GUIDELINES

Depression in adults, including those with a chronic physical health problem: summary of NICE guidance

Stephen Pilling,[1,2] Ian Anderson,[3] David Goldberg,[4] Nicholas Meader,[5] Clare Taylor,[5] On behalf of the two guideline development groups

[1]National Collaborating Centre for Mental Health, University College London, London WC1E 7HB
[2]Research Department of Clinical, Educational and Health Psychology, University College London, London WC1E 7HB
[3]University of Manchester, Manchester M13 9PL
[4]Institute of Psychiatry, King's College London, London SE5 8AF
[5]National Collaborating Centre for Mental Health, Royal College of Psychiatrists' Research and Training Unit, London E1 8AA
Correspondence to: S Pilling
s.pilling@ucl.ac.uk

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This is one of a series of *BMJ* summaries of new guidelines, which are based on the best available evidence; they highlight important recommendations for clinical practice, especially where uncertainty or controversy exists. Further information about the guidance, a box outlining research needed, and the supporting evidence statements are in the full version on bmj.com.

Why read this summary?

Each year 6% of adults will experience an episode of depression, and over the course of a person's lifetime more than 15% of the population will have an episode.[1-4] Depression (as defined by the American Psychiatric Association[5]) is the leading cause of suicide and currently the fourth highest disease burden on society in terms of its treatment costs, its effect on families and carers, and its impact on productivity in the workplace.

Depression can be disabling and distressing and for many people can become a chronic disorder, especially if inadequately treated. It is about two to three times more common in people with a chronic physical health problem than in people who are in good physical health.[6] Chronic physical health problems can precipitate and exacerbate depression, but depression can also adversely affect outcomes of coexisting physical illnesses, including increased mortality. Furthermore, depression can be a risk factor for some physical illnesses, such as cardiovascular disease.[7]

This article summarises the most recent recommendations on depression from the National Institute for Health and Clinical Excellence (NICE): an updated guideline on the management and treatment of depression in adults[8] and a new guideline on depression focusing on adults with a chronic physical health problem.[9] In both guidelines diagnosis was based on the criteria of the *Diagnostic and statistical manual of mental disorders*, fourth edition (DSM-IV), which require the presence of at least five symptoms and of impaired function persisting for at least two weeks.[5]

Recommendations

NICE recommendations are based on systematic reviews of the best available evidence. When minimal evidence is available, recommendations are based on the experience and opinion of the Guideline Development Group (GDG) of what constitutes good practice. Evidence levels for the recommendations are in the full version of this article on bmj.com.

Identification and assessment

- Be alert to possible depression (particularly in people with a history of depression or a chronic physical health problem with associated functional impairment) and consider asking the following two questions:
  - "During the last month, have you often been bothered by 'feeling down,' depressed, or hopeless?"
  - "During the last month, have you often been bothered by having little interest or pleasure in doing things?"
- When assessing a person who may have depression, conduct a comprehensive assessment that does not rely simply on a symptom count. Take into account both the degree of functional impairment and/or disability associated with the possible depression to determine severity (as defined in DSM-IV) and establish the duration of the episode.

Persistent subthreshold depressive symptoms or mild to moderate depression

- For people with persistent "subthreshold symptoms of depression" (symptoms that are below the DSM-IV criteria for major depression) or mild to moderate depression (with or without a chronic physical health problem) and for those with subthreshold depressive symptoms that complicate the care of the physical health problem, consider offering one or more of the following low intensity psychosocial interventions, guided by the person's preference:
  - Individual, guided self help based on principles of cognitive behavioural therapy (CBT)
  - Computerised cognitive behavioural therapy
  - A structured, group based physical activity programme.

For people with a chronic physical health problem, also offer group based peer support (self help) programmes.

- Do not use antidepressants routinely to treat persistent subthreshold depressive symptoms or mild depression in people without a chronic physical health problem, but consider antidepressants for those with:
  - A history of moderate or severe depression, or
  - Subthreshold depressive symptoms that have

been present for at least two years, or
- Subthreshold depressive symptoms or mild depression persisting after other interventions

- Do not use antidepressants routinely to treat subthreshold depressive symptoms or mild depression in people with a chronic physical health problem, but consider antidepressants for those with:
  - A history of moderate or severe depression, or
  - Mild depression complicating the care of the physical health problem, or
  - Subthreshold depressive symptoms that have been present for at least two years, or
  - Subthreshold depressive symptoms or mild depression persisting after other interventions.

Starting antidepressants in people with depression and chronic physical health problem

- When prescribing an antidepressant, take into account:
  - Any additional physical health disorders
  - The side effects of antidepressants, which may affect the underlying physical disease (in particular, selective serotonin reuptake inhibitors may result in or exacerbate hyponatraemia, especially in older people)
  - The absence of evidence to support the use of specific antidepressants for people with particular chronic physical health problems
  - Interactions with other medications.
- Prescribe a selective serotonin reuptake inhibitor in generic form first, unless there are interactions with other drugs; consider using citalopram or sertraline as they are less likely to lead to interactions.

Moderate or severe depression

- For people with moderate or severe depression without a chronic physical health problem, provide antidepressant medication combined with high intensity psychological treatment (CBT or interpersonal therapy).
- For people who first present with moderate depression and a chronic physical health problem, offer group based CBT (or individual CBT for those who decline group based CBT or for whom it is not appropriate, or where a group is not available) or behavioural couples therapy.
- For people who first present with severe depression and a chronic physical health problem, consider offering individual CBT combined with antidepressant medication.

Sequencing treatments after initial inadequate response

- When reviewing drug treatment for a person with depression whose symptoms have not adequately responded to initial pharmacological interventions:
  - Check adherence to, and side effects from, initial treatment
  - Increase the frequency of appointments, monitoring outcomes with a validated outcome measure (such as the hospital anxiety and depression scale[10] or the patient health questionnaire-9 (PHQ-9))[11]
  - Be aware that using a single antidepressant rather than combination medication (two antidepressants used together) or augmentation (a non-antidepressant such as lithium or an atypical antipsychotic used with an antidepressant) is usually associated with fewer side effects
  - Consider reintroducing previous treatments that have been inadequately delivered or adhered to, including increasing the dose
  - Consider switching to an alternative antidepressant.
- When switching to another antidepressant, be aware that the evidence for the relative advantage of switching either within or between classes is weak. Consider switching to:
  - First, a different selective serotonin reuptake inhibitor or a better tolerated, newer generation antidepressant
  - Subsequently, an antidepressant of a different pharmacological class that may be less well tolerated—for example, venlafaxine, a tricyclic antidepressant, or a monoamine oxidase inhibitor
  - In people with a chronic physical health problem be aware of drug interactions.

Continuation and relapse prevention

- Support and encourage people who have benefited from taking an antidepressant to continue medication for at least six months after remission of an episode.
- Offer people with depression (without a chronic physical health problem) who are considered to be at substantial risk of relapse or who have residual symptoms one of the following psychological interventions:
  - Individual CBT (for those who have relapsed despite antidepressants or who have a history of depression and residual symptoms despite treatment)
  - Mindfulness based cognitive therapy (for those who are currently well but have experienced three or more previous episodes of depression)

People with chronic physical health problem and moderate to severe depression not responding to treatment

- Consider collaborative care for people with moderate to severe depression and a chronic physical health problem with associated functional impairment whose depression has not responded to initial psychological interventions (CBT or behavioural couples therapy), pharmacological treatment, or a combination of both of these.
- Such care should include case management supervised by a senior mental health professional, close collaboration between primary and secondary physical health services, a range of

interventions consistent with those recommended in this guideline (including patient education, psychological and pharmacological interventions, and medication management), and long term coordination of care and follow-up.

Effective delivery of interventions for depression

- All interventions for depression should be delivered by competent practitioners.
- Base psychological and psychosocial interventions on the relevant treatment manuals, which should guide the structure and duration of the intervention.
- Practitioners should consider using competence frameworks from the relevant treatment manuals, and for all interventions they should:
  - Receive regular, high quality supervision
  - Use routine outcome measures and involve the person with depression in reviewing treatment efficacy
  - Monitor and evaluate adherence to treatment and practitioner competence.

Overcoming barriers

Under-recognition of depression remains a major problem, as does the assessment of depression in the presence of chronic physical health problems.[12] The new guidelines[8 9] offer specific advice on how to overcome these problems, including modification to assessment procedures in people with chronic physical health problems. Evidence also exists of limited uptake of psychological interventions,[13] and this problem is addressed by the recommendation of low intensity psychosocial interventions for mild to moderate depression as part of a stepped care framework. As evidence exists of considerable variation in the competence of those providing psychological interventions[14] both guidelines include a key recommendation for effective delivery of interventions for depression.

The new guidelines[8 9] also confront the considerable pessimism that may exist about the effective treatment of depression, in particular for those with a chronic physical health problem, by identifying effective psychological and pharmacological interventions. Uncertainty about drug interactions (in particular between the drugs used to treat depression and those used for a physical health problem) may lead to inappropriate or inadequate prescribing of antidepressants, therefore the guideline places special emphasis on being aware of drug interactions and offers advice about minimising risk. Prescribers who have concerns are advised to consult the *British National Formulary* (www.bnf.org) and the table of interactions in appendix 16 of the full guideline[9] or to seek specialist advice or referral.

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What types of article does the *BMJ* consider?

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LESSON OF THE WEEK

Chest radiographs in pregnancy

S J O'Connor,[1] H Verma,[2] S Grubnic,[2] C F J Rayner[2]

Do not hesitate to perform chest radiography in pregnant patients if they fulfil the criteria

[1]Mayday University Hospital, Croydon, Surrey CR7 7YE
[2]St George's Hospital, London
sallyjeanoconnor@yahoo.co.uk

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The misconception that a pregnant patient should not undergo a chest radiograph is common. Risk to a fetus during chest radiography is minimal, but reluctance to image pregnant patients can delay diagnosis and affect outcomes. We describe two cases illustrating use of this investigation when clinically indicated.

Case 1

A 38 year old woman was referred to the chest clinic by her general practitioner. She was 31 weeks pregnant and reported an eight week history of fever, dry cough, and left sided chest pain. Despite repeated courses of oral antibiotics her symptoms had slowly worsened, resulting in a referral for specialist review. On examination she had decreased breath sounds at the left lung apex, left basal crackles, and soft expiratory wheeze. A chest radiograph showed a mass at the left hilum and left upper lobe collapse (fig 1). Urgent bronchoscopy revealed a large vascular tumour obstructing the left upper lobe. A computed tomography (CT) scan confirmed a hypervascular lesion centred on the left upper lobe bronchus, which was most consistent with a carcinoid tumour, and several lymph nodes in the prevascular space.

She had an elective caesarean section at 35 weeks followed by a left upper lobectomy two days later. Frozen section analysis confirmed carcinoid tumour. Paraffin embedded section showed tumour at the peribronchial margin and one metastatic hilar lymph node. The patient opted for monitoring over pneumonectomy. An octreotide scan five years later showed no abnormal accumulation and surveillance bronchoscopy and CT scans have shown no recurrence since then.

Case 2

A 33 year old woman presented to her GP 19 weeks pregnant with a two week history of right sided neck swelling and exertional breathlessness. On admission, a right sided pleural effusion was confirmed clinically and aspirated. The clinical team were reluctant to do a chest radiograph, but after discussion with a radiologist they did so at 12 days post-admission, revealing a large anterior mediastinal mass and right pleural effusion (fig 2). A subsequent limited CT was performed. An ultrasound-guided fine needle aspiration of the mass showed probable Hodgkin's lymphoma. A mediastinoscopy confirmed the diagnosis of grade 2 nodular sclerosing Hodgkin's lymphoma and an ultrasound of the abdomen showed no disease beneath the diaphragm.

The patient was found to have stage IIB disease, was treated with pulsed steroids, and was induced at 34 weeks when she delivered a healthy girl by normal vaginal delivery. After six cycles of chemotherapy a positron emission tomography and CT showed no residual active disease. She has since remained in remission.

Discussion

Symptoms such as coughing and breathlessness may be experienced by healthy pregnant patients, which can result in clinicians failing to consider a full differential diagnosis. A chest radiograph will guide diagnosis and treatment, therefore preventing unnecessary delays. Although cancer only develops in about one in 1 000 pregnant women,[1] the coincidence may become more frequent owing to the increasing prevalence of delayed childbearing and of smoking in young women. According to the British Thoracic Society Guidelines, a chest radiograph should be undertaken in all patients complaining of a chronic cough (defined as lasting more than eight weeks). In addition the guidelines recommend a chest radiograph should be done in patients with a cough who have any one of these atypical symptoms: haemoptysis, breathlessness, fever, chest pain, or weight loss. These associated symptoms should be ruled out by direct questioning and the guidelines should be followed in all patients, including pregnant women.[2]

The risk posed by the underlying disease process to a pregnant woman and her developing fetus outweighs that of low dose radiation, as highlighted in these two cases. Doctors need to know the relative radiation risk to the fetus, in order to counsel and reassure patients appropriately. Estimation of the absorbed dose for organs and tissues of a radiological procedure is quantified in Gray (Gy). The effective dose to the patient, which takes into account the type of radiation used and the tissues irradiated, is measured in Sievert (Sv). For a chest radiograph, the radiation dose to the patient is 0.02 mSv, which is the equivalent of three days of background radiation, or, for example, a four hour flight from London to Athens.[3]

The Health Protection Agency and National Radiation Protection Board quote a maximum and mean fetal dose of <0.01 mGy from a maternal chest radiograph.[4] Some papers state that it is as low as 0.0007 mGy for two views.[5] The primary x ray beam is not directed toward the uterus and the dose to

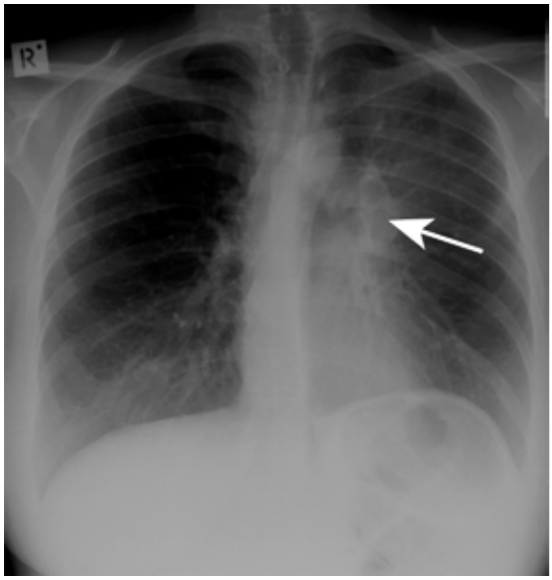

Fig 1 | Chest radiograph shows left hilar mass (arrow), left hemithorax volume loss, and a veil-like opacity in the left upper zone consistent with collapse

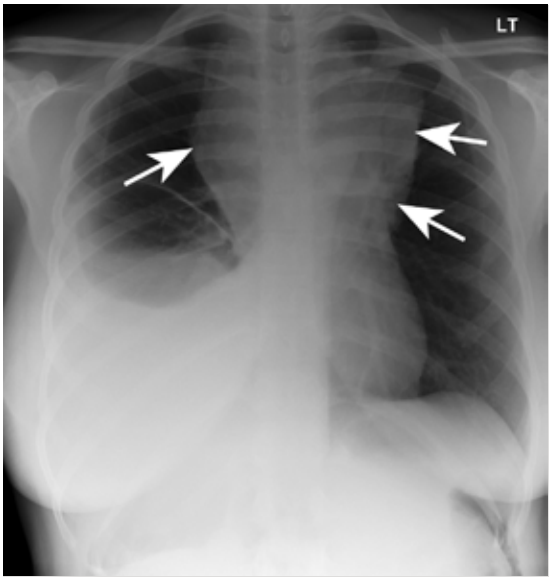

Fig 2 | Chest radiograph shows large anterior mediastinal mass (arrows) and right pleural effusion

the fetus is by scatter of the radiation beam through the mother, not direct exposure. Patients, clinicians, and radiologists should be reassured that risk to the fetus is minimal.

Damilakis et al studied the dose to the fetus from chest radiography with phantom studies, varying the chest anteroposterior dimension and the stage of pregnancy.[6] They used exposure factors that enabled the estimation of the upper level of doses possible from a chest radiograph. The larger the patient, the greater the dose, as greater exposure factors are needed to obtain a good quality radiograph. Even when these issues were taken into account, the maximum dose to the fetus was still only 0.023 mGy. The later the stage of pregnancy the greater the radiation dose, because of the proximity of the gravid uterus. The dose from a posteroanterior radiograph was less than that of an anteroposterior radiograph because the distance from the uterus to the primary beam is greater in the posteroanterior projection. The overall doses, however, were much lower than the doses required to cause malformations during organogenesis (0.1 Gy) or radiation induced microcephaly (0.5 Gy).

The Royal College of Radiologists use the "as low as reasonably practical" (ALARP) principle.[7] This approach is crucial to radiation protection and takes into account the risk of radiation and the potential benefit of the investigation. The most recent publication from the Royal College, *Making the Best Use of Clinical Radiology Services*, suggests that the referring clinician and radiologist should discuss pregnant patients who need a radiograph, keep the patient fully informed, and clearly document the decision.[8]

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Endpiece

Drink your ale and be damned

The surgeon, Dr John Abernethy, spent nearly half an hour eliciting pint by pint that a farmer's only trouble was a thirst quenchable only by over a gallon and a half of ale per day: "Go home, sir, and never let me see your face again! Go home! Drink your ale and be damned!"

Graham H. *Surgeons all*. London: Rich and Cowan, 1939: 250

Submitted by **Jeremy Hugh Baron**, honorary professorial lecturer, Mount Sinai School of Medicine, New York

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10-MINUTE CONSULTATION

Acute anterior uveitis

Ashraf A Khan,[1] Ross J Kelly,[2] Zia I Carrim[3]

[1]Department of Medicine, Northern General Hospital, Sheffield S5 7AU
[2]Spencer Street Practice, Carlisle CA1 1BP
[3]Department of Ophthalmology, St James's University Hospital, Leeds LS9 7TF

Correspondence to: Z I Carrim
zia.carrim@doctors.org.uk

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A 37 year old man presents with a five day history of progressively painful red right eye. He is photophobic and has blurred vision. For the past two days he has been using chloramphenicol eye drops, but his symptoms have not improved.

What issues you should cover

The iris, ciliary body, and choroid constitute the uveal tract of the eye. Inflammation of these structures is termed uveitis. Anterior uveitis, in which inflammation is confined to the anterior portion of the uveal tract, is a common cause of acute red eye and has an incidence of 1 in 10 000.

History—Ask about:

- Onset—usually acute with progressive symptoms.
- Pain—usually throbbing and aggravated by accommodative effort or change in lighting conditions.
- Discharge—absent, but lacrimation may be excessive.
- Vision—ranges from normal in early and mild presentations to greatly reduced in severe cases.
- Systemic inflammatory conditions—a coexisting inflammatory condition, such as inflammatory bowel disease or connective tissue disorder, increases likelihood of anterior uveitis.

Differential diagnoses—Consider acute angle closure (more likely in older, long sighted patients); herpetic keratitis; microbial keratitis (associated with contact lens wear); episcleritis or scleritis; corneal abrasion or recurrent erosion; viral conjunctivitis.

Considerations—Be aware that:

- Treatment with dilating drops can alter depth perception (the Pulfrich phenomenon), making it unsafe for patients to operate machinery or drive a car.
- Acute anterior uveitis is an unpredictably recurrent condition. When patients have known recurrent disease and are familiar with their symptoms, start them on treatment and arrange follow-up by an ophthalmologist.
- Inflammation and steroid treatment can predispose to premature cataract formation and raised pressure, so give appropriate counselling.

Distinguishing features of anterior uveitis and conjunctivitis

Feature	Anterior uveitis	Conjunctivitis
Purulent discharge	No	Yes
Contagious (>1 household member affected)	No	Yes
Pain worse on accommodation (for example, on reading)	Yes	No
Enlarged preauricular lymph nodes	No	Yes
Keratic precipitates	Yes	No
Irregular pupil	Yes	No

USEFUL READING

Diaper CJM. Pulfrich revisited. *Surv Ophthalmol* 1997;41:493-9 (doi:10.1016/S0039-6257(97)00014-3)
Royal National Institute of Blind People. *Eye info—uveitis*. www.rnib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_rnib003667.hcsp
Uveitis Information Group (www.uveitis.net)—Patient support

What you should do

Do a basic ophthalmic examination to establish the severity of the condition and the urgency of referral. Using a Snellen chart and a direct ophthalmoscope:

- Record monocular visual acuity. Use the pinhole to compensate for refractive error and assess the reduction of vision.
- Set the lens dial on your direct ophthalmoscope to +10D. Holding the ophthalmoscope about10 cm (4 inches) from the patient's eye, compare the red reflex on either side in dim lighting. Look for unequal pupils. The affected eye is likely to have a smaller, irregular pupil as a result of posterior synechiae. Severe inflammation may cause a dull reflex and make iris detail appear misty. Sometimes clumps of cells are visible on the inside of the cornea as opaque spots (keratic precipitates). A predominantly circumcorneal pattern of injection suggests intraocular inflammation. Notice how the patient reacts to bright light.
- Look out for severe corneal oedema (associated with greatly reduced vision and caused by raised pressure or severe inflammation), the presence of a hypopyon (indicating intraocular infection, or inflammation, or both) and a fixed mid-dilated pupil (typical of acute angle closure) as important signs indicating immediate referral.
- Instil a small amount of fluorescein dye into the red eye and examine under blue light. A break in the cornea, caused by an ulcer or abrasion, will fluoresce.
- Distinguish mild acute anterior uveitis (will worsen without treatment) from viral conjunctivitis (self limiting) (table).

If you suspect acute anterior uveitis, refer the patient to an ophthalmologist who will treat with dilating drops (cyclopentolate or atropine) and steroids. Consider prescribing dilating drops for pain relief (except for acute angle closure) if referral is likely to be delayed. Most patients will get better after a month of treatment. A minority of patients will have a chronic form of uveitis.

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