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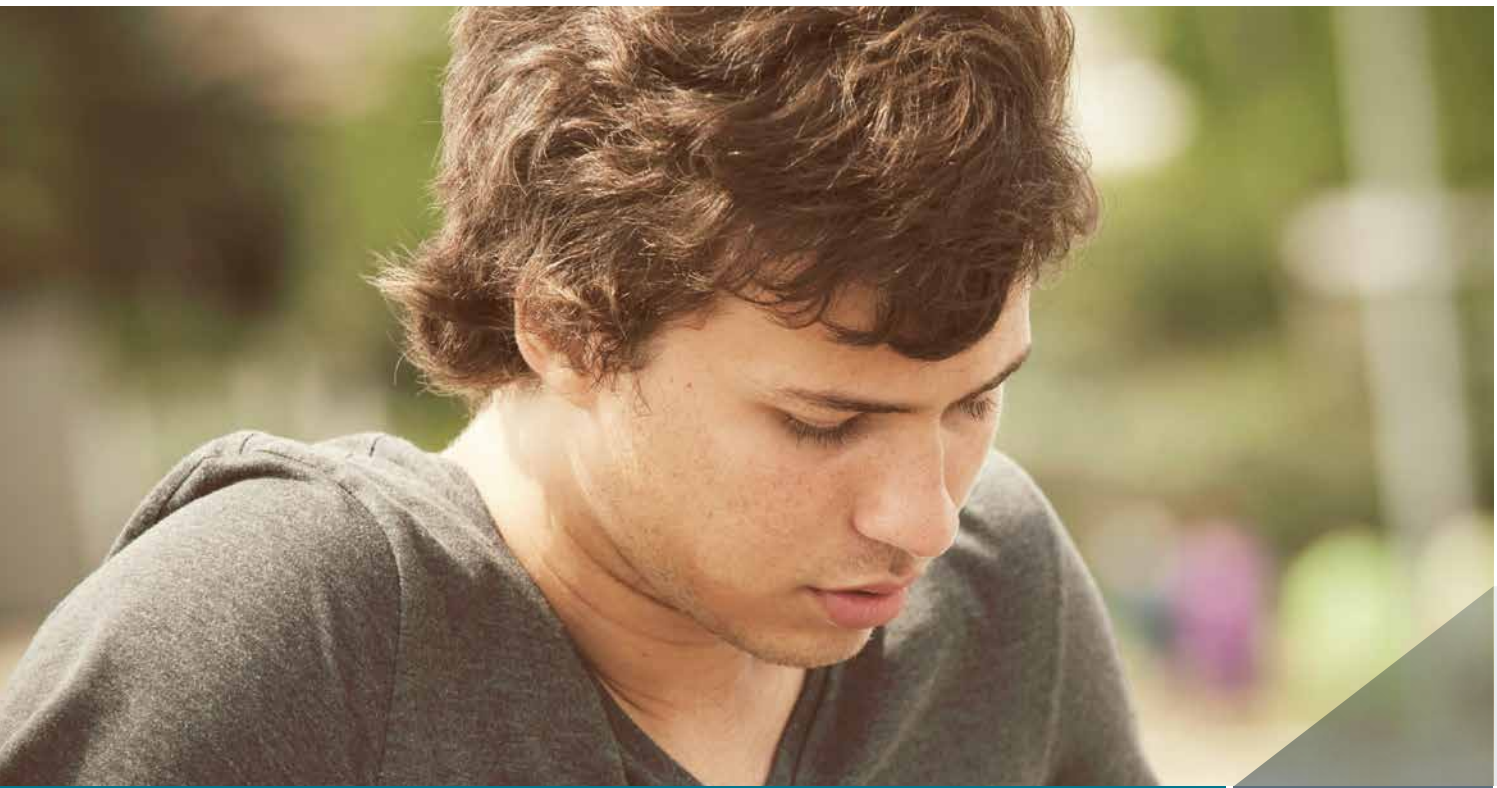

Depression and anxiety

Essential CPE

2015
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Essential CPE
Depression and anxiety
December 2015

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Contents

Learning objectives

After reading this Essential CPE , pharmacists should be able to:

- Outline the key symptoms of depression and anxiety disorders
- Describe the impact of depression and anxiety symptoms on the lives of consumers and their carers
- Identify important key medicine practice principles when treating people with depression and anxiety in primary care using evidence-based practices
- Describe the principal therapeutic modalities used to treat depression and anxiety in adult populations including older adults and pregnant/postpartum women
- Explain the role of medicine in the treatment of people with anxiety and depression with a particular focus on quality use of antidepressants
- Identify appropriate and effective communication skills when working with consumers and carers
- Identify barriers and facilitators that impact on consumer and carer experiences in a community pharmacy setting
- Identify strategies to assist consumers and carers in the management of antidepressants
- Follow a collaborative pathway to support consumers and carers recovery journeys.

Competency standards

Pharmacists can self-assess their abilities against the competency standards relevant to their role to determine areas in which further development is needed. This Essential CPE *Depression and anxiety* addresses the following competencies:

Domain 1: Professional and ethical practice

Standard 3: Deliver 'patient-centred' care

Standard 5: Maintain and extend professional competence

Domain 2: Communication, collaboration and self-management

Standard 1: Communicate effectively

Standard 2: Work to resolve problems

Standard 3: Collaborate with members of the healthcare team

Domain 4: Review and supply prescribed medicines

Standard 2: Consider the appropriateness of prescribed medicines

Domain 6: Deliver primary and preventative healthcare

Standard 1: Assess primary healthcare needs

Standard 2: Deliver primary healthcare

Standard 3: Contribute to public and preventative health

Domain 7: Promote and contribute to optimal use of medicines

Standard 1: Contribute to therapeutic decision-making

Standard 2: Provide ongoing medication management

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Glossary

CBT	Cognitive behavioural therapy
DSM-5	*Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*
ECT	Electroconvulsive therapy
GAD	Generalised anxiety disorder
GP	General practitioner
IPT	Interpersonal therapy
MAOI	Monoamine oxidase inhibitor
OCD	Obsessive compulsive disorder
PBS	Pharmaceutical Benefits Scheme
PTSD	Post-traumatic stress disorder
SNRI	Serotonin and noradrenaline reuptake inhibitor
SSRI	Selective serotonin reuptake inhibitor
TCA	Tricyclic antidepressant
Consumer	Person with a lived experience of mental illness
Carer	Person who provides care and support to someone living with mental illness

Depression and anxiety

Depression and anxiety are both common mental illnesses, with one in four Australians experiencing such an illness at some time during their lifetime.[1,2] Anxiety disorders are the most commonly reported mental disorders affecting approximately 14% of the adult population, followed by affective disorders such as depression, which affect approximately 6% of the population.[2] Optimal treatment of depression and anxiety focuses on symptom relief and functional recovery, and encompasses a range of pharmacological, psychosocial and psychological interventions.[3]

Primary care practitioners play an important role as most depressive and anxiety disorders are diagnosed and treated in this setting. In 2013–14 about 13% of general practitioner (GP) visits involved a mental health component,[4] with pharmacists dispensing about 34 million prescriptions for mental health medicines such as antidepressants in 2013–14 (accounting for 12% of all prescriptions dispensed in Australia).[5] However, mental disorders are still under-recognised; the estimated treatment rate in the Australian population was 35% in 2007,[6] and up to 50% of people with depression and anxiety who present in primary care will not be identified.[7,8] Healthcare practitioners need sound clinical knowledge, good interpersonal communication skills, and professional confidence to improve early identification and facilitate access to optimal treatment.

Depression

Depression is a common, recurrent disorder affecting over two million Australian adults.[9] It is twice as common in women and about 80% of people who receive treatment will experience more than one episode over their lifetime.[10,11] The median duration of an episode of depression is 16–23 weeks; about 12% of people will not entirely recover from an initial episode and will therefore go on to experience a more chronic course.[11] Depression is associated with significant disability that is often not recognised and is a major cause of morbidity worldwide.[12] It is also associated with high levels of mortality and is a leading cause of suicide.[11] Depression is frequently associated with other psychiatric disorders, particularly anxiety disorders, and with substance misuse and physical health disorders.[13] Physical illnesses, in particular cardiovascular disease and cancer, are also associated with high rates of depression and consequently even higher rates of disability.[14]

Depression is most commonly diagnosed by GPs who are guided by classification systems such as the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5).[15] As depicted in Box 1 depression is viewed on a continuum of severity between normal sadness and severe illness. The DSM-5 criteria for major depression provide a useful guide for when antidepressant treatment will be beneficial. Once a diagnosis is made practitioners need to consider the severity (based on the number of symptoms and the functional impact), duration of symptoms and the number of prior episodes in order to decide the most appropriate therapeutic intervention(s). Table 1 outlines the key symptoms of depression and emotional, cognitive, physical and social indicators. Greater numbers of symptoms are associated with greater morbidity; the DSM-5 criteria for a major depressive episode requires a minimum of five symptoms, one of which must be low mood or loss of interest, nearly every day over the two weeks prior to the consultation with a health professional. Persistent depressive disorder is also diagnosed by the duration of symptoms, with the person affected reporting a history of two or more symptoms over a period of two years or longer. Identifying the severity and duration of symptoms will assist the practitioner to make decisions about whether to use antidepressants.

Two quick questions that are useful to identify depression in the primary care setting:

- 'In the past month, have you lost interest or pleasure in things you usually liked to do?'
- 'In the past month, have you felt sad, low, down, depressed or hopeless?'

If the answer to either question is yes, further detailed questioning and assessment is required by a GP.[16] Pharmacists should talk with anyone they are concerned about and advise them to speak with their GP.

Anxiety

Anxiety symptoms are common in the general population and are often mild and fleeting. Anxiety is the feeling of worry and apprehension; it warns of impending danger and enables the person to take measures to deal with a threat (real or imagined). Anxiety is experienced in two components; awareness of the physiological sensations (e.g. palpitations, sweating) and the psychological sensations (of feeling nervous or frightened). Anxiety causes stimulation of the autonomic nervous system resulting in a variety of symptoms including cardiovascular (tachycardia and palpitations), muscular pain (sore back), gastrointestinal (diarrhoea), respiratory (rapid breathing). Our bodies typically respond to this by showing agitation, muscle tension, sweating with hot and cold flushes and pacing.[18,19]

Anxiety disorders are characterised by persistent excessive worry and apprehension for no apparent reason; this causes significant distress, impairs function and reduces quality of life.[18,19] The DSM-5 outlines the diagnostic categories for the principal anxiety and related disorders, including generalised anxiety disorder, panic disorder, social anxiety disorder (social phobia), specific phobia, post-traumatic stress disorder and obsessive compulsive disorder. These are summarised in Box 2.

Box 1. DSM-5 criteria[15]

Major depressive episode

- Five (or more) of the following symptoms have been present over the last two weeks for most of the day, or nearly every day and represent a change from previous functioning; at least one of the symptoms is either depressed mood or loss of interest or pleasure:
  - depressed mood, indicated by subjective report (e.g. feels sad or empty) or observation made by others (e.g. appears tearful)
  - marked loss of interest or pleasure in all (or almost all) activities, indicated by subjective account or others
  - significant weight loss or gain (e.g. more than 5% change in body weight in a month), or decrease or increase in appetite nearly every day
  - insomnia or hypersomnia
  - psychomotor agitation or retardation (observed by others and/or subjective feelings of restlessness or being slowed down)
  - fatigue or loss of energy
  - feelings of worthlessness or excessive or inappropriate guilt (not merely self-reproach or guilt about being sick)
  - diminished ability to think or concentrate, or indecisiveness (either by subjective account or observed by others)
  - recurrent thoughts of death (not just fear of dying), or recurrent suicidal ideation (without a specific plan), or a suicide attempt or a specific plan for committing suicide.
- Symptoms cause clinically significant distress or impairment in social, occupational or other areas of functioning.
- Symptoms are not due to the effects of a substance (e.g. drug of abuse) or a medical illness (e.g. hypothyroidism).

Severity of episodes is classified as:

- mild (few symptoms beyond those expected to make diagnosis; distress is manageable with mild functional impairment)
- moderate (minimum number of symptoms and functional impairment between mild and severe)
- severe (most symptoms present, seriously distressing and unmanageable, with marked functional impairment).

Persistent depressive disorder

- Depressed mood for most of the day, for more days than not, for two years or more indicated by subjective account or observation by others.
- Presence of two or more of the following symptoms for the same period:
  - poor appetite or overeating
  - insomnia or hypersomnia
  - low energy or fatigue
  - low self-esteem
  - poor concentration or difficulty making decisions
  - feelings of hopelessness.
- Never without symptoms (as outlined above) for more than two months.

Adapted from American Psychiatric Association (DSM-5)[15]

Anxiety symptoms (and disorders) often coexist with other psychiatric disorders, especially depression; 85% of people with depression experience significant anxiety symptoms and comorbid depression is found in up to 90% of individuals with anxiety disorders.[21] Coexisting anxiety and depressive disorders are associated with a prolonged recovery time, greater functional impairment, a greater risk of discontinuing treatment early, increased healthcare use and generally worse outcomes than people with an anxiety disorder or depressive disorder alone.[22,23] Anxiety disorders and depression are both associated with comorbid substance misuse and chronic physical illness.[20]

Many people with anxiety and depressive symptoms do not present to their GP and when they do, anxiety symptoms are typically not the presenting complaint; however, up to 25% of people seen in primary care have comorbid depression and anxiety disorders.[24] Under-recognition is related to a number of factors including practitioner competence and consumer knowledge but also the difficulty many people (including health professionals) have in discussing emotional issues and psychological symptoms. People with anxiety and/or depression are likely to present with physical symptoms rather than psychological symptoms and the symptoms they describe may seem vague and non-specific.[25] It is important for health professionals to be alert to anxiety symptoms and ask about them. Pharmacists can support people they are concerned about by advising them to see their GP. While many people have mild symptoms of anxiety associated with stressful life events, those who meet the diagnostic criteria for an anxiety disorder (*see Box 2*) are likely to benefit from psychotherapy or pharmacotherapy. Treatment need is influenced by symptom severity and duration, level of distress and impact on everyday life and the presence of coexisting depression and other disorders.[20,25]

Particular populations

Particular populations may require special consideration with respect to depression and anxiety disorders. This Essential CPE primarily focuses on depression and anxiety in adults, however older adults and pregnant/postpartum women will also be discussed. Children and adolescents who present with symptoms congruent with depression and/or anxiety require care from experienced specialist services, and for this reason they are not covered in detail here; a brief summary only is provided. Anxiety and low mood in children and adolescents can result from changes in their biology (e.g. maturation pathways), home or school environments, and hence should be approached from a family-focused care perspective. Symptoms of low mood and anxiety are not uncommon in in the adolescent years and need to be approached sensitively, with the right therapeutic 'touch' that acknowledges this as a transitional period of life typically involving substantial change. Normal maturation processes should not be medicalised although health practitioners must be cognisant of the potential for high-risk behaviours including self-harm, substance use and other behaviours with which this population may present or engage in. The evidence of efficacy for psychotropic medicines such as antidepressants in both children and adolescents is less robust and should be considered only under specialist consultation.[26] Key points when antidepressants are prescribed for children and adolescents include the following:

- Antidepressants, including selective serotonin reuptake inhibitors (SSRIs) and venlafaxine, can increase the incidence of suicidal ideation. It is therefore important that a robust care plan is initiated by specialist services that recognise these risks and shares information with family and carers.[27]
- Fluoxetine has some modest evidence as an antidepressant in this population.[28]
- Medicines should be initiated slowly and always used as part of a package of care that includes psychosocial and cognitive therapies.

Table 1. Key symptoms of depression[17]

Emotional symptoms	Low or depressed mood Irritable and sensitive to criticism Persistent sadness Loss of enjoyment or pleasure (can result in withdrawal from regular activities, including looking after personal appearance) Feeling angry and being aggressive.
Physical symptoms	Fatigue, lack of energy and tiredness (can have difficulty with a normal conversation and result in withdrawal from family and friends) Significant change in appetite and weight (poor appetite is common but overeating can occur) Difficulty sleeping (restless, and waking very early) or sleep may be prolonged Increased sensitivity to pain (can feel muscle tension, aches and pains and headaches) Slowed and heavy movements including altered/reduced facial expressions Loss of sex drive Agitation.
Cognitive symptoms	Difficulty concentrating and making decisions Worry and pessimism Feeling worthless or hopeless Thoughts about death (can feel hopeless and trapped) Slow thinking and memory problems Guilt.
Social symptoms	Social withdrawal Deliberate isolation.

Adapted from Firipis M[17]

Older adults

Senior members of our communities who experience anxiety and depression may require more focused care. Age-related changes to human physiology include reduction in renal function, reduced respiratory and cardiac outputs, reduced gastric motility, and the gradual decrease in hepatic metabolism.[29-31] The central nervous system (CNS) also shows age-related changes which may manifest as psychological changes resulting from reduced blood supply, reduction in neurons and neural plasticity as well as changes in cognition, memory and other aspects of brain function.[32,33] When providing care for individuals over 65 years of age, or indeed younger consumers with significant impairment of renal or hepatic clearance of medicines, dosing parameters need to be adjusted in light of renal clearance or degree of hepatic functioning. People over 65 years of age often need a gradual increase in medicine doses as they are more sensitive to adverse events, e.g. adverse effects associated with SSRIs such as gastrointestinal effects, increased arousal or anxiety or sleep disturbances, electrolyte disturbances such as hyponatraemia. Some older people develop a significant degree of frailty as they age, which adds a greater risk, especially if they are also affected by low mood and have diminished resources for recovery.[34-36] Frailty is often associated with marked cachexia, reduced muscle strength, increased dependence; those at risk may simply take to their beds. Despite this population often experiencing marked comorbidity, low mood is one of the potentially manageable risk factors; however, they can be extremely sensitive to the effects of medicines.[37]

Depression in older people can be part of a lifetime disorder or may be a new presentation.[38] It can be associated with a sense of 'survival guilt' with the loss of a long-term partner or friends. In people with a lifetime of episodic depressive illness, the continuation of antidepressant medicines can reduce the risk of severe exacerbations in later life.[39,40] However, medicine reviews when considering treatment discontinuation often only cover a short timeframe of past depression (e.g. 1–2 years) rather than risk over the course of life. There is also evidence that depression in older adults can be harder to treat with medicines, and may require combination regimens rather than monotherapy.[38,41] Psychological interventions such as cognitive behavioural therapy (CBT) have shown benefit in older adults.[42]

Box 2. Key features of the principal anxiety and related disorders[20]

Generalised anxiety disorder (GAD)

Characterised by excessive and inappropriate worrying that is persistent (more than a few months) and not restricted to particular circumstances. Symptoms include:

- physical anxiety symptoms (e.g. tachycardia, sweating, diarrhoea) and psychological symptoms (e.g. restlessness, fatigue, difficulty concentrating, irritability, and disturbed sleep).

GAD is often comorbid with major depression, panic disorder, phobic anxiety disorders, health anxiety and obsessive compulsive disorder. Symptoms cause clinically significant distress or impairment in social, occupational and/or other areas of functioning.

Panic disorder

Characterised by recurrent unexpected surges of severe anxiety or panic attacks with variable amounts of anticipatory anxiety between attacks. Panic attacks are:

- discrete periods of intense fear or discomfort
- accompanied by multiple physical and psychological anxiety symptoms
- typically last around 30–45 mins (reaching a peak within 10 mins).

After an initial episode, most people develop a fear of having subsequent panic attacks with about two-thirds developing agoraphobia, i.e. fear in places or situations where escape might be difficult or help might not be available if they were to experience a panic attack (e.g. being in a crowd, outside the home, using public transport). These situations are typically avoided or endured with significant distress.

Social anxiety disorder (Social phobia)

Characterised by a marked, persistent and unreasonable fear of being observed or evaluated negatively in social, or performance situations. It is associated with physical and psychological anxiety symptoms. Situations that are feared (e.g. eating/presenting in public) are avoided or endured with significant distress.

Specific phobia (Simple or isolated phobia)

Characterised by excessive or unreasonable fear of particular people, animals, objects, or specific situations (e.g. dentists, spiders, elevators, flying, having an injection). These are either avoided or endured with significant distress.

Post-traumatic stress disorder (PTSD)

Characterised by a history of exposure to a traumatic event (e.g. actual or threatened death, serious injury, or threats to physical integrity of self or others) with a response of intense fear, helplessness or horror. This is typically accompanied by the later development of symptoms, including:

- intrusive symptoms such as recollections, flashbacks or dreams
- avoidance symptoms such as avoiding activities or thoughts associated with the trauma
- negative alterations in cognition and mood
- hyperarousal symptoms such as disturbed sleep, hypervigilance, and an exaggerated startle response.

Obsessive compulsive disorder

Characterised by recurrent obsessive ruminations, images or impulses, and/or recurrent physical or mental rituals. These are distressing, time-consuming, and cause interference with social and occupational functioning, such as:

- contamination, accidents, and religious or sexual matters are common obsessions
- washing, checking cleaning, counting and touching are common rituals.

Adapted from Baldwin DS, Anderson IM, Nutt DJ, et al.[20]

Anxiety disorders may also reflect a lifelong lived experience, or may newly emerge in older age. Furthermore, anxiety and lowered mood may be part of important features in the early presentation of dementia.[43,44] Treatment of anxiety disorders in older people requires the same care as treatment of depression with attention required when initiating medicines. When considering anxiety and depression in older adults, key practice points include the following[35,45,46]:

- Individuals may have multiple morbidities and be on medicines that can interact and exacerbate symptoms, or cause medicine interactions.
- There is evidence that continuing antidepressant therapy after symptom remission may prevent relapse and improve quality of life.
- Slow dose initiation of medicines often reduces untoward adverse effects and using medicines with greater dosage flexibility (such as sertraline) can assist in the more gradual dose initiation.
- Systemic adverse effects are dose related and can include anticholinergic side effects with tricyclic antidepressants (e.g. dry mouth, blurred vision, constipation urinary retention), gastrointestinal side effects (e.g. nausea, diarrhoea, urinary incontinence and cramps), cardiac side effects (e.g. postural hypotension, risk of prolonged QT interval), neurological side effects (e.g. headache, increased risk of serotonin syndrome, emergence of Parkinson-like symptoms, increased anxiety, and tremor), and respiratory depression with benzodiazepines.
- Some older people have a poor response to monotherapy and may require adjunctive therapies to boost antidepressant action; these combinations can include addition of lithium, co-prescribing mirtazapine or bupropion with an SSRI or venlafaxine.
- Psychological therapies for depression in older adults are as effective as antidepressants. Problem-solving therapy (PST) may be particularly effective for older people with depression complicated by significant executive dysfunction.

Women

Depression is more common in women than men,[47,48] with two periods in the life course when they are at greater risk, notably pregnancy and the postpartum period, and around menopause. Depression presenting in a postpartum woman has some particular challenges, as the onset can be swift and severe with deleterious effects on the mother's ability to bond effectively with her infant. Prompt recognition of the problem, together with appropriate and timely treatment, can reduce the risk of harm. Many primary care practices will screen new mothers at the child's first immunisation schedule; national clinical guidelines also advocate screening in the antenatal period to identify 'at-risk' women.[49,50] Depression in postpartum women responds well to most therapies but where possible, choice of medicine should reflect the mother's preference to breastfeed, so the antidepressant should ideally have a low concentration in breast milk. Examples include sertraline and, to a lesser extent, paroxetine.[51-54] As with other populations it is advisable for any woman with a diagnosis of postpartum depression to continue therapy for at least six months.

Management of depression in women who are pregnant, or who become pregnant whilst being treated with antidepressants, can cause anxiety regarding potential harm to the fetus as a result of medicine. There is modest evidence to suggest that untreated depression in pregnancy can raise maternal cortisol levels with associated harm to the fetus and negative impacts on subsequent infant development; untreated depression during pregnancy is also directly associated with depression after birth.[55-57] A number of substantive reviews of maternal antidepressant use and related outcomes to exposed infants have focused on SSRIs; all these medicines have been shown to cause an increase in the incidence of pulmonary hypertension in newborn infants.[55,56,58-61] However, the incidence of this condition is rare and the risk of occurrence is low with one meta-analysis identifying an increased odds ratio of 1.23 (95% CI= 0.58 to 2.6) in early pregnancy increasing to 2.5 (95% CI=1.32 to 4.73) in late pregnancy.[62] The other concern with antidepressant use in pregnancy relates to the evidence of withdrawal symptoms in newborn infants including cyanosis and respiratory distress, feeding difficulties, hyperreflexia and tremor. Some guidelines recommend tapering antidepressants before delivery as a precaution, although data suggests that such withdrawal syndromes are mild and self-limiting and may have been compounded by use of multiple psychotropics, especially benzodiazepines.[57] There is also evidence of a small increase in cardiac defects for infants exposed to maternally-ingested paroxetine during the first trimester of pregnancy however the incidence is thought to be no more than 2 per 1,000 births.[57]

Due to the complexities involved for pregnant women, or those who experience postpartum depression, specialist maternal health services should be engaged. Pharmacists however, are well placed to support pregnant women and new mothers about questions they may have about medicines, by providing them with good evidence-based advice.

Causes of depression and anxiety

The causes of depression and anxiety are unknown but a combination of biological, genetic and psychosocial factors are likely to contribute and interact with one another resulting in changes to brain chemistry and function. Life events that cause emotional or physical stress (such as illness, loss of a loved one or recent disappointments), individual factors (such as personality style, learned response to experiences), and comorbid physical illnesses (such as cardiovascular disease, cancer) and/or medicine (such as interferon, steroids, beta-blockers) can trigger these changes in brain chemistry (*see Appendix 1*).

Theories relating to the biological factors primarily involve the monoamine neurotransmitters such as noradrenaline, serotonin and dopamine in depression and noradrenaline, serotonin (and GABA-ergic neurotransmission) in anxiety disorders. The recognition that the original antidepressants (such as MAOIs and TCAs) boosted one or other of the monoamines gave rise to theories that depression and emotional distress was due to a deficiency in these neurotransmitters. Although much effort has been spent trying to investigate this, results have been mixed and confusing.[63] Most current research implicates a complex neurochemical imbalance which, in some cases, may be genetic in origin.[63] The pharmacological treatments for depression and anxiety interact with these neurotransmitter systems.

Box 3. One person's experience of depression and anxiety

Anxiety had always circled my life; it started with trying to fit in. By the time I was a teenager I'd migrated twice and lived in three different countries. Little things set me apart: talking with an accent, wearing different clothes, and having no understanding of local sports and customs. While none of this was insurmountable, in 1980s Brisbane I felt as if I may as well have been from outer space. I tried to avoid all conflict and as a young adult led an ultra-cautious life, avoiding close relationships and not committing to anything that mattered, living vicariously through books and the adventures of others.

Eventually though, life lost what little colour it had. I started avoiding my friends and stopped contacting them; in the days before social media this was much easier to do. I found reasons not to see my family, and visits became weeks, and then months apart. I told them I was busy, but underneath I knew things were not quite right. I started to wake up each morning with a disappointing feeling that I had woken up. At first this seemed disconcerting, but eventually it became the norm. If getting up was hard, doing anything meaningful became harder, and I spent ages trying to do the most mundane of things. Even reading, once such a pleasure, became a chore; I hadn't even enough concentration to read a page, re-reading sentences and continually losing my place.

Ironically, for someone who read widely, it never occurred to me to investigate why this was happening. It was only a chance encounter at a GP's surgery – I was taking someone else for a check-up – that I started to talk about what I was feeling. Those visits became regular and after a couple of months my new GP convinced me to trial an antidepressant. I was very anti-medicine but he 'sold' them to me as a 'bridge' to a safer place where I could tackle my underlying problems, which I was slowly starting to disclose. The pharmacist matched his pragmatism and was very open about the side effects I might experience. The first round worked well, and with some talking therapy I felt much better, so stopped everything, convinced I was fine. And then I started to go downhill. It would take another three cycles like this – each time having to get 'cleverer' with how the antidepressant could be reintroduced and then subsequently weaned – before, after nearly three years, I could finally stop for good.

The depression and anxiety have never really left me, but over time I've become much more aware of their presence. The antidepressants were like a dam wall that held back the flood of water long enough for me to find an alternative way around. Today I have whole regime – diet, exercise, meditation, and avoidance of overly stressful situations – that I regularly deploy. I always keep a small supply of anti-anxiety medicine on hand, but for the first time in ages I think this batch is going to expire before I get to open it.

Insights for community pharmacists:

- Reducing the burden of common mental disorders such as depression and anxiety is the role of primary care practitioners
  - consumers need to be able to access knowledgeable, competent, and confident practitioners in a timely way so that they can receive evidence-based interventions
- Depression is common and debilitating, and when it is combined with physical illness is complex and the impact multiplies
- Comorbid depression and anxiety are common and affect up to one-quarter of people seen in primary care
  - experienced together these disorders are more severe, more disabling, harder to treat, and people have poorer outcomes
- People experiencing psychological symptoms often find it hard to talk about them and may be reluctant to see a health practitioner. Pharmacists can promote trusting relationships by:
  - welcoming consumers with an open and friendly manner, thus initiating positive experiences
  - adopting a holistic approach by showing an interest in consumers' general health and wellbeing
  - increasing awareness amongst all pharmacy staff about the existence and impact of stigma associated with mental illness
  - increasing their own knowledge about strategies that promote recovery
  - allocating consultation space to ensure privacy and confidentiality in pharmacy settings
- Older consumers who experience anxiety and/or depression may require additional attention from their healthcare team. Pharmacists can support older consumers by:
  - ensuring medicines are introduced and adjusted more gradually to reduce adverse effects
  - checking that medicine doses and dosing schedules reflect changes in organ function
  - engaging with older health consumers in a manner that encourages confidence and reduces the risk of the older person feeling caught in a generation gap
- There is a higher incidence of anxiety and depressive disorder in female consumers and pharmacists need to be aware of the needs of women who may be pregnant or who are new mothers. Pharmacists can play a role in supporting women by:
  - providing clear evidence-based information about the benefits and possible risks of medicines and alternative treatments that may be used in pregnancy and breastfeeding
  - being aware of the risks of postpartum depression in new mothers and providing appropriate and timely guidance and support.

Therapeutic interventions for depression and anxiety

The treatment approach for common mental disorders such as depression and anxiety will depend on the severity and duration of symptoms, impact of symptoms on everyday life, the number of previous episodes, comorbidities (both psychiatric and physical), concomitant treatment, clinician experience, consumer preferences and their individual responses to prior treatments.

Many people with mild symptoms of recent onset that are associated with stressful or troublesome situations may not need specific treatment beyond reassurance, support and monitoring delivered in a patient-centred way.[64] Research has shown that patient-centred care (*see Table 2*) is not likely to directly influence symptoms but it does produce more actively engaged consumers who have a sense of control over their own health, are more knowledgeable, likely to manage their symptoms well, and want ongoing involvement in their healthcare.[65]

However, given that depression and anxiety disorders are often chronic illnesses with significant associated distress and impairment, people who meet the diagnostic criteria (DSM-5) are likely to need, and to benefit from, specific treatment. This may be psychological or pharmacological, or a combination of both, in addition to reassurance, support, lifestyle changes and education. The general principles of treatment for all people experiencing depression and anxiety disorders are outlined in Box 4.

Lifestyle changes, education, reassurance and support

A number of robust studies have highlighted the value of lifestyle interventions, including a reduction in alcohol and other recreational substances, the need for moderate exercise, and engaging in hobbies and mindfulness training to improve recovery from depression and anxiety and help prevent relapse.[63] Moderate exercise has been shown to improve a sense of wellbeing, self-esteem and resilience to stress.[66, 67] Reduction in alcohol consumption and other recreational substances, together with smoking cessation have also been shown to reduce mood changes and improve an individual's sense of autonomy and control.[63] Other benefits of lifestyle changes, such as engagement in hobbies and activities that increase an individual's social interactions with others, can assist in overcoming loneliness and increasing connectivity. Mindfulness, which can be described as a technique to effect change in mental focus such that self-absorption embraces a wider view of the self and others, helps individuals to adopt a less judgmental and self-critical viewpoint. There is good evidence that it improves resilience and wellbeing.[68-70]

A common and distressing problem in depression and anxiety disorders is disrupted sleep or insomnia.[25, 71] This can present as part of the symptom cluster or be an early warning sign of a depressive or anxiety episode, or as an adverse effect of some antidepressants such as SSRIs, SNRIs and bupropion. Although short-term sedative-hypnotics or anxiolytics can offer some help, assisting individuals to develop better sleep-promoting behaviours, commonly described as sleep hygiene (*see Box 5*) can help shift consumers into recovery.[66,72]

Education, reassurance and support are important for everyone irrespective of the severity of their illness.

A significant factor that can strengthen a pharmacist's ability to work with individuals is utilising effective communication skills. Depression and anxiety disorders can rob consumers of their sense of positivity so communication strategies need to include a sense of optimism that is appropriate to the individual's circumstances, as this can help to reframe negative beliefs and misconceptions. The primary skill required by pharmacists is empathetic listening; the ability to hear the individual's concerns and reflect these back, but with reassurance and support. This is dealt with in more detail in the section on Communication and depression in anxiety. Key themes that have been shown to improve outcomes for consumers include:

- listening, reassurance and support
- timely provision of appropriate information, ensuring it matches the health literacy needs of the consumer.

There is considerable scepticism and doubt within society and amongst consumers and their families about the benefits of medicines for depression and anxiety disorders.[73,74] Depression and anxiety may be conceptualised as being caused by, or linked to, a specific event, and once this is resolved that all will be fine.[75] This stance often fails to appreciate the contribution made by other factors such as biological and lifetime adaptive mechanisms, including those that may have outlived their usefulness to the individual.[76-78] When an individual has developed a significant depressive or anxiety disorder changes in brain physiology and function create a pervasive shift in the individual's overall functioning capacity such that medicines may be required to rebalance neurotransmitters and biological processes in order to aid recovery.

When promoting the value of medicine as a pharmacological intervention, pharmacists need to help the consumer and their carers to understand how biological pathways in the CNS are altered when experiencing depression or anxiety. An important part of any solution is to consider the role of medicine in treating the biological component (*see Box 6*).

Box 4. General principles of treatment[17]

- Use a patient-centred approach, empathic listening, reassurance and support
- Provide information to help educate consumers (and their carers) about depression and anxiety
- Use interventions to reduce symptoms in order to achieve complete recovery (or remission)
- Use a treatment approach that is based on treating the whole person – which addresses their psychological and physical symptoms, and spiritual and emotional wellbeing
- Refer people with severe symptoms (e.g. severe depression) to a mental health specialist, particularly if the person (and/or their carers) is not coping
- Monitor the person's progress and assess the risk of (self-) harm by keeping in regular contact
- Prevent relapse
- Restore functioning.

Adapted from Firipis M[17]

Box 5. Principles of sleep hygiene[72]

- Avoid caffeine, alcohol, nicotine and other substances that can alter sleep
- Make sure the bedroom is a restful, sleep-promoting environment
- Establish relaxing rituals and behaviours before going to sleep
- Go to sleep when feeling tired
- Don't watch the clock if you cannot sleep
- Use light to establish your daytime clock, go for a walk in the park at lunchtime
- Have a regular sleep cycle
- If you need to nap, keep it short and nap early, not late in the afternoon or evening
- Don't eat heavy meals before bed
- Have a healthy fluid intake but don't fluid load before bed
- Exercise early, not before going to bed.

Adapted from Harvard Medical School (Division of Sleep Medicine)[72]

Table 2. Key domains of patient-centred care[64,65]

Holistic care	Responds to the true needs of consumers by valuing the entire person, considering the social context in which they live and recognising the interdependence of their parts.
Individualised care	Considers the unique history, specific needs, preferences and health concerns of the individual and customises healthcare to meet their needs.
Respectful care	Recognises and acknowledges consumer competence in their own care, respecting their right to choose and supporting their strengths and abilities.
Empowering care	Assists people to learn and obtain information about their healthcare options thus promoting self-confidence, self-determination and consumer autonomy, which facilitates active participation in decision-making.

Adapted from Morgan S, Yoder LH[64] and McMillan SS, Kendall E, Sav A, et al.[65]

The role of pharmacists with regards to education should focus on issues such as:

- Depression and anxiety disorders are not a failure of character.
- Understanding the role of different medicines and how they have their effect.
- The experience of taking the medicine: what may happen when it is started, how long before improvement in mood or anxiety will be apparent, when and what type of side effects may occur, and how to manage these.
- The fact that antidepressants do not cause addiction, although some can cause withdrawal symptoms.

Supporting individuals with depression or anxiety is part of the package of care that includes effective communication and education; supporting individuals can be as simple as showing that someone cares enough to say hello each time they see them. Demonstrating a sense of interest in the wellbeing and life of someone who is seeking help increases self-worth and confidence. Health professionals can model these skills and work with consumers to assist them in seeking the support they need from their families and friends and other relevant sources.

'…and that feeling of feeling safe with him [pharmacist], to be able to discuss my mental problems. I felt free to discuss it with him because I saw him regularly.'

– Mental health consumer and carer 2012[79]

Alongside the human elements of support there are other features to consider which may offer additional support to aid recovery and build resilience[11,66,67,72]:

- Working with consumers to ensure their home environment is supportive and comforting. Simple things, such as ensuring enough exposure to daylight have been shown to improve mood. Likewise, steps to ensure a comfortable bedroom and a sleeping environment that is quiet, dark and at the right temperature, can help restore sleep.
- Regular physical exercise lifts mood and reduces cortisol and stress.
- Mental activities that stimulate the mind, but are not excessively challenging, have positive outcomes. Planning daily activities, reading, relaxing, meditating or focusing on mindfulness techniques, are all known to increase positive self-regard and improve mood.
- Ensuring comorbid physical disorders are understood and well managed improves mental wellbeing and can reduce stress and worry, and hence negative impacts on overall health.
- Some individuals see value in complementary therapies, some of which have a modest evidence base for efficacy and consumers may wish to exercise personal agency in using such treatments. It is important that pharmacists are knowledgeable about commonly used complementary therapies and are able to work alongside consumers helping them use such therapies safely, and ensuring that they understand the benefits and/or risks, including the lack of empirical evidence, and the sometimes considerable financial costs involved. Therapies including hypericum extracts (St John's wort) , omega-3 fatty acids, S-adenosylmethionine (SAMe) and folate are discussed in the sections on Depression treatment and Practical management issues.
- Psychotherapy has a good evidence base in treating both depression and anxiety and many consumers gain considerable insights that help to strengthen resilience and aid recovery. Some consumers may choose this option as their main therapeutic modality.

The focus of the remainder of this section will be on reducing symptoms especially in acute treatment, choice of antidepressant and practical management issues including relapse prevention (continuation therapy).

Depression treatment

Treatment options for reducing symptoms in depression include psychological or talking therapies such as cognitive behavioural therapy (CBT), interpersonal therapy (IPT), pharmacotherapy (e.g. antidepressants), psychosocial therapy (e.g. facilitated self-help based on CBT principles, exercise groups, group-based peer support program) or physical therapy such as electroconvulsive therapy (ECT). Clinical practice guidelines for depression in adults provide treatment recommendations based on current evidence. The most recently reviewed guidelines which have informed this Essential CPE, include the United Kingdom NICE clinical guidelines for common mental disorders and depression,[80,81] the British Association for Psychopharmacology guidelines,[11] and the *Australian Therapeutic Guidelines*.[82]

Antidepressants are effective for treating major depression that is of moderate or greater severity. They are a first-line treatment for those affected and also for depression of any severity that has persisted for two years or more. Antidepressants should not be used routinely in sub-threshold depression or mild depression unless the symptoms have persisted for more than 2–3 months or the person has a history of moderate-to-severe recurrent depression.[11] For people with mild depression or sub-threshold depressive symptoms, active monitoring and psychosocial interventions are the first-line treatments, however if they do not provide adequate benefit then antidepressants or psychological treatment should be considered.

Box 6. Common concerns people have about antidepressant medicines[11,20]

Adverse effects:

- antidepressants may cause a number of side effects such as insomnia, increased anxiety and gastric side effects with SSRIs/SNRIs, sedation and anticholinergic side effects with TCAs, weight gain and sedation with mirtazapine
- a degree of sexual dysfunction occurs with most antidepressants with the exception of mirtazapine and moclobemide
- increased sweating can be problematic (especially in men, likely due to increased adrenergic receptor numbers)

Dependence:

- inability to cope without medicines
- developing tolerance to treatments
- withdrawal symptoms which are common with SSRIs and SNRIs include sleep issues, and sensory symptoms such as vertigo, paraesthesia, electric shock sensations.

Alternatives to antidepressant treatment for mild-to-moderate depression that should be discussed with consumers are psychological and behavioural interventions; these include CBT, IPT and behavioural activation. For people with moderate or severe depression providing a psychological intervention in combination with an antidepressant is likely to be more effective.

Antidepressant medicines all have similar efficacy in first-line treatment for most people with depression. The relatively high response to placebo treatment (which is not the same as no treatment) in antidepressant trials has led to debate about whether antidepressants are only effective in people who are severely depressed.[83,84] However, based on clinically meaningful responses (rather than rating scale improvement) most guidelines advocate antidepressants for those with moderate depression. An emphasis is placed on the person concerned achieving remission because residual symptoms are often distressing and are associated with functional impairment and risk of relapse. It is also important to note that treatment effect sizes for antidepressants have been shown to be similar to the effect sizes used for pharmacological treatments in medicine more generally.[85]

Antidepressants are sometimes used in combination with antipsychotics, particularly in people with psychotic symptoms as an aspect of their depression, or in situations where the response to antidepressant monotherapy has been inadequate. In people experiencing agitation, anxiety or significant sleep problems, sedative-hypnotic medicine may also be helpful in the short term, especially in the acute stages of treatment. The choice of antidepressant medicine is discussed later in this section together with practical management issues such as optimising outcomes, next steps following inadequate response, relapse prevention, and stopping antidepressant treatment.

Complementary treatment with St John's wort (hypericum extracts in doses between 600–1,800 mg) has been found to be effective in acute treatment of mild and moderate depression, with efficacy equal to antidepressants but with better tolerability.[86] Longer-term efficacy and safety data are lacking for hypericum continuation therapy. St John's wort is not recommended as first-line treatment of depression but can be considered for mild-to-moderate depression where first-line treatments are not tolerated provided a recognised standardised product is used. The potential for interactions with other medicines, including antidepressants needs to be managed carefully. Evidence for other complementary therapies such as omega-3 fatty acids, S-adenosylmethionine (SAMe) and folate is lacking and they are not recommended as monotherapy for depression.[11] Pregnant or breastfeeding women already on complementary medicines for depression, or considering taking them, should discuss this with their doctor. Further advice may be sought from a pharmacist.

Physical treatment such as ECT is the first-line treatment for major depression in urgent and emergency situations. In non-urgent circumstances it can also be considered in the following situations: when it is the individual's preferred choice, following relapse and a previous good response to ECT, and when first-line treatments are not possible or feasible. After a course of ECT, antidepressant treatment should be started to reduce the risk of relapse.

Anxiety treatment

Treatment options for reducing symptoms in anxiety include psychological or talking therapies (e.g. CBT), pharmacotherapy (e.g. antidepressants, benzodiazepines), and/or psychosocial therapy (e.g. facilitated self-help, relaxation). The most recently reviewed clinical practice guidelines, which provided treatment recommendations based on current evidence for this Essential CPE include the aforementioned NICE clinical guidelines for common mental disorders,[80] the British Association for Psychopharmacology guidelines[20] and the *Australian Therapeutic Guidelines*.[87]

Similar to mild depressive symptoms, people presenting with mild anxiety disorders will often respond to non-specific treatment that includes psychoeducation and active monitoring. However, the long-term nature, distress and impairment associated with anxiety disorders means that most consumers who meet the diagnostic criteria will benefit from pharmacological and/or psychological treatment. Response to treatment in anxiety disorders will generally take some time (up to 12 weeks to assess efficacy), symptoms may get worse initially (e.g. increased nervousness and agitation), and long-term maintenance treatment is usually needed.

SSRIs are considered to be first-line pharmacological treatment (both short and long term) in anxiety and related disorders (e.g. obsessive compulsive disorder). The common coexistence of depressive symptoms with all the anxiety disorders means the SSRIs are key treatment modalities. Other groups such as the SNRIs have demonstrated efficacy in some anxiety disorders but are possibly less well tolerated; for this reason they are best reserved for people who do not respond to, or do not tolerate, SSRI treatment. Similarly some TCAs and irreversible MAOIs are effective in some anxiety disorders but overall have more adverse effects and therefore are also best reserved for people who do not respond to, or do not tolerate, other treatment approaches.

Benzodiazepines can be effective in people with anxiety disorders but because of their side effects (e.g. sedation and cognitive impairment in short- and long-term treatment) and tolerance and/or dependence with ongoing use, they should generally be restricted to short-term acute use for assisting sleep and reducing distress. Longer-term use should be only considered in situations where people have not responded to prior treatments and where anxiety symptoms are severe, persistent, distressing and causing functional impairment.[88,89]

Buspirone (serotonin partial agonist) and pregabalin (presynaptic inhibitor of excitatory neurotransmitters) are alternative treatments that may by efficacious, especially in GAD, when other treatments have not worked (Note: pregabalin is not approved in Australia for use in GAD).[20,87]

Antipsychotics are generally only used in situations where there has been a lack of response to other interventions although quetiapine has shown benefit in the treatment of GAD.[75]

In general, psychological treatments have similar efficacy to antidepressants especially in the acute treatment of anxiety disorders. Many people prefer psychological approaches and therefore wherever possible consumers should be given a choice depending on local provision/availability and access. In specific

phobias, exposure therapy (where a person is exposed to their fear without danger), is more effective than other types of psychological therapy and should be first-line treatment; SSRIs should be considered for those people who do not respond to exposure therapy.[90] Similar to antidepressant therapy the response time for psychological treatments may be delayed and prolonged and repeat courses may be needed to sustain improvement in anxiety disorders.

It is not clear whether combining psychological and pharmacological treatment produces greater benefits than monotherapy and so sequential management steps, rather than combining, is usually recommended from the start of treatment. Panic disorder is an exception where combining psychotherapy and antidepressants has greater efficacy in acute treatment and may reduce relapse rates.[20]

Choice of antidepressant

The choice of which antidepressant to use in depression and anxiety disorders is primarily based on a combination of efficacy and tolerability/safety considerations, and consumer preference (*see Box 7*). There is no one group of antidepressants that will suit everyone and pharmacotherapy needs to be tailored to meet individual needs.

Concerns have been raised about antidepressants being associated with increasing suicide/suicide behaviour. While solid evidence of a specific link is lacking, there is evidence of a small increase in non-fatal suicidal ideation/self-harm behaviours in adolescents treated with SSRIs.[11] Therefore assessment and treatment in younger adults requires careful risk-benefit analysis, and close monitoring by specialist services. Overall, ecological and naturalistic studies have found that increased antidepressant use is linked with lower suicide rates.[91,92]

The pharmacological profiles of antidepressants available in Australia are presented in Table 3. Note that bupropion is only registered in Australia for smoking cessation, although it is included in treatment guidelines elsewhere, particularly from North America. Both agomelatine and vortioxetine are available in Australia but are not funded on the Pharmaceutical Benefits Scheme (PBS). Two antidepressants, desvenlafaxine (primary active metabolite of venlafaxine) and escitalopram (active enantiomer of citalopram), are also available. They are as effective as their parent compounds but have been marketed as having a reduced adverse effect burden, e.g. escitalopram causes less agitation and gastrointestinal effects; desvenlafaxine may cause less sexual dysfunction.[82]

SSRIs and SNRIs are generally considered to be first-line medicines in both short- and long-term treatment of depression and anxiety disorders.[11,20] Although there is some evidence that duloxetine and venlafaxine are less well tolerated than SSRIs, the differences are small.[93] SSRIs and SNRIs are commonly prescribed and are generally well tolerated; they are also safer in overdose and easier to use than older classes of antidepressants such as TCAs and MAOIs. However both SSRIs and SNRIs have potentially troublesome adverse effects such as increased nervousness, insomnia, nausea, and sexual dysfunction. They can also cause discontinuation symptoms particularly if they are stopped abruptly. The withdrawal effect will be discussed in more detail later in this section. Venlafaxine has been associated with an increase in blood pressure with monitoring recommended at higher doses.

Box 7. Key principles of antidepressant choice in depression and anxiety[11]

- Antidepressant choice should be matched to individual consumer needs taking into account short- and long--term effects
- First-line antidepressant treatment should be with a medicine that is better tolerated and safer in overdose:
  - most evidence for SSRIs
  - other newer antidepressants such as SNRIs are also first-line choices
  - older TCAs should generally be reserved for situations when first-line antidepressants have failed
  - older MAOIs (irreversible) should generally be reserved for situations when first-line antidepressants have failed and should only be initiated by mood disorder specialists
- Other factors to consider in antidepressant choice:
  - consumer preference
  - previous treatment response including effectiveness and tolerability
  - comorbid psychiatric disorder that may specifically respond to a particular class of antidepressant (e.g. OCD and SSRIs)
  - adverse effect profile and lethality in overdose
  - comorbid physical conditions that impact on pharmacodynamics or kinetics of antidepressant such as liver disease, cognitive impairment, etc
  - pregnancy and the postpartum period, especially if women are breastfeeding
  - concurrent medicine use that may interact with antidepressants
  - consumer age – see section on Particular populations.

Adapted from Cleare A, Pariante CM, Young AH, et al.[11]

TCAs are associated with a higher burden of adverse effects than SSRIs or SNRIs including anticholinergic side effects, dizziness, sedation and sweating. Toxicity in overdose is also higher with TCAs. For these reasons TCAs are generally reserved for use after a poor response or tolerability problems from initial treatment with an SSRI or SNRI, or where there has been a good previous response with a TCA.

Older irreversible MAOIs such as phenelzine and tranylcypromine are effective in treating depression, panic and social anxiety disorder but they are not used frequently because they have a high burden of side effects (e.g. postural hypotension, insomnia, dizziness, sexual dysfunction, weight gain, headache), are potentially fatal in overdose, and consumers face concomitant dietary restrictions. Therefore they should be reserved for people who have not responded to, or who are intolerant of, other treatment approaches. Moclobemide is a reversible inhibitor of monoamine oxidase (selective for type A), which reduces the need for dietary restrictions.

Table 3. Antidepressant pharmacological profiles[11]

	Mechanism of action	Adverse effect								Hepatic enzyme inhibition	Overdose lethality
		Anticholinergic [a]	Sedation	Insomnia/ agitation	Postural hypotension	Nausea/ gastro intestinal	Sexual dysfunction	Weight gain	Specific adverse effects		
Tricyclic antidepressants (TCAs)											
clomipramine	SRI+NRI	++	++	+	++	+	++	+		–	Moderate
amitriptyline, dothiepin	NRI>SRI	++	++	–	++	–	+	++		–	High
imipramine	NRI>SRI	++	+	+	++	–	+	+		–	High
nortriptyline	NRI	+	+	+	+	–	+	–		–	High
Selective serotonin reuptake inhibitors (SSRIs)											
citalopram, sertraline,	SRI	–	–	+	–	++	++	–		–	Low
fluoxetine, fluvoxamine, paroxetine	SRI	–	–	+	–	++	++	–		++	Low
Other reuptake inhibitors											
reboxetine	NRI	+	–	+	–	–	+	–		–	Low
venlafaxine	SRI>NRI	–	–	+	–	++	++	–	Hypertension, sweating	+	Moderate
duloxetine	SRI+NRI	–	–	+	–	++	++	–		–	? Low
bupropion [b]	?DRI+NRI	–	–	+	–	–	–	–	Seizure potential	–	? Moderate
Receptor antagonists											
mianserin	5-HT_2 + α_1 + α_2	+	++	–	–	–	–	–		?	Low
mirtazapine	5-HT_2 +5-HT_3 + α_2	–	++	–	–	–	–	++		–	Low
Monoamine oxidase inhibitors (MAOIs)											
phenelzine and tranylcypromine	Irreversible	+	+	++	++	+	++	++	Hypertensive crisis with sympatho-mimetics, oedema	?	High
moclobemide	RIMA	–	–	+	–	+	–	–		–	Low
Other											
agomelatine [c]	M + 5-HT_{2C}	–	+	+	–	+	–	–	Requires LFT monitoring	–	?
vortioxetine [c]	SRI + 5-HT_3 + 5-HT_7 + 5-HT_{1B} + 5-HT_{1A}	–	–	–	–	++	+/-	–		–	?

NRI = noradrenaline reuptake inhibitor; SRI = serotonin reuptake inhibitor; DRI = dopamine reuptake inhibitor; 5-HT_{1A} = 5-HT_{1A} agonist; 5-HT_{1B} = 5-HT_{1B} partial agonist; 5-HT_2/5-HT_{2C} = 5-HT_2/5-HT_{2C} antagonist; 5-HT_3 = 5-HT_3 antagonist; 5-HT_7 = 5-HT_7 antagonist; α1/α2 = α1 antagonist/α2 antagonist; M = melatonin agonist; RIMA = reversible inhibitor of monoamine oxidase type A.

++ relatively common or strong; + may occur or moderately strong; – absent or rare/weak; ? unknown/insufficient information

[a] side effects commonly caused by muscarinic receptor blockade including dry mouth, sweating, blurred vision, constipation and urinary retention; however may be caused by other mechanisms and does not necessarily imply that the drug binds to muscarinic receptors; [b] Registered in Australia for smoking cessation; [c] Not funded on PBS in Australia

Adapted from Cleare A, Pariante CM, Young AH, et al.[11]

Note: These side effect profiles are not comprehensive, have been compiled from various sources, and are for rough comparisons only. Refer to individual Medicine Data Sheets.

Reboxetine is a newer antidepressant that is classed as an SNRI. Adverse effects can include dry mouth, constipation, urinary retention, sweating, insomnia, increased blood pressure, heart rate and headache. Efficacy data for reboxetine is conflicting and many clinicians view this antidepressant as less effective than other antidepressants.[11,82]

Mianserin is similar to the TCAs with lower anticholinergic and cardiovascular adverse effects and a lower toxicity risk in overdose. It can cause neutropenia which has resulted in fatal agranulocytosis and hence a full blood count is required prior to starting, with ongoing monitoring throughout treatment.

Mirtazapine is a newer antidepressant that is unlikely to cause the commonly reported side effects associated with other antidepressants such as sexual dysfunction, nausea, agitation and anxiety, but is associated with significant sedation, peripheral oedema and increased appetite, which can result in marked weight gain.

Two new antidepressants that are registered for the treatment of major depression but not funded in Australia, are agomelatine and vortioxetine. Agomelatine is generally well tolerated and less likely than SSRIs or SNRIs to cause sexual dysfunction or discontinuation symptoms and may be considered when other antidepressants are not tolerated, or the response is inadequate. Agomelatine can cause elevation of liver enzymes, therefore monitoring of liver function tests prior to, and in the six months after starting, is required. Vortioxetine is a serotonin transporter blocker that appears to be well tolerated, but sexual dysfunction emerges at higher doses. It seems to have a low risk of withdrawal symptoms and gradual reduction in dose is not required when stopping treatment.

Drug interactions

In general TCAs and the older MAOIs have the greatest drug interaction potential because of their wide, non-selective receptor profiles and in the case of MAOIs their irreversible MAO enzyme blockade. MAOIs also interact with a wide variety of food and other medicines (*see Appendix 2*), including other antidepressants, and these interactions can be fatal. A good review of dietary restrictions and drug interactions with MAOIs is provided by Flockhart,[94] and NPS MedicineWise provides an online reference.[95]

Drug interactions can be pharmacodynamic, where one medicine alters the pharmacological response of another (e.g. augmented anticholinergic effects) or pharmacokinetic, where one medicine alters the plasma level of another, and when medicines are combined either or both of these types of interactions many occur. This Essential CPE does not provide a complete review of all drug interactions, safety considerations or adverse effects of antidepressants. Pharmacists should always consult an appropriate reference book such as the current version of the *Australian Medicines Handbook* (AMH), *Stockley's Drug Interactions*, the *Australian Pharmaceutical Formulary and Handbook* (APF), and the registered product information documents for individual medicines. Medicines Information pharmacists based in hospital settings may also be able to provide specific advice.

A pharmacodynamic interaction highlighted here is serotonin toxicity, which can cause coma and death (*see Appendix 3*). This can occur with drugs that increase serotonin neurotransmission particularly in a single high dose or when serotonergic medicines are combined (e.g. St John's wort), or when switching antidepressants. Combinations of serotonergic medicines should be avoided where possible and if they are necessary careful monitoring is required.

Antidepressants also have the potential to cause pharmacokinetic interactions via the cytochrome P450 system. A pharmacokinetic interaction occurs if the antidepressant inhibits the enzyme when co-prescribed with a medicine that is a substrate for the same enzyme. Antidepressants have different effects on the cytochrome enzymes, for example: citalopram, escitalopram, venlafaxine, reboxetine, and mirtazapine have a low risk of pharmacokinetic interactions; duloxetine, bupropion and sertraline are moderate inhibitors of cytochrome enzymes; and fluoxetine, fluvoxamine and paroxetine can strongly inhibit one or more cytochrome enzymes.[96] Pharmacists should always refer to the current version of the AMH, APF, or another suitable reference such as the *Psychotropic Drug Directory*,[97] for a full list of medicines that are substrates for, or inhibitors of, the cytochrome system.

Practical management issues

Optimising outcomes with antidepressants

Once antidepressant treatment has been started it is important to support consumers over the first two months of acute treatment as this is a key time to follow up and monitor for effective response, suicide risk, tolerability and adverse effects, and adherence issues.

Follow-up review should occur every 1–2 weeks once antidepressant therapy has commenced. Whilst information about depression and anxiety, and specific medicines, may have been provided early on in the therapeutic encounter, pharmacists can also 'check-in' over this initial period providing reassurance and counselling, and answering any outstanding queries consumers may have. Education should include potential side effects, benefits of medicine, likely duration of treatment and problems with stopping treatment prematurely, especially concerning the importance of avoiding abrupt withdrawal. Pharmacists will see consumers frequently when they are having their medicines dispensed and they can offer to phone or email in between these visits if that mode of communication meets an individual's needs. Working with the consumer's prescriber, and providing feedback about their progress, is also an important part of the pharmacist's role.

With newer antidepressants an effective dose can be prescribed from the beginning of treatment. In comparison, in order to avoid side effects, TCAs typically require dose titration every 3–7 days to a recommended target dose of ≥125 mg of amitriptyline/imipramine equivalents if tolerated. If the consumer has responded to a lower antidepressant dose in a past episode, it is still recommended to increase the dose to one of proven efficacy if possible in order to reduce the likelihood of relapse.

Most people seem to experience a delay of about two weeks before they can sense any improvement in their symptoms and for older people response time may be longer. However lack of significant improvement after 2–4 weeks of treatment at a therapeutic dose is likely to indicate a lack of sustained response to the selected antidepressant and next-step treatment should be implemented.

As previously mentioned, all antidepressants are associated with adverse effects. Although some may improve over time (e.g. nausea and increased anxiety with SSRI use), sexual dysfunction with SSRIs and SNRIs, and anticholinergic side effects from TCAs, often persist and can be distressing especially in longer-term treatment. Transient side effects can often be managed by consumers, providing they receive adequate explanations; and reassurance and monitoring by the pharmacist is important. Dose reduction, slower titration, switching antidepressants to one with less tendency to cause troublesome side effects, non-drug management (e.g. exercise and diet to prevent weight gain), or symptomatic treatment with another medicine (e.g. short-term benzodiazepines for insomnia, agitation/nervousness) may also be required to manage adverse effects and maintain improvement.

> *'You need the information. That's important because if you end up with a side effect then you at least know why and you can do something about it.'*
>
> *– Mental health consumer and carer 2012*[81]

Next steps after an inadequate response

The ideal outcome when using antidepressant medicines is a treatment response within a timeframe of 4–6 weeks for depression, and up to 12 weeks for anxiety disorders. When questions are raised about the effectiveness of a therapy and alternative treatment options are considered, the first question that should be raised is: 'Was there an adequate trial period of the antidepressant?'.[98] There is some debate about when to consider alternative therapies, but the general consensus is that the likelihood of a sustained response to an antidepressant is low when there is a lack of benefit at four weeks.[11,20] If there has been some improvement at four weeks then treatment should be continued for another four weeks in depression, and eight weeks in anxiety disorders, before further assessment. If there is minimal improvement at this time then next-step treatment should be considered. For people who have failed a number of treatments then longer trials should be considered before changing.

The medicine-related options for individuals who have had a poor response to first-line treatments include:

- Dose increase: this can be considered if the individual has not experienced marked adverse effects and there has been some improvement noted on the lower dose.
- Switching antidepressants: this option can be considered when side effects are problematic and there has been no improvement. The STAR*D study[98] explored the evidence relating to both responses to antidepressant therapies and to switching regimens.[98] The research suggests that switching between antidepressant classes (e.g. SSRI to TCA) or across a class (e.g. SSRI to SSRI) may result in an improved response, although the likelihood of remission reduces.[98] The method of switching can include a straight swap, slow downwards titration and washout, or cross titration.[11]
  - Stop and start – this method is easiest to manage with SSRIs with a similar half-life (e.g. paroxetine to escitalopram). The process is to stop the first medicine on day 1 and start the new medicine on day 2; it works best for consumers who have tolerated the first medicine with minimal side effects. Monitoring for adverse effects such as serotonergic syndrome, gastrointestinal issues, anxiety or sleep disturbance is important
  - Slow downwards titrations, washout and slow upwards titration – this method is best for avoiding adverse effects; it is used with medicines such as older MAOIs which require a two-week washout before other antidepressants are initiated. It reduces the likelihood of withdrawal symptoms or serotonergic syndrome, but it does carry a significant time burden that can have an impact on the consumer's quality of life or impose risks if the consumer has suicidal ideation
  - Cross titration – this method ensures the consumer is always receiving a medicine. The risk is that the consumer may experience adverse reactions such as serotonergic syndrome, and therefore cross titration is best managed by specialist services. The principle is to use the half-life of each medicine as the step between each dose movement.

A table with antidepressant-free intervals recommended when switching antidepressants, is available in the *Australian Therapeutic Guidelines*.[82]

- Augmentation or combining therapies: these strategies are best managed by specialist services due to greater risks. Adding a second medicine can be considered when there has been a partial response and no tolerability problems with the current antidepressant. Strategies include[11,20]:
  - use of an antipsychotic such as quetiapine, risperidone, olanzapine or aripiprazole – these medicines are used if there are psychotic elements associated with the depression, significant anxiety or sleep problems
  - addition of lithium in depression – can have a marked booster effect on antidepressant treatment and the benefit can be observed within a week of initiation
  - addition of tri-iodothyroxine in depression (close monitoring of thyroid status is necessary)
  - addition of prazosin in PTSD – particularly to reduce nightmares

- addition of benzodiazepines in anxiety disorders: less evidence but can be considered when other approaches have not worked in panic disorder and social anxiety disorder
- addition of mirtazapine to SSRIs/SRNIs has been effective both in terms of antidepressive response and in reduction of SSRI-/SNRI-related adverse effects such as anxiety, gastrointestinal issues, sleep disturbance and sexual dysfunction
- augmentation strategies in depression with less robust evidence include bupropion, buspirone, lamotrigine and tryptophan.

Medicine-related strategies are one option for 'next steps' after an inadequate response to antidepressants in depression and anxiety disorders. Other strategies include[11,20]:

- psychological therapies – psychological treatments by themselves or alongside antidepressants are a significant therapeutic option. Therapies such as CBT, or IPT assist consumers to reframe their world view and can assist in creating greater resilience
- physical therapies – ECT is the most commonly utilised physical therapy in depression and has robust evidence and efficacy for use, however it does suffer from a negative public perception. ECT should be considered for people who have not responded to other treatments
- alternative treatments in anxiety disorders – treatments that may be helpful but lack robust evidence include: relaxation training, meditation therapies, yoga-based breathing programs, mindfulness and acceptance-based interventions, chamomile extract, lavender oil preparation
- other treatments in depression – omega-3 fatty acids may be effective in depression when combined with an antidepressant for people who haven't responded; similarly high-intensity supervised exercise may be considered as add-on therapy in severe depression.

Relapse prevention and treatment of relapse

After an episode of depression there is a high risk of relapse over the next six months; the risk declines with time in remission. People should continue on the same treatment they have responded to, (at the same dose) for 6–9 months after remission if this is their first episode and they have a low risk of relapse. Risk factors for relapse include: presence of residual symptoms, number of previous episodes, severity and duration of the most recent episode, degree of treatment resistance, and in older people a greater degree of medical comorbidity. In people with risk factors for relapse, treatment should be continued for at least 12 months after full remission, and in those with high relapse risk (≥5 episodes ever, or two episodes in the last couple of years) at least 24 months treatment is advised.

Box 8. Key points on antidepressant use[11,17,20]

- After commencing an antidepressant consumers should be reviewed every 1–2 weeks during acute treatment depending on the individual situation and their need
- It may take 2–3 weeks before consumers notice any improvement in their symptoms
- It may take 6–12 weeks for depressive symptoms such as low mood, concentration, and lethargy to improve
- Treatment for up to 12 weeks may be required in anxiety disorders before effectiveness can be properly assessed
- Lack of benefit with treatment at 4 weeks in both depression and anxiety disorders is an indicator that a response to this particular treatment is unlikely
- Next-step treatment when there is inadequate response includes:
  - dose increase if there has been partial response with no tolerability issues
  - switching within or across antidepressant classes if there have been side effects and/or no improvement
  - switching between pharmacological and psychological treatments and vice versa in anxiety disorders
  - adding or combining treatments if there has been a partial well-tolerated response to antidepressants or when switching has been unsuccessful (e.g. lithium, quetiapine, risperidone, aripiprazole, mirtazapine and psychological therapies in depression; olanzapine, quetiapine, risperidone in GAD, PTSD and OCD and psychological therapies in all anxiety disorders)
- Once symptoms have resolved the same maintenance dose of antidepressant should be used
- After recovery from a first episode of depression, 6–9 months continuing treatment is recommended. Continuation beyond this time depends on the number of previous episodes, severity of the episode and the adequacy of remission
- Long-term treatment for anxiety disorders is recommended in those who have responded to treatment and the duration depends on the particular disorder:
- generalised anxiety disorder continue for up to 18 months
- panic disorder continue for at least six months
- social anxiety disorder continue for at least six months
- post-traumatic stress disorder continue for at least 12 months
- obsessive compulsive disorder continue for at least 12 months.

Adapted from Cleare A, Pariante CM, Young AH, et al.[1,11] Firipis M,[17] and Baldwin DS, Anderson IM, Nutt DJ, et al.[20]

When acute depression has responded to monotherapy with psychological treatment such as CBT or IPT, continuation with medicine is not generally recommended. However, in those with a partial response or at risk of relapse, addition of CBT or IPT to antidepressant treatment can be considered for relapse prevention. If people have responded to acute ECT, continuation treatment with antidepressants is recommended to prevent relapse and some people may need continuation of both ECT and antidepressants.

In anxiety disorders continuing antidepressant treatment is associated with increased overall response rates, especially for people who have shown improvement in the first four weeks. For people who have responded to acute treatment, continuing for at least six months has shown advantages when compared to placebo. In some anxiety disorders the recommended duration of continuation treatment is longer: up to 18 months in GAD and at least 12 months in PTSD and OCD.

After discontinuing an antidepressant the risk of relapse is greatest in the following six months but this is risk remains over the next two years. Relapse can still occur while continuing to take antidepressant treatment. This phenomena is described as 'medicine tolerance' and individuals may experience a reduced response to the same treatment, with a partial return of symptoms or a full relapse.[99] This tolerance effect does not seem specific to any one group of antidepressants. It may be due to loss of antidepressant effect as a prophylactic medicine, loss of placebo effect, a worsening of the underlying depressive or anxiety disorder, the development of a comorbid condition such as cardiac disease that destabilises the individual, or non-adherence.[11,100] Long-term antidepressant use is better viewed as reducing risk of relapse or symptom severity rather than curing the depression or anxiety.

People with greater treatment adherence seem to have similar relapse rates as those with poorer adherence but the time to relapse is longer and they have fewer symptoms overall.[101] If relapse occurs while on continuation treatment a full review will be needed including dose (especially if this has been lowered), adherence, assessment for comorbid medical and psychiatric illness, social factors that may be increasing stress and possible supports to reduce this, and considering the other next-step options after inadequate response (outlined previously). Box 8 summarises antidepressant use.

Stopping antidepressant treatment

Stopping antidepressant medicines regardless of whether they are being used for depression or anxiety can result in unpleasant withdrawal symptoms.[102-104] Reasons for consumers self-discontinuing antidepressants include: experiencing marked adverse effects, a poor treatment response or a poor relationship with their healthcare team.[105-107] Conversely older people, those with a good response, or a negative experience of being unwell, are more willing to continue therapy. Pharmacists have an important role in supporting consumers to continue to take their medicines and/or to work with healthcare teams to plan antidepressant discontinuation, but it is important to avoid a blame culture where consumers are labelled non-adherent.[105,108] Understanding the reasons why consumers may wish to stop antidepressants, and encouraging this as a planned event, can help reduce potential harm and maintain therapeutic engagement between the consumer and their healthcare team. Pharmacists can provide consumers with valuable support in relation to their choices to continue, or discontinue, with treatment.[109]

A cluster of symptoms associated with antidepressant discontinuation has been recognised since the 1970s in relation to TCAs, and in the 1980s as SSRIs became widely prescribed.[110] The formulation of these clusters is being revaluated in current practice with some researchers proposing that rather than being described as 'discontinuation' symptoms they should be defined as 'withdrawal' symptoms.[110] Withdrawal symptoms can be distressing and cause marked morbidity. Symptoms are usually associated with abrupt cessation of treatment and are observed more commonly in older people, those with multiple morbidities, and those who have previously experienced marked adverse events in relation to taking medicines. The similarity between antidepressant withdrawal symptoms and symptoms of relapse of depression or an anxiety disorder can be so close that it is difficult to distinguish between the two, especially when symptoms occur a week or so after ceasing medicine.[103,104,110] Pharmacists who identify the possibility of withdrawal or relapse should refer individuals to their prescriber.

Withdrawal symptoms tend to cluster around differing antidepressant classes and can be summarised as:

- SSRIs – withdrawal symptoms are more common with short-acting SSRIs (paroxetine, citalopram, escitalopram, sertraline) with reports as high as 30% in some individuals. Symptom clusters include flu-like symptoms, blurred vision, dizziness, tachycardia, vertigo, diarrhoea, nausea, paraesthesias, electric shock sensations, brain 'zaps', myoclonus, jerks, confusion, amnesia, anxiety, depression, mood swings, depersonalisation, hallucinations, insomnia and nightmares.[111]

- SNRIs – venlafaxine and duloxetine are associated with a high incidence of withdrawal symptoms. These result from a serotonergic discontinuation similar to that described for SSRIs, combined with noradrenergic effects including urinary urgency and increased gastrointestinal motility.[102]
- TCAs – withdrawal symptoms are not as common as for the short-acting SSRIs and tend to be observed after high dose treatment (>200 mg TCA) is stopped abruptly. It is thought these symptoms are secondary to the anticholinergic properties of the medicine and include nausea, vomiting, abdominal cramping, sweating, headache, and muscle spasms. TCAs with significant alpha-noradrenergic receptor blockade can cause dizziness, hypotension, and reflex tachycardia. There may also be sleep disturbances and vivid dreams.[102]
- MAOIs – these agents have a longer duration of effect on CNS transmission so the withdrawal effects can be delayed by a number of weeks. There are reports of flu-like symptoms, dysphoria, restlessness, tachycardia, hypertension, and psychosis and agitation which presents in a form of delirium.[102]

Management strategies include a planned withdrawal and slow downward dose titration with some individuals requiring a three-month discontinuation period.[102,110,112] Withdrawal symptoms can vary markedly between individuals with some lasting for only a day, while others find they continue for several weeks. In rare cases, for those experiencing SSRI/SNRI withdrawal that has been difficult to manage, switching to the longer-acting fluoxetine and then stopping after 2–4 weeks has been effective. However, in most cases this management strategy will require specialist supervision.[104]

Communication in depression and anxiety

Good communication is the key to being a successful pharmacist. However, this seems both obvious and overblown. Why? Because on any given work day you participate in hundreds of communication exchanges and their ubiquity means you rarely stop to reflect on how they unfold.

Further, in a profession that focuses its education on facts (chemical constituents, dosage rates and treatment options), it's easy to forget the importance of how you impart information to people who rely on you to be their medicines interpreter. When Marshall McLuhan, the Canadian advertising executive and communication academic, declared 'the medium is the message', what he was saying was that regardless of how well we think we know our 'business', the way we communicate it, both through speech and body movements, becomes the message we communicate.[113] For example, a well-researched medicine fact sheet may be poorly received, even ignored, if we offer it with an indifferent shrug on a dog-eared, fourth-generation photocopy that is blurred and has sentences falling off the page. Hopefully no modern day health professional would do that.

Communication framework

The first part of this Essential CPE has focused on the facts about depression and anxiety and its associated treatments including medicine. This section will consider how best to convey that important information to your customers. At its simplest, communication is driven by our values: we impart a positive message about something that has value to us. Because of this it is easiest to understand our communication through a values-based practice framework. Values-based practice has been developed from the disciplinary intersection of psychiatry and philosophy,[114] with practitioners driven by a desire to re-humanise psychiatry and mental health practice. They have argued this requires recognition of both our shared humanity as human beings, which in turn promotes a more individually centred model of care, and by the power imbalances that have pathologised and trivialised consumers' lived experiences of mental illness. This move is supported by health services, many of which have responded to the dehumanisation process by incorporating patient-centred frameworks into their respective models of care. The key elements of patient-centred care are outlined in Table 2.

Values-based practice builds on these approaches and uses the following four practice skills – awareness, reasoning, knowledge and communication – to determine and compensate for the role values play within our decision-making processes. The first of these, awareness, cannot really be taught, but can be understood best through a series of reflective questions, presented in a safe, enquiring environment, that gently challenges the health professional to think about their everyday assumptions and associated values. Reasoning considers the deductive processes, whether emotionally or logically driven, through which the health professional knowingly or unknowingly incorporates values into their decisions. Knowledge concerns the content: personal knowledge (experience), professional knowledge (education), and corporate knowledge (workplace culture) that professionals might draw upon. This is the 'evidence' on which they base their 'facts'. Finally, when these three values have been considered, values-based practice looks at a fourth, that of communication and considers the way in which we deploy the content of the first three values in driving the messages we ultimately deliver to consumers and carers.

Workplace communication

Mental illness presents different challenges to healthcare professionals; awareness around these challenges is the starting point to understanding them. Each of us must deal with the preconceptions that exist within ourselves and our society. For example, there is a common view that mental illness is a weakness that can be corrected. Yet, it should be self-evident that people with mental illness require the same sensitivity and respect as any other health user, and should not be treated in an overly sensitive way. Similarly, the same codes of behaviour, which include courtesy, respect and civility should be extended to, and expected from, this group of health consumers. However, in dealing with people with a mental illness, we must acknowledge that the illness may affect the person's mind. The mind is the organ through which we perceive the external world, process the information gained and respond

to that world with some form of behaviour. If mental illness has distorted a person's perceived reality then they may well exhibit behaviour that matches, to varying degrees, their state of being unwell. Furthermore, because mental illness affects not just the individual, but very often also their partner, family, friends, work colleagues, carers and support workers, any decision focused on that individual may have a 'ripple effect' throughout all their networks, including their support networks.

Within this holistic context, your own awareness as a pharmacist, and where your values sit around these considerations, can best be determined from a series of reflective questions. This might include not only awareness of yourself, but also extend to your staff and colleagues, and the environment in which you are working. Awareness of your answers to these questions may help place you in a good position to maintain clear, open, communication especially when there is a mismatch between your expectations and your working environment.

At the beginning of your working day, you may wish to ask yourself the following questions:

- How well placed am I today for the stream of customers about to present themselves?
- Do I feel that I treat people any differently because of the script they present?
- Is this view tempered, in turn, by their outward physical characteristics: young or old, well dressed or dishevelled, tattoos and piercings or 'clean cut', articulate or barely coherent?
- How do I feel that my values, through modelling behaviour and conversations with my colleagues, build a corporate culture that in turn affects how they treat our customers?
- Finally, how do the physical spaces around me reflect these values: what can I identify within my workplace that I believe makes it welcoming and accommodating for anyone who comes in for help?

What consumers want

Awareness of your answers, logically deduced without all the distractions of the pharmacy setting, may increase your awareness of what your customer might be thinking when they enter 'your' space. Before you have even spoken the first word of a greeting the customer has already scanned your pharmacy and its occupants for information that might communicate how they are going to be dealt with. Significantly, while customers may see a pharmacy as primarily a retail space, you may consider it as a professional health space, as your workplace, and even as a therapeutic space. This may result in a 'values discord' between your customers and you/other pharmacy staff. For customers, an empty, or at least quiet, shop, may be perceived as a bonus. They may consider whether their path to the counter is obstructed or whether it can be seen clearly from the entrance, and whether the path will be further obstructed by myriad sales displays and promotional paraphernalia. They may also be concerned whether there will be someone there to help them, and who that person might be. For example, older customers may find it disconcerting when dealing with medicine issues if the person behind the counter is young enough to be their grandchild, with associations of both inexperience and loss of authority played out within the transaction. This may then be reinforced if the pharmacist or shop assistant is not professional or courteous.

While all of this may seem subjective, and it is certainly not exhaustive, studies show what customers appreciate when they step into a pharmacy; consider this as a new form of professional knowledge to complement your pharmacological knowledge. In a recent Australian study, more than 200 mental health consumers and carers were interviewed about their community pharmacy experiences.[115-117] They said they saw pharmacy as 'a comfortable place to go [because it] can be difficult to go out when you have a mental health problem.' Another saw it as a place where 'I feel I can ask anything and they would always be able to help me and there's no drama', which was echoed by another who said 'I was made to feel normal and not like there was something wrong with me.'

Consumers and carers interviewed in the study focused as much on the personal qualities of the people they encountered, including pharmacists, as they did on the physical characteristics of the pharmacy space. One acknowledged that 'I like the personal touch as they have come to know my family, and understand our health issues', whereas another found it important that 'they're always friendly and ask how you are.' Further, interviewees were specific about their expectations. One believed it important that staff took the time to be 'very friendly, really interested, [and] explain really well; take time to explain different medicines', whereas another insightfully observed 'I am always greeted in a very warm friendly manner, not just treated as a customer, but more as a visitor or guest.'

Even though these were highly personal accounts, consumers and carers 'likes' were consistent with elements of the functional quality of pharmacies (i.e. referring to 'how' a service is delivered), summarised in Box 9. Crucially, interviewees were more likely to describe pharmacies and their staff in more positive terms when the latter had participated in some form of mental health education or communication training.

Mental illness and stigma

Stigma remains a huge barrier to people with mental illness. In 2011 a major national report identified that nearly three-quarters of the people surveyed said they had experienced stigma and discrimination in the previous twelve months because of their mental illness.[118] Sadly, this figure was almost identical to a corresponding survey carried out five years previously[119]; both reports identified that this was especially prevalent in media portrayals of people with mental illness. However, it was even more disconcerting to note that stigma wasn't just because of lack of education or awareness; many consumers and their carers reported that they had experienced stigma from both mental health and other health professionals.[120] Despite a recent raft of anti-stigma campaigns[121], stigma remains a deterrent to people with a mental illness seeking, and then following through, with a treatment plan.

A mental illness diagnosis may cause embarrassment and shame, sometimes defined as self-stigma. Negative attitudes about the self may extend to a medicine regime; in these cases it's not uncommon for people to seek anonymity outside their normal care networks. This can be a double negative. Firstly, because it takes time to get to know a person in a health environment

(especially in pharmacy settings which may lack facilities for confidential discussions) and it can be difficult to get the person to open up to help inform your advice. Secondly, because consumers are increasingly confronted with health professionals who work all day with people's distress, often never really seeing people 'well' and thus forgetting that they are more than an illness or a clump of symptoms. Such experiences can colour an individual's view about the value of seeking professional advice, leading to (or reinforcing) assumptions that no-one in the health sphere is interested in them. This may then affect their decision to keep initiating and following through with a structured approach to their care.[116]

However, assumptions work both ways, and even very brief health encounters are subtly reflected in our communication exchanges. Again, it's good to go back to our awareness and reasoning to consider what might have happened to the customer, and why they are here today or have come to you. They may have only recently received a diagnosis of a mental illness, and may be struggling to come to terms with what that might mean for them, and how they now see themselves in the world. The illness in itself may be preventing them from seeing themselves and their situation as clearly as they would like to (they may or may not be aware of this) which may make them fearful or anxious about what is going to happen. When coming to you for the first time this may be one of many uncomfortable encounters they have recently endured. We cannot assume that their GP or any other allied health professional has made the kind of communication 'connection' that the person might have been looking for and while they may still be hopeful, they might also be confronted by any number of other negative emotions.

In contrast, the person might consider himself or herself to be a 'veteran' of the mental health system. Despite knowing what to expect, they might be weary and worn down by their illness and recovery journey. They may have lost friends and family along the way and feel worn out and insecure about communicating their needs. They may either wish to fill their prescription quickly and get out of the pharmacy; or use the opportunity as a chance to reflect on where they're at and how the medicine might have worked for them. Either way, consumers consistently value having the opportunity to at least have their voices and choices heard.[122]

Pharmacists as medicines advocates

Pharmacists should embrace the role of medicines advocate to help the individual gain greater understanding of the benefits and problems of medicine. Although advocacy is a central tenet of professional practice it is especially important in the area of mental healthcare because of the way customers may have already experienced stigma, and because of the ongoing debate around the place of medicine within mental health treatment. Pharmacists should focus on ensuring the safe and appropriate use of medicines, the supply of medicines to consumers or carers and continued monitoring of response to those medicines: the right drug, at the right dose, at the right time for the right reason. As well as ensuring the optimal and safe use of pharmacotherapy it is important that pharmacists provide information and education about medicines tailored to the needs of the consumer or their carer to help them both better manage the illness and recovery. Advocacy skills can also be used advantageously when liaising with medical and nursing staff, social workers and occupational therapists, and the consumer's family and support network.

Consider opportunities to practise this along the spectrum of how customers experience that service, outlined in Figure 1.

Being a medicines advocate, however presents a number of domains that consumers have identified as being particularly problematic with regards to good communication.[117] The first of these is the transactional nature of the pharmacy setting. You may find the following questions help you to consider the customers possible concerns:

- How do you stay present in the moment to let the person in front of you know that they have your attention?
- Do you feel both comfortable and authentic when you use the tiny courtesies that your customers expect, but may not get, when they're being served?
- In contrast, have you avoided the things that people have indicated they don't like: having their name called out in public, and making potentially sensitive (to that person) information about their medicine made public to those around them?

On the face of it, these may appear as minor considerations, but nonetheless they may help you build the foundations on which you can ask further, sometimes more difficult, questions when assessing how informed the person is about their own health and the medicine they've been prescribed. While verbal exchanges are going on, a second, and just as important, consideration is the environment around you. Pharmacies, like many retail spaces, are often saturated with colour, light and noise. You may want to consider:

- How do you indicate that this is a safe space for the customer?
- Is the person's body language telling you they're comfortable where they are?
- Are you comfortable remaining in that public retail space without worrying about interruptions?
- How would you determine if you should move to somewhere more private?
- How can you indicate to your colleagues that this transaction might take a bit longer than usual, while not inadvertently signalling to the customer that they are taking up too much of your time?

Box 9. Functional qualities 'liked' by mental health consumers and carers visiting pharmacies[115]

- Individualised and respectful care, particularly not feeling judged
- Relationships developed with trustworthy pharmacy staff which led to perceived greater levels of support, especially feeling safe and being well looked after
- Holistic and empowering care which promoted pharmacy as a safe health space
- Staff who listened and took time to get to know the customer, thereby 'protecting' them from harm.

Adapted from Knox K, Kelly F, Mey A, et al.[115]

Finally, once you start talking to the person, make no assumptions about what they have understood about their medicine, or even, in some cases, why it has been prescribed. Try to use closed questions to understand the individual's level of health literacy. Consider, for example the following questions:

- Do their replies suggest they understand what you're saying?
- Are they overwhelmed by what you're saying; might they still be in the 'information overload' phase of a fresh diagnosis, or do they simply not understand what you're trying to communicate?
- Are you reading them the product information or fact sheet that is packaged with the medicine, or are you making 'plain language' translations that might help to bridge any gaps in their understanding?
- Do you discuss the positive symptom relief the person may experience from the medicine(s), or do you focus mainly on the side effects and other things the person might be wary of?
- Is there a 'plain language' fact sheet the person can take away, on which you can highlight what you think are the most important things that the person needs to know?

Completing the communication cycle

The communication cycle is only considered successful, and complete, if you have set up and delivered what you promised to the person. Information remains a critical element of how customers perceive value in their pharmacist; it is also a measure of points of difference in service. In completing this cycle, and opening up for the next, you create the opportunity to ask further questions over the course of the medicine cycle which (with their permission) may be shared with the consumer's GP. These steps help to cement the relationship and they also help to ensure the customer will keep returning; call-back services and other follow-up strategies may also be essential here. Finally, how you store personal data and communicate (confidential) information over time will also influence how that person comes to see your role in their care.[123] By repeating these communication cycles you'll be able to improve your customer's health literacy over time, while also building a therapeutic alliance that will cement pharmacy as an essential component of good mental healthcare. If this all seems a little too difficult, it's important to be aware that customers remain largely unaware of all the extra services that pharmacy may offer them.[115] Australian mental health consumers and carers participating in interviews after visiting their community pharmacy revealed that[80]:

- only around 30% of participants spoke to a staff member specifically about their medicine or a related health issue during their visit
- nearly 80% of participants collecting continuing medicines reported that a pharmacist never or rarely asked them about side effects
- around 60% of participants reported that they had never or rarely received written information.

Clearly, all of these issues can be addressed through improved communication practice. In short, small changes to your daily practice will make a big difference to the experience your customers will have of community pharmacy.

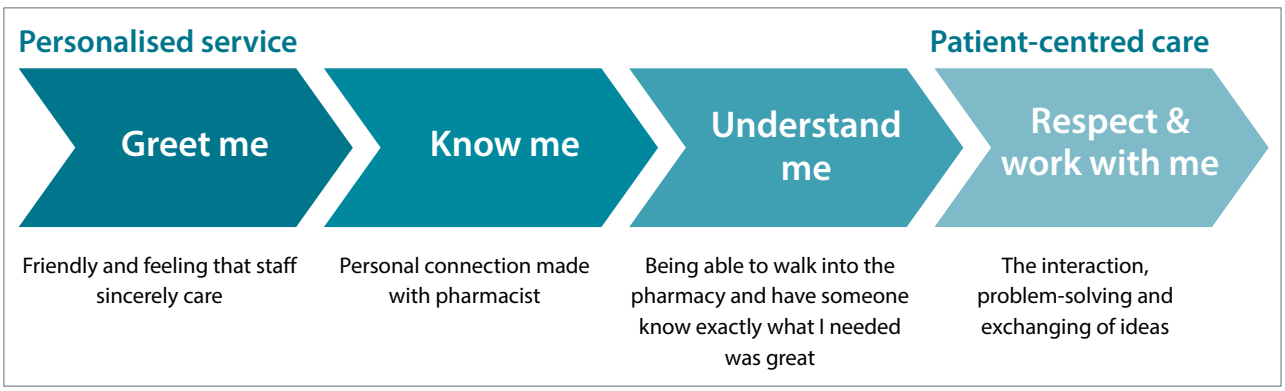

Figure 1. Spectrum of what mental health consumers liked most about their experiences of a pharmacy-delivered medicine support service[79]

Key communication insights for pharmacists

- Good communication remains the single most effective element that defines your success as a pharmacist.
- Consider your communication skills in the context of a values-based practice framework, combining awareness, reasoning and knowledge to effectively communicate with your customers.
- Regardless of their mental illness, customers are looking for a good quality service with commonly held expectations of being treated promptly, and with dignity and respect.
- Improving your communication skills makes you better placed to expand your role as a pharmacist, e.g. providing medicine reviews, high-quality evidence-based information sheets, and a patient-centred, individualised service.

Case studies

Case study 1

Joseph Soi is a 34-year-old Samoan man, who was raised in Queensland; he has previously been in contact with your pharmacy to manage the medicines of his aging parents, and his young child. He has always been anxious, yet friendly, and often requests more information as he consults the internet for health information. When he visits the pharmacy on this occasion he asks for some vitamins to help 'pick him up'.

You take him to a more private area of the pharmacy as you have noticed that he doesn't seem his usual cheerful self. As you start talking to Joseph he begins to unload. He tells you he feels like he has suffered many blows: last year he was made redundant from the construction firm he worked for; six months ago he and his wife separated, and now he only sees his son every fortnight. He tells you he thinks he has made a 'hash' of everything; he is not even able to care for his parents and his mother has had a minor stroke. You become concerned that Joseph may have depression. You ask him some brief screening questions[16,124]:

- Tell me about your mood and how long you have been feeling like this?
- How well are you sleeping and how is your appetite?
- Do you still enjoy your favourite hobby/pastime?

Joseph responds that he has been feeling low since he lost his job. Since then he has not been sleeping well, and was consequently gruff with his wife and son so thinks this may have contributed to his wife leaving. In addition, he lives off Chinese takeaways but cannot 'stomach' them, and he has his given up on playing rugby league 'they play like me; they are just losers'.

You encourage Joseph to visit his doctor and to talk about these issues. He returns a few days later with a prescription for paroxetine 20 mg daily and lorazepam 0.5 mg at night when needed.

Issues to consider

Helpful questions/topics to discuss with Joseph or anyone recently commenced on antidepressants include:

- What has your doctor told you about the medicine(s)?
- The medicine(s) will not work straight away, you usually need to take the medicine(s) for 2–3 weeks, to gain the full benefit. What supports have you got in place to help you though this time period?
- In the short term the medicine(s) could have side effects such as sleep disturbance and it could upset your stomach. What do you think might be helpful to help you cope with these issues?
- Some people feel that a diagnosis of depression or anxiety means they have somehow failed, which is reinforced by the stigma associated with 'tough' men who don't discuss their feelings. I'm interested in how you are feeling about starting an antidepressant?
- Taking medicine(s) for any period of time can be difficult. How can we help you to take your medicine(s) regularly?

Counselling

You counsel Joseph on potential treatment adverse effects, including the possibility that paroxetine may disrupt his sleep and increase his anxiety during the first week and that he may experience some stomach problems including feeling sick. You talk through how best to manage sleep problems including:

- not drinking caffeinated drinks within six hours of sleep
- making sure the bedroom is quiet, and comfortable
- taking moderate daily exercise
- using relaxation techniques
- if he is unable to get to sleep, to get out of bed and go to another room and read, listen to soothing music and try to relax.

Joseph's doctor has also prescribed lorazepam, so you talk through how he can decide if he needs this medicine to help settle to sleep; you explain it takes about half an hour to have an effect. You encourage him not to use the lorazepam every night and only to use it if he is having significant difficulties, after a few nights of trying to sleep.

You talk with Joseph about how antidepressants will not lift his mood immediately, but that a medicine like paroxetine will lift his mood over the next few weeks. In fact, his family/friends may notice a shift before he feels significantly brighter and you stress that it is important that he continues the medicine over this time period. You offer to contact him after a week and see how he is managing. You check with him as to what support he has from his family, friends and healthcare team over the next 2–3 weeks and you encourage him to talk with them about how he is feeling. You stress that if his mood is very black, or he has any thoughts about harming himself, he must talk to someone, ideally his doctor.

You advise Joseph that those living with anxiety and depression may need to engage with a range of treatments, of which medicine is only one, for at least six months and sometimes for a number of years. You explain that medicine(s) can be a helpful part of recovery, but you also highlight that other factors can be of great value. These include some form of talking therapy or counselling with a psychologist or trained therapist, and other valuable elements include a healthy and balanced lifestyle which includes exercise, managing stress, modest consumption of alcohol, and the support of family and friends and his healthcare team. You encourage him to resume playing rugby league with his friends. You also encourage him to consider how he might return to the workforce.

As part of your counselling you remind Joseph that stopping antidepressant medicine abruptly can result in a withdrawal syndrome that can include disrupted sleep, feeling agitated and experiencing shock-like sensory experiences. You recommend that Joseph talk with someone in his healthcare team if he is thinking about stopping the paroxetine treatment so they can help him plan a managed withdrawal of treatment.

Key learning points

Newly diagnosed depression in an individual often requires a period of adjustment as each person processes and manages their own life journey. The way in which health professionals interact with a person who has a new diagnosis can create a positive platform to support the person in their journey; mismanagement may create a barrier that makes ongoing interactions difficult.

Depression can be associated with stigma, which may present as part of an externalised experience where the individual may feel judged on their work performance, by colleagues, families and loved ones. Another expression of stigma occurs when negative beliefs are internalised and the individual may be harshly critical of themselves. Regardless of how it's experienced, stigma can prove a significant hindrance to an individual finding their own path to recovery. It often forms part of the negative self-talk for those affected by depression and anxiety.

Health professionals need to be aware of the likelihood that negative beliefs about mental disorders can be internalised by the individual. Hence pharmacists might seek to:

- ensure that individuals with a mental illness who present to your pharmacy, or who are under your service, are engaged in a professional, empathetic, manner which supports the establishment of an ongoing therapeutic alliance
- ensure your pharmacy is a safe environment and that you and your staff have sufficient knowledge and training in dealing with consumers who have a mental illness so that they feel safe and validated as individuals.

Case study 1 (continued)

Eight months later Joseph comes into your pharmacy again. He initially picked up his paroxetine for about three months but he hasn't been into the pharmacy in the last four months. This time he has a prescription from the local mental health unit for desvenlafaxine 50 mg daily and quetiapine 50 mg at night.

Just as you have dispensed medicine(s) for Joseph in the past, you ask him if he would like you to talk about his current treatment and for you update him about his new medicines.

Rather than speak with Joseph at the counter you ask him if he would be happy to come to a more private counselling room. You reassure Joseph that this way you are less likely to be interrupted and you can give him a copy of a medicines information sheet your pharmacy provides.

Issues to consider

- Be aware that asking individuals about mental health issues in a public setting may be difficult and uncomfortable, but a sensible, empathetic approach helps put most people at ease.
- Using a private area can assist in gaining confidence but it has to approached in thoughtful manner so as not increase anxiety or discomfort.
- Ask open-ended questions to begin a discussion and then narrow in on specific concerns.

Counselling

You start by recalling that Joseph had been treated previously with paroxetine and you ask him how things have been since then. Joseph begins by explaining how things went wrong: he explains that he became fed up with how paroxetine had 'flattened his life out', how he felt like he was 'wrapped in cotton wool', and that when he and his wife had tried getting back together it had been a disaster in the bedroom. As a result he had stopped the paroxetine and things went from bad to worse: he couldn't sleep and felt like he had been wired to the electricity grid.

Long-term antidepressant use can be associated with a number of issues, including people feeling that their emotions are restricted within a narrow band, and awareness of sexual side effects, which can occur in both genders: impotence in men and reduced libido and inability to orgasm in both men and women.

You listen to Joseph and reflect on some of the difficulties associated with long-term antidepressants. You encourage Joseph to be aware that he may also have sexual side-effects with desvenlafaxine, and that stopping the medicine abruptly can lead to a withdrawal syndrome similar to what he had already experienced when he stopped taking the paroxetine. You encourage him to discuss these issues with his treating team if they become a concern. You also suggest that you could speak to his prescriber on his behalf if that would help. A future alternative to desvenlafaxine if the sexual dysfunction becomes an issue again is mirtazapine (*see Table 3*). Your interactions with Joseph's GP could be recorded as a clinical intervention.

Recovery from a depressive illness or anxiety disorder can take time and it often requires the use of specific therapies and changes in lifestyle. You ask Joseph about any other treatments he is receiving and he tells you he is seeing a psychologist once a fortnight. You reinforce that psychotherapy is helpful for learning new ways of managing old triggers and ongoing stress. You reinforce that there are online resources; as Joseph likes to read you could recommend the extensive suite of brochures published by *beyondblue*, the national depression initiative (*see Appendix 4*).

Key learning points

- Consumer journey: the journey to recovery may be associated with periods when an individual may decide to stop their medicines and other periods when they engage with treatment; the healthcare team and pharmacists need to work with the consumer and support their recovery.
- Stopping treatment: this is a significant issue during the first 3-4 weeks of treatment as the ability of antidepressants to lift the mood may be over shadowed by adverse effects.
- Early interventions: by the healthcare team and pharmacists can assist consumers to maintain adherence to medicines. Phone calls and other interpersonal contacts (e.g. emails and text messages) have been shown to improve outcomes including adherence. This is especially the case during the first week or two as initiating a (new) therapy is often a troublesome time.
- Long-term adherence: a significant number of consumers who have responded to their treatment may wish to try going without medicine at some point; this may be a matter of several months or years. It is important to maintain a dialogue with consumers to support the best outcome.
- Reasons for stopping: there can be a number of factors leading to the decision to stop treatment including intolerance of long-term adverse effects, the individual's desire to be autonomous and being free from taking medicine, and the belief that medicines for mental illness are stigmatising. Some people may decide to 'tough it out' – this is a common attitude in those who feel their depression or anxiety can be overcome by strength of character alone.
- Reasons to continue: consumers with a long-term experience of depressive and anxiety disorders have reported that they had to stop medicines in order to come to their own realisation that treatment had actually improved their quality of life and reduced the reoccurrence of debilitating symptoms.

There are many protective and lifestyle factors that can support individuals. These can include family and cultural support, faith and personal belief, developing regular patterns including exercise routines, a good diet and reduction in (or cessation of) smoking, alcohol consumption, gambling and recreational substance use.

The support pharmacists can provide over the various phases of recovery includes listening, providing unbiased support, and high-quality information, whilst maintaining a vigilant eye on symptoms and being alert to indicators or expressions of self-harm. A MedsCheck could be offered to consumers such as Joseph, following an inpatient admission (or other significant medical event) as a professional pharmacy service to understand current medicine-related issues or concerns and provide education to improve treatment satisfaction, quality of life and adherence to treatment. Remember:

- Consumers may choose not to take medicines, but rather than being branded non-adherent, they need understanding with regards to their decision and support to maintain an ongoing relationship.
- Lifestyle factors can hinder or add recovery.

Case study 2

Paula is a 36-year-old woman who gave birth to her second daughter four weeks ago. She has called into the pharmacy to purchase some barrier cream as her newborn has some nappy rash. As you speak with her you notice she appears tired and emotional so you ask how things are. She breaks down and cries and says things are heading down the same dark road that she experienced with her first child.

Postpartum depression is a common presentation and health practitioners need to be vigilant and support families to seek help early if a new mother is having problems, especially in the first weeks and months after birth. You ask Paula how she is feeling, what her sleep is like and what support she has at home.

Issues to consider

- Safety issues for the mother including her partner and children, should form part of the care plan.
- Prompt and effective treatment should be initiated.
- An approach that supports the mother and assists her with the pressures of managing her infant includes wraparound family support.
- Supporting a mother to continue to breastfeed her infant encourages mother-infant bonding, but prescribing must also focus on medicines with low milk-to-plasma ratio.

Counselling

In your discussion with Paula she lets you know that she experienced postpartum depression with her firstborn and she is worried that this is coming back. You support Paula and encourage her to make an appointment to see her doctor that afternoon; you also discuss what support she has at home. She agrees to contact her husband about seeing the doctor and also to ask her mother, who lives locally, to pick up her older child from daycare and help with her newborn while she visits her doctor.

Paula returns the next day with her husband and with a prescription for sertraline commencing at 50 mg daily and stepping up over the next week to 150 mg daily. You counsel Paula and her husband about the new medicine, emphasising that it is unlikely to affect her ability to continue breastfeeding.

Key learning points

Mental health concerns raised during pregnancy and the postpartum, particularly for breastfeeding mothers, require extra care from the treating health professionals. The effects of medicines on both the mother and the baby must be considered in terms of potential benefits and harms, as well as ensuring that any intervention does not interfere with maternal-infant bonding.

Resources

- Appendix 4: *beyondblue Perinatal Clinical Practice Guidelines*[50]
- Lanza di Scalea T, Wisner KL. Antidepressant medication during breastfeeding. Clin Obstet Gynecol 2009;52(3):483–97.

Case study 2 continued

Paula made a good recovery from her postpartum depressive episode and was able to breastfeed her child until six months, when she switched to a mixture of solids and formula. Her depression has been adequately treated over this period and although at times she still has occasional negative dark thoughts, her life has returned to a sense of balance. She has spoken with her GP about significant sexual dysfunction; her libido is low, she finds intercourse painful at times and no longer experiences orgasm. She has read about these side effects on the internet and is considering stopping treatment.

Issues to consider

To help improve outcomes when a change in medicine is considered, the pharmacist can support the consumer and the healthcare team with a treatment plan. There are a number of possible options that could be considered when reviewing a change to Paula's medicines, each with its own merits and concerns. These include:

- If another medicine is to be considered, then identifying an antidepressant with less tendency to cause sexual dysfunction is prudent; the incidence of sexual dysfunction across the spectrum of SSRIs and SNRIs is reported to be similar as these antidepressants block the serotonergic pathways down the spinal cord that are associated with arousal and orgasm. TCAs have similar properties but can also interfere with noradrenergic pathways. The antidepressants least likely to cause sexual dysfunction include mirtazapine, moclobemide, and bupropion (*see Table 3*).
- Switching to an alternative antidepressant which is less likely to cause sexual dysfunction may reduce the risk of relapse, however it may not fully reduce these sexual side effects as each antidepressant has its own potential adverse risk profile. There are two possible modalities of switching therapy; a washout of the sertraline (normally 3–5 days) then slow up-titration of the new agent, or a cross titration where the sertraline dose is reduced as the second agent is stepped up. The first option (stop and washout) reduces the risk of possible drug interactions. The second option (cross titration) is usually undertaken only when specialist mental health services are involved.
- Paula could discontinue sertraline: a slow discontinuation would be best to avoid the possible risk of withdrawal symptoms.[125] Strategies that could support this action could include Paula engaging in a non-drug therapy such as CBT, with good follow up and monitoring. Possible risks include Paula experiencing a relapse; an important consideration given that this is her second episode of postpartum depression and she may have experienced only a partial remission at this stage.
- The possible treatment options need to be discussed with Paula and her husband and a clear treatment pathway developed, with further discussion about the potential side effects of all prescribed medicines and possible changes in Paula's mood state.

Counselling

It is important when discussing managing medicine-related adverse effects to have an open discussion with the consumer and their carers so that they can freely discuss their experiences of taking the medicine, and their perceptions of the adverse effects. Consumers may not always describe symptoms in the language that health practitioners may use, so asking open questions, and always seeking to clearly elucidate how and when symptoms are experienced, can be helpful. Pharmacists must take care to use language which validates the individual's concerns and which acknowledges the distress caused by adverse effects.

It is important not to create a perception of treatment failure with no other possible treatment options. Terms such as 'treatment-resistant depression' create a sense of desperation to the consumer, who may internalise the belief and build it into their own world of negative self-stigmatisation.

- Use open-ended questions and explore around a topic when talking with consumers. For example:
  - When asking about a symptom ask the individual to explain the experience: 'When you feel upset in your stomach, can you tell me where the feeling is?'; 'When you have this feeling, do you think it starts in your stomach like heart burn or is it like a giddy feeling in your head?'
  - Ask the individual how and when they experience the adverse effect, and how long after taking the medicine; and whether it is in conjunction with taking another medicine, or with coffee or alcohol
  - It can be helpful to ask the individual how intolerable the experience is, e.g. on a scale of one to five, where one is bearable and five is unbearable; likewise asking how the experience is impacting their daily life, including impact on family, friends and workplace
  - Ensure you do not act or respond in a way that creates a sense of an untreatable or unmanageable symptoms or problems
  - Always acknowledge the individual's distress and help them, and the healthcare team to find effective solutions.

Key learning points

- Adverse events are common and can affect ongoing treatments and treatment choices.
- Ensure the consumer and their partner/family, and the healthcare team, work together to make the choice as to the best option.
- Changes to therapies need to be individualised both in terms of what treatment options should be considered, and what method is adopted.
- When switching therapies a slow dose reduction, followed by a washout (usually four half-lives of the first medicine), and then a slow up-titration of the new medicine is the path least likely to cause adverse effects. Possible issues that can occur include:
  - the emergence of withdrawal symptoms, most commonly seen with shorter half-life SSRIs (citalopram, escitalopram, sertraline and paroxetine), SNRIs such as venlafaxine, TCAs especially when reducing a high dose
  - withdrawal symptoms for SSRIs/SNRIs: sleep disturbance, anxiety, mood changes, and sensory experiences such as electric shock sensations, vertigo and headache
  - withdrawal symptoms from TCAs: gastrointestinal upsets, sleep disturbances, anxiety, and acute confusion.
- When a cross titration is considered only proceed if there is no contraindication (i.e. not with older MAOIs where at least a 14-day washout is required). With cross titration specialist care is often indicated. Possible issues that can occur with a cross titration include:
  - the emergence of withdrawal symptoms (as described above)
  - additive adverse effects, e.g. increased sleep disturbance, gastrointestinal upsets
  - the emergence of serotonergic syndrome: symptoms include movement disorders, hyperreflexia, neck movement, tremor, headache, raised body temperature.

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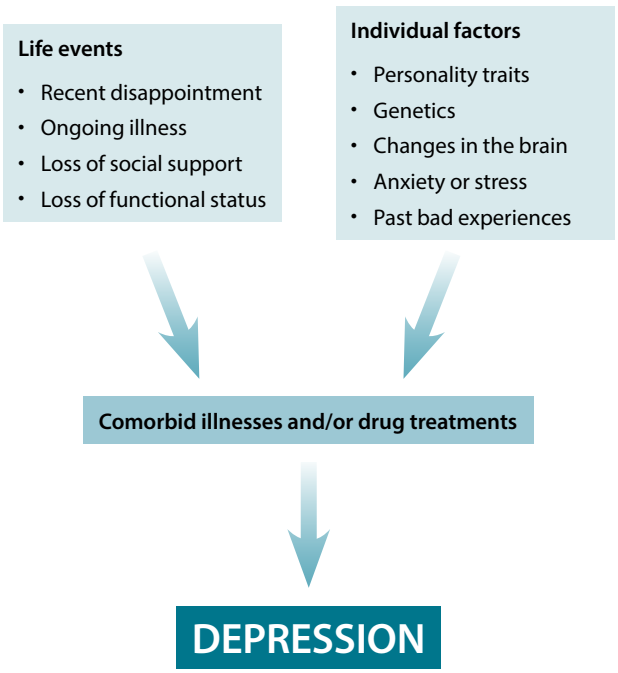
Appendices

Appendix 1

Factors that contribute to the development of depression (*Essential CPE: Depression in older adults 2010*)



Appendix 2

Food and drug interactions with MAOIs (*Essential CPE: Depression in older adults 2010*)

Foods containing tyramine:

Avocados, bananas, bean curd, beer and ale, caviar, matured or aged cheese, figs, fish, liver, milk products, protein extracts, meat, sausage, shrimp paste, soups, soy sauce, wines, yeast extracts.

Foods not containing tyramine:

Caffeine, chocolate, fava beans (broad beans, 'Italian' green beans), ginseng, liqueurs, New Zealand prickly spinach, whiskey.

Medicines:

- May increase the effects of adrenaline, dopamine, noradrenaline and zolmitriptan.
- May increase the risk of adverse effects and should be used with caution with selegiline.
- Contraindicated due to potentially serious reactions with atomoxetine, dexamphetamine, dextromethorphan, entacapone, ephedrine, fentanyl, metaraminol, methylphenidate, linezolid, pethidine, phentermine, phenylephrine, pseudoephedrine, reboxetine, sibutramine, SNRIs, SSRIs, sumatriptan, tramadol, TCAs.

Appendix 3

Symptoms of serotonin toxicity *(Essential CPE: Depression in older adults 2010)*

- **Cardiovascular**: tachycardia, hypertension
- **Gastrointestinal**: abdominal cramping, bloating, diarrhoea
- **Neurological**: tremor, muscle spasms, convulsions, poor speech, incoordination
- **Psychiatric**: manic-like symptoms, agitation, racing thoughts, hurried speech, elevated or dysphoric mood, confusion
- **Other**: sweating, shivering, coma, death.

Medicines that may contribute to serotonin toxicity *(Essential CPE: Depression in older adults 2010)*

Antidepressants	MAOIs, moclobemide, SNRIs, SSRIs, TCAs
Complementary medicines	St John's wort
Opioids	Dextromethorphan, fentanyl, pethidine, tramadol
Other drugs	Mianserin, bupropion, metoclopramide, sibutramine, triptans, tryptophan, methylene blue, phentermine, selegiline, buspirone, lithium, linezolid, and illicit drugs such as LCD, ecstasy or cocaine.

Appendix 4

Resources

Mental health first aid (MHFA) resources

- Mental Health First Aid – workshops (various states)
- Pharmaceutical Society of Australia. At: www.psa.org.au
- Blended MHFA in the Pharmacy (Mental Health First Aid Australia). At: **www.mhfa.com.au**

Useful websites

There are a number of resources pharmacists can offer to consumers experiencing mental health problems, their carers, family and friends who might need support and information. Many websites provide downloadable fact sheets, guidelines, and training programs, which can also be useful for pharmacy staff. Telephone helpline numbers for people are also available.

Beacon

www.beacon.anu.edu.au

Provides consumers and professionals with information about e-health online applications for mental health and physical health disorders. Beacon is developed and delivered by the Australian National University (ANU) Centre for Mental Health Research.

beyondblue: the national depression initiative

Provides information on depression, anxiety and bipolar disorder through an extensive range of booklets, fact sheets, information cards, and wallet cards. Site has regular additions so check back regularly.

www.beyondblue.org.au

Black Dog Institute

Provides specialist information on depression and bipolar disorder.

www.blackdoginstitute.org.au

BluePages Depression Information

This website was developed by the Centre for Mental Health Research at the ANU. It provides questionnaires to allow self-assessment of depression, and information on treatments, including scientific evidence for interventions and consumer perspectives.

www.bluepages.anu.edu.au

BlueBoard

This website is part of BluePages. It is a moderated online community for people suffering, or people who think they might be suffering, from depression or anxiety, and their friends and carers.

www.blueboard.anu.edu.au

Children of Parents with a Mental Illness (COPMI)

Support options and resources for children where a parent has a mental illness.

www.copmi.net.au

Anxiety Disorders Clinic (Clinical Research Unit for Anxiety and Depression)

Developed by the University of New South Wales and St Vincent's Hospital, this site contains an online self-help 'clinic', support for professionals, and research. Downloadable fact sheets are particularly useful.

https://adc.crufad.org/

depressionservices.org.au

Provides information and online forums with 24-hour peer support for people living with depression.

www.depressionservices.org.au

depressioNet

This website has been developed by people who have experienced depression. It includes a range of information about depression, including a chat room, stories from contributors, poems and quotes, information about books, and summaries of research studies.

www.depressionet.org.au

e-couch

An interactive, evidence-based, self-help program that includes modules for social anxiety and generalised anxiety, as well as depression. It provides self-help interventions drawn from cognitive, behavioural and interpersonal therapies as well as relaxation and physical activity. e-couch was developed and is delivered by the ANU Centre for Mental Health Research.

www.ecouch.anu.edu.au/welcome

InfraPsych

This site provides information about depression in a question and answer format covering symptoms, causes, frequency, management, sources of help and an overview of treatments. It also has a questionnaire for the self-assessment of depression and information on medicine side effects.

www.infrapsych.com

Kids Helpline

Provides online and phone counselling for young people experiencing concerns about their own health, or that of others around them.

www.kidshelpline.com.au

P: 1800 55 1800

Lifeline

Volunteers offer professional support to callers concerned about suicide. Provides general counselling and referrals to services in caller's local community.

www.lifeline.org.au

P: 13 11 14 (24-hour crisis hotline)

MensLine Australia

Provides telephone and online support, free counselling, mental health hotlines and general information for Australian men and their families.

www.mensline.org.au

P: 1300 78 99 78

MoodGYM

At: This is an interactive online program developed by the Australian National University specifically designed to prevent depression. It comprises five modules and an online cognitive behavioural therapy (CBT) program.

www.moodgym.anu.edu.au/welcome

National Carer Counselling Program

Provides free short-term counseling and support services for carers.

www.carersaustralia.com.au/how-we-work/national-programs/national-carer-counselling-program

P: 1800 242 636

Psychotropic Drug Advisory Service

Provides advice to medical practitioners and the general public on choosing treatments, response times, side effects of medicines and interactions with other medicines; as well as information on using medicines by special groups such as the elderly. The service can be contacted via email or by phoning the Mental Health Research Institute and asking to be transferred to the Psychotropic Drug Advisory Service.

www.mhri.edu.au/psychotropic-drug-advice

P: 03 9035 3089 (STD charges may apply)

E: enquiries@mhri.edu.au

ReachOut.com

National online youth mental health service established by the Inspire Foundation.

www.au.reachout.com

SANE Australia

Provides comprehensive information on mental health including factsheets. Also includes an online helpline that provides information and referral for callers anywhere in Australia concerned about mental illness.

www.sane.org

P: 1800 18 SANE (1800 18 7263)

Suicide Call Back Service

The Suicide Call Back Service is a free nation-wide telephone support service for people at risk of suicide, their carers and people bereaved by suicide. It supports callers through a series of six 50-minute telephone-counselling sessions, scheduled to suit the caller. Some after-hours appointments are available.

www.suicidecallbackservice.org.au

P: 1300 659 467

Additional resources from *beyondblue*

A significant amount of information on depression and anxiety can be obtained (or ordered) from *beyondblue*: the national depression initiative.

www.beyondblue.org.au

Assessment form

1. Which ONE of the following treatment options is normally considered for mild-to-moderate depression?
   a) A low dose of an SSRI such as citalopram 10 mg, fluoxetine 10 mg or paroxetine 10 mg.
   b) Lifestyle changes such as sleep hygiene, exercise and taking up a hobby.
   c) Initiating a therapeutic dose of an antidepressant and/or psychological therapy such as cognitive behavioural therapy (CBT).
   d) Electroconvulsive therapy (ECT).

2. After a 2-week trial of an antidepressant such as escitalopram with very little response, which ONE of the following pathways does NOT mirror best practice?
   a) Blister pack the medicine as the consumer has most likely been non-adherent.
   b) Suggest the therapy be continued for another two weeks to see if there is a response.
   c) Talk with the person and ask how they are managing with the medicine and counsel them on the likely response timeframes.
   d) Consider if the person may benefit from some cognitive psychotherapy.

3. In a person who has been taking an SSRI for three months with only a partial remission of depression symptoms, which ONE of the following possible options could be considered the BEST?
   a) Swap to another agent but ensure a four-week washout to avoid any interaction.
   b) Add in a benzodiazepine, such as prn lorazepam, to reduce anxiety.
   c) Switch to fluoxetine as it has a longer half-life in case they are skipping doses.
   d) Consider either stepping up the antidepressant dose or adding adjunctive treatment such as lithium.

4. Which ONE of the following statements is CORRECT? Postpartum depression is:
   a) Typically observed following childbirth and needs urgent attention.
   b) Always a precursor for postpartum psychosis.
   c) Is synonymous with the baby blues and the woman's partner needs to be more supportive.
   d) Responds best to monoamine oxidase inhibitors (MAOIs) such as moclobemide.

5. When treating an older adult with an SSRI which ONE of the following statements is INCORRECT?
   a) Careful monitoring of sodium is recommended due to risk of hyponatraemia.
   b) Slow dose titration is encouraged to reduce side effects such as sleep disturbance, gastric side effects and anxiety.
   c) Daily lying and standing blood pressure (BP) is recommended due to risk of postural hypotension.
   d) The risk of serotonergic syndrome is increased in individual's co-prescribed medicines such as tramadol.

6. When counselling a person who has been started on venlafaxine, which ONE of the following key points would you wish to discuss?
   a) Sexual dysfunction occurs in 50% of people so encourage all male consumers to ask their GP to prescribe sildenafil.
   b) When a consumer starts venlafaxine they may have some mild stomach upset and may feel anxious, and the medicine will not lift their mood straight away but they may notice improvement over the next week or two.
   c) The consumer needs to have an emergency safety plan in case of suicidal ideas because the medicine can take up to four weeks to work.
   d) Emphasise the common side effects such as gastrointestinal upset, including nausea and vomiting as well as abdominal cramps and diarrhoea, increased anxiety, sleep disturbance, and increase in systolic blood pressure (BP) by 3–4 mmHg.

7. Which ONE of the following statements is MOST appropriate for acute treatment of generalised anxiety disorder (GAD)?
   a) Never prescribe benzodiazepines because of the risk of dependence.
   b) Quetiapine at doses of 300 mg is first-line treatment.
   c) Treatment with either an antidepressant such as an SSRI or a psychological therapy such as cognitive behavioural therapy (CBT) is first line.
   d) Attending yoga or tai chi and practicing mindfulness is first line.

8. Which ONE of the following statements which BEST describes obsessive compulsive disorder (OCD)?
   a) The person is acting out a delusional belief such as being poisoned by bacteria.
   b) It is a result of a traumatic life event such as physical abuse in childhood.
   c) It is the over-development of a rigid personality type.
   d) It is associated with an obsessive thought (such as 'Did I lock the house when I left?') followed by a compulsive action (needing to check the locks).

9. Which ONE of the following statements is MOST appropriate for managing insomnia in anxiety or depression?
   a) A short-acting hypnotic medicine such as triazolam is first line.
   b) A one-month supply of a sedative-hypnotic prescription to reduce the potential for dependence.
   c) Counsel the individual on sleep hygiene and only use hypnotics for the shortest possible period.
   d) Melatonin.

10. When supporting a consumer with anxiety or depression, which ONE of the following statements is considered the MOST important for a health professional?
   a) Recognition that internalised stigma creates significant distress to the individual so only discuss issues relating to mental health if the consumer raises them.
   b) Use the skills of empathetic listening.
   c) Always ensure that you go over the adverse effects of treatments each time you meet with the consumer as they may have limited health literacy.
   d) Always take the consumer to a private room.

11. An effective method of screening for depression used by doctors and nurses in primary care is the 'two-question' tool. Which ONE of the following options CORRECTLY Identifies the two questions:
   a) 'In the past month do you feel like your life is no longer worth living?', 'In the past month have you lost or gained 5 kg in weight?'.
   b) 'In the past month have you lost interest or pleasure in things you usually like to do?', 'In the past month have you argued with your partner or your family?'.
   c) 'In the past month have you lost interest or pleasure in things you usually like to do?', 'In the past month, have you felt sad, low, down, depressed or hopeless?'.
   d) 'In the past month have you struggled at your job or with your daily activities?', In the past month have you felt so anxious you did not want to go outside?'.

12. Which ONE of the following descriptions does NOT match the anxiety disorder it is linked to?
   a) Generalised anxiety disorder (GAD): characterised by excessive and inappropriate worrying that is persistent (more than a few months) and not restricted to particular circumstances.
   b) Panic disorder: characterised by persistent and ongoing catastrophic fear and concomitant physical symptoms.
   c) Social anxiety disorder: characterised by a marked, persistent and unreasonable fear of being observed or evaluated negatively in social, or performance situations.
   d) Post-traumatic stress disorder (PTSD): characterised by a history of exposure to trauma (actual or threatened death, serious injury, or threats to physical integrity of self or others) with a response of intense fear, helplessness or horror.

13. Which ONE of the following statements most closely aligns with the experience of antidepressant withdrawal especially when an antidepressant is stopped abruptly? Antidepressant withdrawal:
   a) Is seen across a number of classes of antidepressants including SSRIs, SNRIs, TCAs and MAOIs; symptoms vary across each class but common elements include gastrointestinal upsets, sensory changes and sleep disturbances.
   b) Is observed in the days following abrupt cessation of short-acting antidepressants such as venlafaxine and fluoxetine.
   c) Is observed with a number of antidepressants and is often related to co-prescribing of sedative medicines such as zopiclone or quetiapine.
   d) Presents in populations with sensitivity to medicines including women, the elderly and those who have a history of alcohol or substance dependence.

14. When considering a first-line antidepressant which ONE of the following medicines would be preferred:
   a) Mirtazapine as it causes fewer side effects.
   b) Although they have more side effects the TCAs have more efficacy to support their use.
   c) An SSRI or SNRI.
   d) Any agent as they all have similar efficacy.

15. When considering the pharmacological properties of antidepressants, which ONE of the following statements is MOST correct?
   a) Older MAOIs can be stopped and a new antidepressant started the next day due to their short pharmacokinetic half-life.
   b) TCAs only affect noradrenergic receptors.
   c) SSRIs can cause hypokalaemia in older people.
   d) TCAs can cause dry mouth and urinary retention due to their anticholinergic effects.

16. Which ONE of the following statements explains why communication is a key skill for a successful pharmacist?
   a) So the pharmacist can run a more profitable pharmacy.
   b) Because the way in which pharmacists communicate needs to be combined with what they communicate.
   c) It lets the consumer model the behaviour they wish to adopt.
   d) Most customers don't know anything about medicine and need a pharmacist to keep them compliant.

17. Which ONE of the following statements does NOT correctly reflect a customer's expectation of good communication in a pharmacy?
   a) Being treated respectfully and courteously, and consulted about their needs.
   b) Having their personal information seen by as few staff as possible.
   c) Being offered the opportunity to ask questions about medicines, and accessing written resources if needed.
   d) Asking them to come back just before closing when the pharmacy is nearly empty so no one will overhear their medicine details.

18. **Which ONE of the following statements about stigma experiences associated with mental illness is INCORRECT?**
    a) A significant majority of consumers have reported that they experienced stigma in the last twelve months.
    b) Media portrayals of consumers with mental illness use many positive stereotypes.
    c) A mental illness diagnosis may cause shame and embarrassment, sometimes defined as self-stigma.
    d) Consumers continue to experience stigma from mental health and other health professionals.

19. **Which ONE of the following statements is MOST correct when predicting antidepressant response in depression or anxiety disorders?**
    a) As depression and anxiety have different causes with no overlap no inference can be drawn.
    b) Depression response is predicted by remission at four weeks and generalised anxiety disorder response is predicted by remission at 12 weeks.
    c) If no response is seen at two weeks a switch should be considered.
    d) Response to antidepressants in depression and anxiety disorders is predicted by some initial benefit within the first four weeks.

20. **An individual has not had any improvement in mood with an initial SSRI (e.g. citalopram 20 mg daily) after four weeks but has noticed that their poor appetite and sleep has improved. What is the MOST appropriate action at this time?**
    a) Consider stopping citalopram, waiting 3–4 days and starting sertraline.
    b) Consider switching to venlafaxine and encouraging them to consider cognitive behavioural therapy.
    c) Continue the citalopram for another four weeks with a possible increase in dose if it is well tolerated.
    d) Consider adding in lithium or mirtazapine.

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