalence of a depressive episode is 2.6% and the prevalence of mixed anxiety and depression is 11.4% (1).

Research over the last 30 years has suggested that a substantial proportion of depression goes undiagnosed in primary care. One of the reasons for this is that mood symptoms are often associated with other chronic illnesses, and physical needs may seem more pressing to both doctor and patient in the context of relatively brief consultations. On the other hand, alarm has been expressed at the 'medicalisation of unhappiness' and the high volume of antidepressant prescribing.

There are advantages to primary-care-based management, where emphasis is on whole-person care. GPs often know their patients, their families, and their social setting. Primary care is more easily accessible and perceived as less stigmatising than mental health services; GPs can often offer a longitudinal and developmental perspective. They may already be involved in managing other illnesses associated with the depression. There are limitations, however; some patients with depression may think that doctors are not approachable or not interested in hearing about low mood.

Diagnosis of depression

Diagnosis can be challenging for many reasons, especially as it may not be possible to cover all areas in a single brief consultation. However, one of the strengths of general practice is the opportunity for re-evaluation over time, striking a careful balance between over- and under-medicalisation.

Whilst some mood symptoms are obvious, patients may present with physical symptoms, which may indicate underlying depression. Mood changes can amplify and distort a patient's fears and thoughts about bodily symptoms; sensitive exploration over time can help in identifying the underlying issues and

gaining the patient's understanding and their ideas about acceptable treatments.

Recently updated guidelines from the British Association of Psychopharmacology provide a comprehensive overview. A bio-psycho-social assessment (Box 1) is advocated, exploring symptoms which may indicate depression (Box 2). NICE guidelines for depression (CG90 and CG91) stress the importance of assessing functional impairment, and not relying on symptom count alone (2).

Box 1: Bio-psycho-social assessment

Current symptoms including duration and severity

- Personal history of depression
- Family history of mental illness
- The quality of interpersonal relationships with partner, children and/or parents
- Living conditions/housing
- Social support
- Employment/financial worries
- Current or previous alcohol and substance misuse
- Suicidal ideation
- Thoughts on treatment options
- Any past experience of, and response to, treatments

Box 2: Diagnosis of a major depressive episode

- Depressed mood or a loss of interest or pleasure in daily activities for more than two weeks
- Mood represents a change from the person's baseline
- Impaired function: social, occupational, educational

Specific symptoms, at least five of these nine, present nearly every day, including one of the above:

- Depressed mood or irritable most of the day, nearly every day, as indicated by either subjective report (e.g. feels sad or empty) or observation made by others (e.g. appears tearful)
- Decreased interest or pleasure in most activities, most of each day
- Significant change in appetite or weight change (5%)
- Change in sleep: insomnia or hypersomnia
- Change in activity: psychomotor agitation or retardation
- Fatigue or loss of energy
- Guilt/worthlessness: feelings of worthlessness or excessive or inappropriate guilt
- Concentration: reduced ability to think or concentrate

Differential diagnoses

'Common Mental Disorders' (CMDs: unipolar depression and anxiety disorders) are the most frequent mood disorders within a primary care setting. However, mood symptoms also occur in other conditions, which may require different management, including specialist input. The context may be obvious but, if not, it is important to consider these, especially if the response to treatment is suboptimal. Included here are several organic or iatrogenic conditions (Box 3: selected tests may be helpful) and:

- Hormonal-related mood changes: premenstrual syndrome, antenatal and postnatal depression/anxiety, postpartum psychosis, perimenopause or menopause

- Seasonal Affective Disorder
- Alcohol and substance misuse
- Eating disorders
- Emotionally unstable/borderline personality disorder
- Bipolar Disorder
- Psychoses including: psychotic depression and schizoaffective disorder

Box 3: Some organic and iatrogenic causes of depression/anxiety

Consider where appropriate:

- Hypo/hyperthyroidism, anaemia, renal failure, hyponatraemia, hypercalcaemia, B12 deficiency, myopathies, Addison disease, lupus, multiple sclerosis, HIV, chronic fatigue syndrome, sleep disorders
- Medications: corticosteroids, beta-blockers, calcium channel blockers, alpha-blockers, statins
- Consider a trial off relevant medication if possible
- Alcohol and substance misuse, e.g. amphetamines, cocaine

NICE (2) advocates the 'Patient Health Questionnaire' (PHQ-9) to assess severity and guide management. Patients often value these types of scales (3, 4) but they may take time and divert from other issues (5). Serial PHQ-9s may be useful for monitoring mood in some patients.

Case finding

Depression may be 'under-recognised' if comorbid with long-term conditions (LTCs) such as diabetes, heart or lung disease, arthritis and chronic pain. Psychological symptoms can be overshadowed by apparently more pressing physical needs (6). There have been attempts to address this problem by using two case-finding questions (Box 4), the PHQ-2, but there are difficulties integrating these questions into routine consultations (7) (also see paper on the use of the PHQ-2).

Box 4: Case-finding questions

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

A 'yes' to either question is considered a 'positive' test. A follow-up question, "Is this something you want help with?", can help further assessment.

A 'no' response to both questions makes depression highly unlikely (8).

Age

The age of the patient may have important diagnostic and prognostic implications. Whilst a detailed discussion is beyond the scope of this article, persistent or severe symptoms in a teenager or young adult may indicate the onset of a more significant mood disorder (for example bipolar disorder, before the first manic episode) (9), and older adults who are depressed may be more likely to present with physical, rather than psychological symptoms.

Risk assessment

Thoughts about suicide and self-harm are common in depression. It is important to ask about these (Box 5), as patients may be reluctant to volunteer them because they may be ashamed or fear the consequences of disclosure. Urgent referral to specialist mental health services is recommended if a person presents

a substantial risk to themselves or others. Suicide risk is especially high in bipolar disorder (especially Bipolar II, a particularly difficult diagnosis) (10, 11) and in 'mixed affective states' (depression + agitation, impulsivity). Associated alcohol and drug misuse and previous self-harm should also raise concern (12).

Box 5: Risk assessment: useful questions

- How do you see the future?
- Have there been times when you felt that you wanted to get away from everything?
- Sometimes when a person feels very low, they begin to feel that life isn't worth living. Have you experienced those thoughts?
  - How recently?
  - How often?
  - Are these thoughts persistent?
  - How difficult or easy is it to resist them?
- Have you made any plans?
  - What exactly have you considered?
  - What has stopped you from carrying this out?

Management in primary care

Trust and continuity are the foundations for recovery, and disclosure to an empathetic GP can be cathartic. Engagement in treatment depends on a therapeutic relationship, and also diagnostic concordance: labels are not helpful if the patient does not agree with them.

Three questions are helpful to guide management decisions, both now and later (13):

1. How severe are the symptoms?
2. How long has this lasted so far?
3. What is the risk of relapse?

Management is based around the 'stepped care model' (NICE 2010) (see box 6), depending on severity. Active monitoring is important: arrange a review within two weeks or earlier, depending on severity.

Box 6: Stepped care for depression

Focus of the intervention	*Nature of the intervention*
STEP 4: Severe and complex depression; risk to life; severe self-neglect	Medication, high-intensity psychological interventions, electroconvulsive therapy, crisis service, combined treatments, multi-professional and inpatient care
STEP 3: Persistent sub-threshold depressive symptoms or mild to moderate depression with inadequate response to initial interventions; moderate and severe depression	Medication, high-intensity psychological interventions, combined treatments, collaborative care and referral for further assessment and interventions
STEP 2: Persistent sub-threshold depressive symptoms; mild to moderate depression	Low-intensity psychological and psychosocial interventions, medication and referral for further assessment and interventions
STEP 1: All known and suspected presentations of depression	Assessment, support, psychoeducation, active monitoring and referral for further assessment and interventions

Initial management of milder symptoms includes exercise, behavioural activation and psychological treatments: these are effective and may be preferred by many. Signposting to third sector services should also be considered. It is important to note that antidepressants are not helpful in mild depression (14).

Access to talking therapies has been variable but in the last few years the IAPT (Improving Access to Psychological Therapies) programme has been rolled out across England (15). IAPT services run self-help and psycho-educational groups in many areas. Individual psychological wellbeing practitioners (PWPs) can also offer simple behavioural interventions, which may be effective at this level of severity. Other low-intensity psychological interventions include self-help CBT books or online. Computer-based CBT has recently been shown to be ineffective in a large-scale trial (16).

Psychoeducation includes helping the patient to understand the links between mental experiences and physical symptoms, sleep hygiene, diet (Box 7), exercise, behavioural activation and the establishment of regular routines.

Box 7: Depression and nutrition

There is increasing evidence for the role of nutrition and the gut microbiome in the aetiology, and perhaps treatment, of depression (17-19). Mechanisms include reducing inflammation and ensuring adequate dietary precursors for neurotransmitter synthesis. However, dietary research is difficult: causality is complicated by multiple confounders and the magnitude of effect is often unclear.

The PREDIMED trial (20) showed that a Mediterranean diet supplemented with nuts might reduce the incidence of depression in patients with type 2 diabetes. The SMILES trial (21) and the HELFIMED trials (22) are some of the first RCTs to investigate diet as a treatment for depression (23). Both showed promising results for a Mediterranean diet (SMILES trial NNT = 4) although replication is required.

In general:

- aim for a Mediterranean diet, which includes: oily fish (omega 3 essential fatty acids), olive oil, tree nuts, and leafy green vegetables (19).
- avoid/reduce: processed food, additives, and high glycaemic index carbohydrates (19, 24). There is some evidence that gluten may adversely affect mood in some people (25), but further evidence is required before a gluten-free diet can be formally recommended to treat depression.

A recent systematic review and meta-analysis showed that certain nutritional supplements (especially omega 3 and vitamin D) may improve symptoms of depression in patients already taking antidepressants (26).

Further information: International Society for Nutritional Psychiatry Research (ISNPR)
http://www.isnpr.org

Some people will not respond to low-intensity interventions, such as those with more severe depression or those with 'sub-threshold depressive symptoms' (present for at least 2 years). For these, an SSRI (selective serotonin reuptake inhibitor) antidepressant or 'high-intensity' psychotherapy such as individual CBT should be considered. Treatment choice is influenced by patient preference and availability. There is some evidence that combining medication and talking treatments leads to improved outcomes.

When antidepressants are used, it is important to prescribe (and for the patient to take) an adequate dose (as per the British National Formulary (27)) for a recommended period. Response rates to antidepressants are around 50% compared to around 30% on placebo, with an NNT of 5 - 7 and NNH of around 30 (13). Switching to another agent may be required if the first-line medication is not tolerated or is ineffective (see NICE (2) and BAP (13) guidelines).

It is essential to discuss potential adverse effects of antidepressants. Certain side effects are antidepressant-specific, for example increased appetite and weight gain with mirtazapine. Discontinuation symptoms can also occur upon sudden stoppage of certain antidepressant such as citalopram. Suicidal thoughts and plans, which are common in depression, should always be explored. The issue of some antidepressants increasing suicidal thoughts (at least initially), though somewhat controversial, should also be explored. Furthermore, it should always be remembered that a severely depressed person may be so

depressed that he or she may not have the strength to carry out a suicidal act, but as he or she begins to improve (particularly energy levels) after 2 - 3 weeks of antidepressant treatment, the risk of carrying out a suicidal act increases. Women of childbearing age need to be aware of the potential effect of antidepressants on pregnancy; specialist advice may be required.

A proportion of patients do not respond to first-line antidepressants, individual psychological intervention or the combination of both. Adverse effects of medications may also result in discontinuation before an effective dose is reached. Those with depression and a chronic physical health problem may also require additional therapeutic input, with care delivered within a collaborative care framework, utilising a case manager to organise care (28, 29) (see article on collaborative care in this issue).

Stepping up to specialist mental health advice is important here. This involves a detailed psychiatric assessment, to review the diagnosis (for example, could this be bipolar II?) and appraisal of second-line treatment options (both non-pharmacological and pharmacological). Maintaining factors (for example relationship issues) and hidden alcohol/substance misuse must be addressed. Sometimes, more complex medication (e.g. adding an 'atypical' antipsychotic or lithium) may be effective (13), but adverse effects are important (e.g. sedation, confusion, weight gain, metabolic syndrome); specialist advice and careful monitoring are required.

Staying well

Depression can be a chronic relapsing condition, so it is important to discuss the likely prognosis and risk of relapse, especially if ongoing triggers are present (for example LTCs). Self-management strategies are important, including: increasing social contacts and purposeful activities, diet, exercise, sleep hygiene, and addressing alcohol and substance misuse. Mindfulness-based cognitive therapy may prevent relapse and maintain wellbeing. Individual CBT, if available, is useful in preventing relapse, as it teaches skills that are valuable for the person in the long term. Patients who have responded to antidepressants should be encouraged to continue their medication for at least 6 months. Longer-term antidepressants may be recommended if there is a history of relapse but the need for any repeat prescription should be reviewed regularly.

Implications for policy and practice

Most patients with depression are managed in primary care, with the GP being the key clinician involved in making the diagnosis and initiating management. Regular review, either by the GP, or by a trained practice nurse, is important, but may be difficult to achieve with the competing priorities and workload within primary care. Provision of accessible and acceptable psychological (or psycho-social) interventions should be the aim of commissioners of services.

References

1. Singleton N, Bumpstead R, O'Brien M, Lee A, Meltzer H. Psychiatric morbidity among adults living in private households, 2000. International Review of Psychiatry. 2003 Jan 1;15(1-2):65-73.

2. National Collaborating Centre for Mental Health. Depression: The Treatment and Management of Depression in Adults (Updated Edition), NICE Clinical Guidelines, No. 90. National Institute for Health and Care Excellence; 2010.

3. Dowrick C, Leydon GM, McBride A, Howe A, Burgess H, Clarke P, Maisey S, Kendrick T. Patients' and doctors' views on depression severity questionnaires incentivised in UK quality and outcomes framework: qualitative study. BMJ. 2009 Mar 19;338:b663.

4. Malpass A, Dowrick C, Gilbody S, Robinson J, Wiles N, Duffy L, Lewis G. Usefulness of PHQ-9 in primary care to determine meaningful symptoms of low mood: a qualitative study. British Journal of General Practice. 2016 Feb 1;66(643):e78-84.

5. Leydon GM, Dowrick CF, McBride AS, Burgess HJ, Howe AC, Clarke PD, Maisey SP, Kendrick T. Questionnaire severity measures for depression: a threat to the doctor–patient relationship? British Journal of General Practice. 2011 Feb 1;61(583):117-23.

6. Coventry PA, Hays R, Dickens C, Bundy C, Garrett C, Cherrington A, Chew-Graham C. Talking about depression: a qualitative study of barriers to managing depression in people with long term conditions in primary care. BMC Family Practice. 2011 Dec;12(1):10.

7. Maxwell M, Harris F, Hibberd C, Donaghy E, Pratt R, Williams C, Morrison J, Gibb J, Watson P, Burton C. A qualitative study of primary care professionals' views of case finding for depression in patients with diabetes or coronary heart disease in the UK. BMC Family Practice. 2013 Dec;14(1):46.

8. Whooley MA, Avins AL, Miranda J, Browner WS. Case-finding instruments for depression. Journal of General Internal Medicine. 1997 Jul 1;12(7):439-45.

9. Benazzi F. Classifying mood disorders by age-at-onset instead of polarity. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2009 Feb 1;33(1):86-93.

10. Dietch D. Recognising Bipolar Disorders in Primary Care. Psychiatria Danubina. 2015 Sep;27(1):188-94.

11. Hughes T, Cardno A, West R, Marino-Francis F, Featherstone I, Rolling K, Locker A, McLintock K, House A. Unrecognised bipolar disorder among UK primary care patients prescribed antidepressants: an observational study. British Journal of General Practice. 2016 Feb 1;66(643):E71-7.

12. Carr MJ, Ashcroft DM, Kontopantelis E, Awenat Y, Cooper J, Chew-Graham C, Kapur N, Webb RT. The epidemiology of self-harm in a UK-wide primary care patient cohort, 2001–2013. BMC Psychiatry. 2016 Dec;16(1):53.

13. Cleare A, Pariante CM, Young AH, Anderson IM, Christmas D, Cowen PJ, Dickens C, Ferrier IN, Geddes J, Gilbody S, Haddad PM. Evidence-based guidelines for treating depressive disorders with antidepressants: a revision of the 2008 British Association for Psychopharmacology guidelines. Journal of Psychopharmacology. 2015 May;29(5):459-525.

14. Barbui C, Cipriani A, Patel V, Ayuso-Mateos JL, van Ommeren M. Efficacy of antidepressants and benzodiazepines in minor depression: systematic review and meta-analysis. The British Journal of Psychiatry. 2011 Jan;198(1):11-6.

15. IAPT 3 Year Report - The first million patients. November 2012. Department of Health; 2012.

16. Gilbody S, Littlewood E, Hewitt C, Brierley G, Tharmanathan P, Araya R, Barkham M, Bower P, Cooper C, Gask L, Kessler D. Computerised cognitive behaviour therapy (cCBT) as treatment for depression in primary care (REEACT trial): large scale pragmatic randomised controlled trial. BMJ (Online). 2015 Nov 11;351.

17. Dash S, Clarke G, Berk M, Jacka FN. The gut microbiome and diet in psychiatry: focus on depression. Current Opinion in Psychiatry. 2015 Jan 1;28(1):1-6.

18. Sarris J, Logan AC, Akbaraly TN, Amminger GP, Balanzá-Martínez V, Freeman MP, Hibbeln J, Matsuoka Y, Mischoulon D, Mizoue T, Nanri A. Nutritional medicine as mainstream in psychiatry. The Lancet Psychiatry. 2015 Mar 1;2(3):271-4.

19. Opie RS, Itsiopoulos C, Parletta N, Sanchez-Villegas A, Akbaraly TN, Ruusunen A, Jacka FN. Dietary recommendations for the prevention of depression. Nutritional Neuroscience. 2017 Mar 16;20(3):161-71.

20. Sánchez-Villegas A, Martínez-González MA, Estruch R, Salas-Salvadó J, Corella D, Covas MI, Arós F, Romaguera D, Gómez-Gracia E, Lapetra J, Pintó X. Mediterranean dietary pattern and depression: the PREDIMED randomized trial. BMC Medicine. 2013 Dec;11(1):208.

21. Jacka FN, O'Neil A, Opie R, Itsiopoulos C, Cotton S, Mohebbi M, Castle D, Dash S, Mihalopoulos C, Chatterton ML, Brazionis L. A randomised controlled trial of dietary improvement for adults with major depression (the 'SMILES' trial). BMC Medicine. 2017 Dec;15(1):23.

22. Parletta N, Zarnowiecki D, Cho J, Wilson A, Bogomolova S, Villani A, Itsiopoulos C, Niyonsenga T, Blunden S, Meyer B, Segal L. A Mediterranean-style dietary intervention supplemented with fish oil improves diet quality and mental health in people with depression: A randomized controlled trial (HELFIMED). Nutritional Neuroscience. 2017 Dec 8:1-4.

23. O'Neil A, Berk M, Itsiopoulos C, Castle D, Opie R, Pizzinga J, Brazionis L, Hodge A, Mihalopoulos C, Chatterton ML, Dean OM. A randomised, controlled trial of a dietary intervention for adults with major depression (the "SMILES" trial): study protocol. BMC Psychiatry. 2013 Dec;13(1):114.

24. Gangwisch JE, Hale L, Garcia L, Malaspina D, Opler MG, Payne ME, Rossom RC, Lane D. High glycemic index diet as a risk factor for depression: analyses from the Women's Health Initiative. The American Journal of Clinical Nutrition. 2015 Jun 24;102(2):454-63.

25. Peters SL, Biesiekierski JR, Yelland GW, Muir JG, Gibson PR. Randomised clinical trial: gluten may cause depression in subjects with non-coeliac gluten sensitivity - an exploratory clinical study. Alimentary Pharmacology & Therapeutics. 2014 May;39(10):1104-12.

26. Sarris J, Murphy J, Mischoulon D, Papakostas GI, Fava M, Berk M, Ng CH. Adjunctive nutraceuticals for depression: a systematic review and meta-analyses. American Journal of Psychiatry. 2016 Apr 26;173(6):575-87.

27. British National Formulary (online) London: BMJ Group and Pharmaceutical Press; [Available from: http://www.medicinescomplete.com].

28. Ekers D, Murphy R, Archer J, Ebenezer C, Kemp D, Gilbody S. Nurse-delivered collaborative care for depression and long-term physical conditions: a systematic review and meta-analysis. Journal of Affective Disorders. 2013 Jul 1;149(1-3):14-22.

29. Coventry P, Lovell K, Dickens C, Bower P, Chew-Graham C, McElvenny D, Hann M, Cherrington A, Garrett C, Gibbons CJ, Baguley C. Integrated primary care for patients with mental and physical multimorbidity: cluster randomised controlled trial of collaborative care for patients with depression comorbid with diabetes or cardiovascular disease. BMJ. 2015 Feb 16;350:h638.