Late-life depression affects 15% to 20% of people older than 65 and is associated with reduced quality of life and function, and increased risk of death. Over half of residents in residential aged care have some degree of depression. Depression is often associated with deterioration in cognitive functioning which is sometimes not completely reversible with treatment.

Symptoms
Common symptoms associated with depression include:

- Loss of interest in life
- Lack of enjoyment in normal activities
- Poor sleep
- Persistent thoughts of death
- Chronic unexplained pain
- Poor concentration
- Impaired memory

Goal setting
Setting of goals when starting antidepressant therapy can help evaluate the resident’s response and ongoing need. These goals may include improved:

- Socialisation
- Sleep
- Anxiety
- Appetite
- Energy

Medical conditions and their symptoms should be optimised, pain treated, and strategies employed to improve socialisation.

Antidepressants
There is likely no difference in efficacy between tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs), although individuals may respond differently. Efficacy might decrease with the patient’s age. Individual response to antidepressants varies considerably. Combinations of different classes of antidepressants have not been shown to be more effective than monotherapy, and have a significant risk of serious adverse effects. SSRIs are regarded as first-line medicines in older people, as they tend to have less problematic side effects compared to tricyclic antidepressants (TCAs).

SSRIs include:

- Citalopram (Cipramil, Celexa, Talam)
- Escitalopram (Lexapro, Cipramil, Cilapam, S, Esitalo, Lexam, Loxalate)
- Fluoxetine (Prozac, Lovan, Prozac, Zactin)
- Fluvoxamine (Faverin, Luvox, Movox, Vomar)
- Paroxetine (Aropax, Extine, Paxtine, Roxet)
- Sertraline (Eleva, Sertra, Setrona, Zoloft)

SSRIs are best administered as a single daily dose each morning. SSRIs may increase the risk of bleeding and would normally not be prescribed when taking other medicines known to increase risk of gastrointestinal bleeding (e.g. aspirin, NSAIDs, corticosteroids). Numerous drug-drug interactions can occur with SSRIs. Sertraline and citalopram have a lower potential for drug interactions. Fluoxetine has a long half-life making it less suitable for frail older people. If one SSRI is ineffective, it may be reasonable to try another SSRI.

SNRIs are another class of antidepressants, including:

- Desvenlafaxine (Desven, Desven, Pristiq)
- Duloxetine (Andepra, Cymbalta, Dytrex, Tixol)
- Milnacipran (Jonia)
- Venlafaxine (Efexor-XR, Elaxine-SR, Elnafax-XR)

Duloxetine is also approved for painful diabetic peripheral neuropathy and generalised anxiety disorder. Venlafaxine has indications for generalised anxiety disorder, panic disorder and social phobia. SNRIs also increase risk of serious bleeding due to their effect on platelet aggregation, and may cause palpitations, tachycardia, increased BP and orthostatic hypotension. TCAs are sedating and have anticholinergic side effects. These include weight gain, orthostatic hypotension, dry mouth, blurred vision, constipation and urinary retention.

TCAs include:

- Amitriptyline (Endep, Entrip)
- Clomipramine (Anafranil, Placil)
- Dosulepin (dothiepin) (Dothep)
- Doxepin (Deptran, Sinequan)
- Imipramine (Tofranil)
- Nortriptyline (Allegron, NortriTABS)

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Nortriptyline is often chosen for older people because it is less likely to cause hypotension, sedation and anticholinergic effects.

TCAs may prolong the QT interval and increase the risk of arrhythmia; and may cause or exacerbate angina in people with coronary heart disease.

Other antidepressants include:
- Agomelatine (Valdoxan)
- Mianserin (Lumin)
- Mirtazapine (Avanza)
- Moclobemide (Amira, Aurorix, Clobemix)
- Reboxetine (Edronax)
- Vortioxetine (Brintellix)

Mianserin and mirtazapine are sedating, so that anxiolytic and sedative/hypnotic medicines are less likely to be needed at the start of treatment. Mirtazapine often causes weight gain, which may be beneficial in frail underweight persons.

Response to antidepressants
Response to antidepressants in the older people varies widely from 45% to 80%, compared with 35% to 70% for placebo. Older people might respond to antidepressants more slowly than younger adults, possibly requiring 10 to 12 weeks before effects are seen. Adverse effects may occur much earlier than a response.

Adverse effects
Harms of antidepressants are common, with approximately 20% of patients stopping owing to adverse effects. Withdrawals from treatment owing to adverse effects are higher with TCAs. In the older people, antidepressants have been associated with a fall risk similar to that with benzodiazepines.

Duration of treatment
If a response is seen, antidepressants should be continued for at least 6 months and stopped gradually to reduce the risk of withdrawal syndromes. More severe depression and later age of onset of depression are associated with a higher risk of early recurrence. Long-term treatment may be appropriate in some residents with a history of recurrence or with severe depression.

Depression and chronic illness
Chronic illness often coexists with depression in elderly patients, along with frailty, possibly mitigating effects. Diabetes, COPD, chronic pain syndromes and cardiovascular disease are recognised as risk factors for depression. Poststroke depression develops over months, with peak prevalence between 3–24 months, and is associated with poor functional and psychosocial outcome. Conditions such as vitamin B12 deficiency and hypothyroidis should be screened for in people with symptoms suggestive of depression. Medicines including beta-blockers, corticosteroids, levodopa, cholinesterase inhibitors and alcohol misuse can contribute to depression.

Depression and dementia
Depression can be hard to recognise in people with dementia, but there is evidence that it is common and associated with increased disability, poorer quality of life, and shorter life expectancy. In residents with dementia, apathy is common (50% to 90%) and can often be misconstrued as depression. Antidepressants might not be effective in treating depression in dementia. A large review of 10 studies found there was little or no difference in scores on depression rating scales between people treated with antidepressants and those treated with placebo for 12 weeks. Antidepressants did not affect the ability to manage daily activities and probably had little or no effect on a test of cognitive function (which includes attention, memory, and language). Interventions such as cognitive behavioural therapy (CBT) and exercise have been inconsistently shown to improve depressive symptoms. Good sleep hygiene may reduce depressive symptoms.

Summary
Depression in older people is sometimes difficult to recognise as the symptoms are often similar to the problems of ageing. Features can include unexplained physical symptoms, memory loss and various behavioural changes. Most older residents with depression will respond to treatment, with improvement in function and wellbeing. Antidepressants are effective in treating major depression, although there is limited evidence of their effectiveness in minor depression. Choice of antidepressants depends on comorbidities, adverse effects and potential for drug-drug interactions.

References
Cochrane Database of Systematic Reviews 2018, Issue 8.