The assessment of older people needs to cover the psychological domain of health, with a focus on the individual’s behaviour and mind. The main health problems affecting older people in this domain are cognitive impairment, depression and delirium. Although these are different health issues, their symptoms overlap and may present simultaneously (Baquero and Martín, 2015; Fong et al, 2015); this complicates diagnosis and the choice of treatment. Careful assessment is key to reach the correct diagnosis, provide appropriate treatment and understand the patient’s care needs.

Previous articles in this series have addressed the physical and functional domains of health. This article explores the psychological domain and discusses the assessment of cognitive impairment, delirium and depression.

Cognitive impairment

Definition

Although not all older people have cognitive problems (Wyss-Coray, 2016), normal ageing does imply a shrinking of the brain and protein abnormalities (Blundell and Gordon, 2015). Considering these normal ageing processes, Wyss-Coray (2016) suggests that normal brain ageing may form a continuum with neurodegeneration and disease. Cognitive impairment could, therefore, arise as a consequence of the normal ageing process and become more severe over time.

Cognitive impairment is closely related to dementia – an umbrella term that encompasses several progressive neurological disorders affecting cognition, such as Alzheimer’s disease and vascular dementia. However, older people may experience cognitive impairment without having a diagnosis of dementia. An expert group has defined dementia as “a terminal syndrome characterised by deterioration in the structure and function of the brain” (Annear et al, 2015).

Mild cognitive impairment is characterised by memory problems, but the person usually remains able to function independently (Langa and Levine, 2014). Dementia may start with mild cognitive impairment but progressively moves...
beyond minor memory problems as people start struggling to retain, process and communicate information. As the disease progresses, the person may lose the ability to function independently (Bit.ly/DUKDementia). Assessing and reassessing cognitive function is, therefore, crucial to meet individuals’ care needs. This will enable observation of early signs of cognitive impairment and allows the nurse to provide personalised care aimed at maintaining maximum independence.

**Short assessment tools**

Various assessment tools can be used to assess cognitive function. Most focus on similar aspects and themes, such as orientation, memory and language.

The Mini Mental State Examination (MMSE) (Folstein et al, 1975) assesses orientation, registration, attention and calculation, recall, language and copying (for example, the ability to copy simple drawings). It has been widely used to assess cognition but is used less today due to copyright issues (Willacy, 2017; Seshadri and Mazi-Kotwal, 2012).

Other tools used to assess cognition include the clock drawing test (Fig 1). Recordings of its use date from 1915 and have been increasing since 1989 (Hazan et al, 2018). The test is not time limited and there are different ways of using it (Agrell and Dehlin, 1998). Patients may be asked to carry out the following:

- Copy the image of a clock;
- Add hands showing a specific time to the image of a clock;
- Add numbers of the clock face, and hands showing a specific time, to the image of a circle;
- Draw a clock from memory.

There are different scoring systems, but all are based on sub-scores of specific aspects of the drawing. The total score indicates the level of cognitive impairment (Agrell and Dehlin, 1998). Research, including a systematic review (Hazan et al, 2018) and meta-analysis (Park et al, 2018), has shown that clock drawing tests are useful to diagnose cognitive impairment in clinical practice. The Montreal Cognitive Assessment (MoCA) (Nasreddine et al, 2005) has been shown to be a useful alternative to the MMSE when assessing cognitive function (Nielsen et al, 2019; Rowland et al, 2006).

Finally, the mini-Addenbrooke’s Cognitive Examination (M-ACE), which consists of five items, has been shown to achieve good results in screening for dementia (Hsieh et al, 2015).

**In-depth assessment tools**

The tools described are relatively compact and used mostly for screening. More-extensive and detailed tools are available to assess cognition in more depth; for example, after use of the MoCA has revealed the presence of cognitive impairment (Arevalo-Rodriguez et al, 2015).

The Nurses’ Observation Scale of Cognitive Abilities (NOSCA) has been shown to have excellent validity and reliability (Persoon et al, 2012); it involves observing the patient during informal interactions, activities of daily living (ADLs) and/or meals (Persoon et al, 2011). The NOSCA can be used to standardise and document the findings of the assessment. It covers eight domains to be observed after consciousness has been assessed, namely: attention, visual perception, orientation, memory, thoughts, higher cognitive functions, language, and praxis – established by experts in the field (Persoon et al, 2011). There are 17 subdomains and 39 items to be scored.

The NOSCA may be perceived as too long, particularly given the current lack of resources in healthcare; however, conducting a detailed assessment seems a valuable use of time if it gives a health professional an in-depth understanding of a patient’s cognitive impairment.

**Depression**

**Definition**

Depression is a complex condition with different elements and presentations. According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), a person needs to present with a depressed mood for most of the day and have a reduced interest in daily activities to be diagnosed with depression (American Psychiatric Association, 2013).

Symptoms of depression include feeling sad, desperate, apathetic and/or guilty, and having low self-worth, lack of energy and poor concentration (Baquero and Martín, 2015; Bit.ly/MHFDepression). People may have these symptoms without necessarily having depression; the difference with depression is that the symptoms are intense and overwhelming, and may negatively affect the ability to conduct ADLs.

It is estimated that, in the UK, depression affects 22% of men and 28% of women aged ≥65 years, and that 85% of older people who have depression receive no support from the NHS (Bit.ly/MHFStats). This supports the World Health Organization’s (2017) findings that depression is underdiagnosed and undertreated, as symptoms are overlooked or hidden by other co-occurring issues.

Careful assessment of patients and a thorough understanding of the different health problems with which they may present are crucial.

**Assessment tools**

A number of validated and reliable tools are available to screen for, and assess, depression (Applied Health Sciences...
Delirium has been defined by Lindroth et al (2018) as “an acute disturbance of consciousness and cognition precipitated by an acute event such as sudden illness, infection or surgery”. Risk factors include being aged ≥65 years, having cognitive impairment, having a hip fracture, and having a severe illness (NICE, 2010). Delirium may mean the patient is hyperalert and agitated or hypoactive and drowsy; the latter is sometimes called silent delirium (NICE, 2014).

Up to 50% of older people admitted to hospital may present with delirium, which

### Table 1. Features of the short Confusion Assessment Method

<table>
<thead>
<tr>
<th>Feature</th>
<th>Assessment method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature 1: acute onset and fluctuating course</td>
<td>Is there evidence of an acute change in mental status from the patient’s baseline?</td>
</tr>
<tr>
<td>Feature 2: inattention</td>
<td>Does the patient have difficulty focusing attention (that is, are they easily distracted) or do they have difficulty keeping track of what is being said?</td>
</tr>
<tr>
<td>Feature 3: disorganised thinking</td>
<td>Is the patient’s thinking disorganised or incoherent – for example, rambling or irrelevant conversation, unclear/ illogical flow of ideas, unpredictable switching from subject to subject?</td>
</tr>
<tr>
<td>Feature 4: altered level of consciousness</td>
<td>Overall, how would you rate this patient’s level of consciousness?</td>
</tr>
</tbody>
</table>

#### Box 1. Assessing an older person’s psychological health

**Questions to ask the patient**
- How is your mood? Do you feel sad or happy?
- Have you lost any weight recently? How is your appetite?
- Do you feel you have enough energy to do everything you want to do?
- Do you feel anxious? Are you worried about anything?
- Are you able to do all your daily activities, such as showering, preparing and eating meals, visiting friends and family?
- Are you able to concentrate on something or are you easily distracted?
- Have you had any thoughts of harming yourself?
- Do you know what day it is today?
- Do you know where you are?
- Do you know why you are here?
- Have you recently had a fall or been diagnosed with a severe illness?

**Questions to ask relatives, carers and/or friends if the person is too confused to answer:**
- How is the person different from their usual self?
- Are they able to undertake daily activities such as washing and eating, or do they need support?
- When did their confusion start? Did it start suddenly or gradually?
- Have they been agitated and hyperalert? Or drowsy and withdrawn?
- Does the person seem to see things that are not there?
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has been linked to increased mortality and functional disability (Lindroth et al, 2018). NICE’s guidelines on delirium (NICE, 2014; NICE, 2010a) focus on early detection and treatment, which requires health professionals in all care settings to have the ability to spot early signs and carry out a thorough assessment. Early detection in the community could prevent admission to hospital.

Assessment tools

Screening for, and assessing, delirium is required for all older people admitted to a care setting, be they in acute care or the community (NICE, 2014). Screening should focus on risk factors for delirium (NICE, 2010a); assessment should focus on “recent changes in behaviour, including cognition, perception, physical function and social behaviour” (NICE, 2014).

To assess delirium, NICE (2010a) suggests various tools, including the:

- DSM-V criteria for delirium;
- Short Confusion Assessment Method (CAM);
- Delirium Rating Scale;
- Neelon and Champagne confusion scale;
- Delirium Index.

Although there are slight differences between the tools, all allow a range of symptoms to be reviewed, and most result in a score indicating the level of acute confusion (NICE, 2010a). The short CAM, a validated tool used in some UK care settings, has four features:

- Acute onset and fluctuating course;
- Inattention;
- Disorganised thinking;
- Altered level of consciousness (Table 1).

A diagnosis of delirium requires the presence of the first two features and at least one of the third and fourth (Inouye et al, 1990).

Other tools for assessing delirium may focus on items such as hallucinations, the sleep-wake cycle, and psychomotor behaviour (NICE, 2010a). It is important to engage with the patient, both verbally and through close observation, to assess the level of confusion and check that scoring is accurate.

Cognitive impairment, depression and delirium: the overlap

Cognitive impairment, depression and delirium have overlapping symptoms, can present at the same time, and each increases the risk of one of the others occurring (NICE, 2014). This means thorough assessment is key to ensure that both the diagnosis made and treatment offered are appropriate.

The main difference between dementia and delirium is in their onset and progression: dementia develops gradually while delirium is characterised by a sudden onset (NICE, 2014). If the patient’s assessment leaves any doubt about whether they have dementia or delirium, initial treatment should focus on delirium (NICE, 2014).

Baquero and Martín (2015) explained that “frequently, depressive symptoms are masked by cognitive decline” due to neurodegenerative diseases resulting in patients having difficulty expressing their feelings. The Cornell Scale for Depression in Dementia (CSDD) (Alexopoulos et al, 1988) has been developed to assess depression occurring in conjunction with cognitive impairment. It has five subscales:

- Mood-related signs;
- Behavioural disturbance;
- Physical signs;
- Cyclic function;
- Ideational disturbance.

The last subscale includes items such as self-esteem and negative feelings.

The CSDD is reportedly useful in detecting depression in people with dementia (Goodarzi et al, 2017), but staff need to be skilled and knowledgeable when using it, and they must have sufficient time to collect all relevant information about the patient (Jeon et al, 2015). Tools that may not have been specifically developed for patients who have dementia, such as the GDS, have been found to be appropriate for assessing depression in that patient group (Goodarzi et al, 2017).

Conclusion

Different tools are available to assess the psychological domain of health in older people, in particular cognitive impairment,

**Reflection exercises**

**Psychological domain assessment in hospital**

Two months ago, Mark Williams’ lost his wife of 50 years. Since then he has been living alone. His two children live some distance away so cannot visit him regularly. They have arranged for meals on wheels to be delivered and for a carer to visit three times a week.

Three days ago, Mr Williams was admitted to hospital with dehydration, weight loss and skin rashes due to self-neglect and poor personal hygiene. He sometimes bursts into tears and often tells staff how much he misses his wife. His focus is entirely on his late wife, and he often repeats himself and forgets about daily activities, such as eating his meals. You are one of the nurses looking after him.

- What questions would you ask Mr Williams regarding his psychological problems?
- Which tools would you use to screen for, or assess, his psychological problems?
- What additional aspects of care need to be assessed in Mr Williams’ case to ensure a holistic approach?
- Which health professionals need to be involved in Mr Williams’ treatment and care?
- What would you include in Mr Williams’ care plan?

**Psychological domain assessment in the community**

Mary Robertson is 93 years old and lives alone in an assisted-living flat. Her husband died 20 years ago and her only son died three years ago. Mrs Robertson has been cared for by district nurses and community carers for about 10 years. During that time, her arthritis, chronic heart condition and kidney disease have been deteriorating. She has not left her home, nor has she had any visitors, for several years. She is a very private person; in general, she does not ask for support from staff working in the assisted-living facility and has, on occasions, refused help when it has been offered.

You are one of the district nurses looking after Mrs Robertson. You have noticed there is an increasingly strong smell of ammonia in her flat, and that she is sleeping in a chair in the living room. Mrs Robertson is incontinent of urine and appears to wear pads for at least 24 hours; in addition, she does not seem to eat or drink much. When you arrive to see her in the morning, she appears suddenly confused and is unable to hold a conversation.

- What questions would you ask Mrs Robertson about her psychological problems?
- Which tools would you use to screen for, or assess, her psychological problems?
- What additional aspects of care need to be assessed in Mrs Robertson’s case to ensure a holistic approach?
- Which health professionals need to be involved in her treatment and care?
- What would you include in Mrs Robertson’s care plan?

*The patients’ names have been changed.*
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depression and delirium. They allow health professionals to document their findings and produce a score that is linked to what needs to happen next. However, despite the value of these assessment tools, it is crucial that health professionals have the ability to observe subtle changes in patients’ behaviour or communication, so that any symptoms of cognitive impairment, depression and/or delirium can be detected and treated early. Useful questions to ask are outlined in Box 1.

Assessment of the psychological domain is a multidisciplinary effort and may include, for instance, physicians, nurses, healthcare assistants, therapists, social workers and specialist nurses within care for older people or dementia care. It is everyone’s responsibility to observe and assess cognitive function and other aspects of this domain, such as mood (NICE, 2014; NICE, 2009). For example, a nurse or a therapist may notice the patient has difficulty following instructions; the role of the nurse will involve referrals to those who have specialist knowledge of a certain psychological need (NMC, 2018). Specialist nurses within the field can support the nursing team to provide high-quality assessment and interventions as needed (Griffiths et al, 2015).

If a patient appears depressed or disoriented in time or place, after an initial assessment using a tool as suggested above, a doctor and specialist mental health services may need to be involved in their care (NICE, 2009). Some patients may struggle with a decline in cognitive function, which could lead to a change of living arrangement for which the patient and their family may need the support of a social worker (NICE, 2006b). For patients in the community and their family, an Admiral Nurse can support independence of those who experience cognitive impairment (Knight and Dening, 2017). Therefore, to ensure the delivery of good care regarding a patient’s psychological domain, nurses need to engage at the centre of communication and collaboration (Wiltjer, 2017) to make sure the multidisciplinary team includes all specialties and professions necessary to meet the individual patient’s needs.

• Part 5 of this series will focus on the social domain of health.

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