THE COMPLEXITY OF PAIN ASSESSMENT IN OLDER PEOPLE

Julie Gregory looks at the work being done to improve nurses’ measurement of pain when communication and cognitive function are impaired

Abstract

Pain is common in older people and its assessment is an important part of the nurse’s role. Asking people about their pain is considered the most accurate and reliable assessment because of the subjective nature of pain. A number of simple and easy-to-administer self-rating scales are available to measure pain intensity. To rate their pain, however, people need to understand the request, as well as recall and interpret the painful signal. Observing specific behaviours associated with pain is advocated when communication and cognitive function are impaired, for example, in people with advanced dementia.

A number of pain assessment tools have been developed that involve observation of some or all of the behaviours. The aim of this article is to highlight the importance of pain assessment, discuss the various pain assessment scales and tools available and identify some of the factors that can make comprehensive assessment of pain in older people and those with cognitive impairment complex.

Keywords
carer inclusion, cognitive impairment, dementia, pain, pain assessment, pain scales

PAIN IS common in older people and has an adverse effect on their quality of life, for example, wellbeing and general health, physical and psychosocial functioning and vitality (Brown 2011, Hadjistavropoulos et al 2014). It is under-recognised and poorly treated in older people across all care settings and there is a direct correlation between under-treatment of pain and severity of cognitive impairment (Kunz et al 2009, Corbett et al 2012).

Poor control or management of pain in older people has been consistently identified as an issue (Berry 2013). Inadequate assessment, especially when there is cognitive decline, is a barrier to effective pain management (Rantalainen et al 2014). Assessment of pain can be challenging in older people because of changes in vision, hearing and cognition, as well as attitudes and beliefs of healthcare professionals and patients (Abdulla et al 2013).

Nurses play a pivotal role in pain assessment and management because of their consistent and close relationship with patients (Brown 2011). Assessment is fundamental to ensure that interventions are effective and improve patient outcomes (Lukas et al 2013).

This article aims to highlight the importance of pain assessment, discuss assessment tools and identify some of the factors that can make comprehensive assessment of pain in older people and those with cognitive impairment complex.

Pain and older people

A wide range of pain prevalence is reported in older people. In residential care settings, for example,
it has been estimated at between 49% and 83% (Schofield 2008). In the US Patel et al (2013) asked 7,601 older people living in the community if ‘pain had been bothersome in the previous month’. More than half of those interviewed (53%) reported pain. The study found that pain increased the risk of mobility problems compared with older adults who had no pain, thus reducing independence (Patel et al 2013). Older people are prone to many painful conditions, which may be chronic – that is, they have lasted for more than three months, including musculoskeletal disorders such as osteoarthritis and osteoporosis, and peripheral vascular disease – for example, leg ulcers. In addition acute pain may be associated with hospital for infections, surgery or trauma (Rantala et al 2014).

Consequences of under-treatment of pain include impaired mobility, decreased socialisation, depression, sleep disturbances, decreased appetite, constipation, gait impairment and falls, and cognitive impairment (Closs et al 2004, Corbett et al 2012). Under-treatment of pain affects recreational activities as well as physical function leading to a reduced quality of life (Corbett et al 2012). Pain may result in agitation, resistance to care and aggression in older patients with cognitive impairment, which may be interpreted as challenging behaviour and can lead to the inappropriate use of antipsychotic medication rather than analgesia (McAuliffe et al 2012, Somes and Donatelli 2013). There is no suggestion that pain is less intense or frequent in people with cognitive impairment, but inability to communicate means that healthcare professionals need to pay more attention to the possibility of pain and ensure that proactive interventions are provided (Corbett et al 2012).

Assessment
Identification and assessment of pain and how it is affecting people and their activities of daily living (ADL) are important aspects of the nurse’s role. Obtaining a pain score has been advocated as the fifth vital sign and incorporated into routine observations of vital signs in hospital settings. However, identification and assessment of pain are more complex than obtaining a pain score by asking ‘have you any pain today?’ – not least because it is challenging or impossible when patients have communication difficulties and/or cognitive impairment.

Verbally administered assessment scales
Pain is a subjective experience and asking patients about their pain using a self-report method is considered the most accurate and reliable assessment, sometimes described as the gold standard (Brown 2011, Hadjistavropoulos et al 2014). A number of verbally administered self-report pain assessment scales are available. Two of the most commonly used are the numerical rating scale (NRS) and verbal descriptor scale (VDS). They are valid, reliable and appropriate for use in the clinical setting (Williamson and Hoggart 2005). The NRS asks users to rate their pain on a scale of 0-10 with 0 indicating no pain and 10 the worst pain imaginable. It was described as reliable for use in older people by Hadjistavropoulos et al (2014) and its use in cognitively intact older people was advocated by the Royal College of Physicians (RCP) et al (2007). The VDS uses words to help people describe their pain, for example, no pain, mild pain, moderate pain and severe pain. In many organisations a numerical descriptor scale is used and numbers added to aid documentation of the pain score obtained: 0=no pain, 1=mild pain, 2=moderate pain and 3=severe pain. Bird (2005) described the VDS as the preferred scale for use in older people. The VDS is useful to assess pain in older people with cognitive impairment and mild to moderate dementia (RCP et al 2007, Herr 2011, Corbett et al 2012). Lukas et al (2013) assessed pain in older patients with dementia and found that 90% could rate their pain using a VDS compared with 60% using an NRS, confirming similar findings by Closs et al (2004).

Use of verbally administered assessment scales should be attempted for all older patients (RCP et al 2007). There may be a need to alter the wording, for example, to use ‘hurt’ or ‘ache’ instead of ‘pain’, use open questions, allow time for an answer and check understanding of the request. However, for pain assessment scales to be useful patients need to understand the request to rate their pain as well as to recall and interpret the painful signal (Buffum et al 2007).

Observational assessment
Nurses are influenced by individual patients’ behaviour when conducting a pain assessment. For example, it can be assumed that someone who appears relaxed and is smiling is not in as much pain compared with an individual who appears tense and is grimacing. Observing and assessing ADL are important aspects of pain assessment because many activities can be influenced by pain such as sleep, appetite, mobility, mood and sociability.

Observing specific behaviours associated with pain is advocated when communication and cognitive function are impaired, for example,
in patients with advanced dementia. This is because an individual’s ability to respond to questions about pain contributes to its under assessment and is a major barrier to effective pain management (Corbett et al 2012, Hadjistavropoulos et al 2014). Six categories of pain behaviour have been identified by the American Geriatrics Society (AGS) (2002):
- Vocalisation.
- Facial grimace.
- Body language, such as guarding an area or resisting care.
- Changes in behaviour, such as increased confusion, agitation or becoming withdrawn.
- Physiological changes, such as increased respiratory rate, heart rate or blood pressure.
- Physical changes, such as skin damage, tears, pressure ulcers or trauma.

**Behavioural assessment tools**
A number of behavioural assessment tools have been developed to guide practitioners towards appropriate interventions based on observations (Hadjistavropoulos et al 2014). Most have been developed and tested in long-term care. They include Pain Assessment for the Dementing Elderly (PADE) (Villanueva et al 2003), DOLOPLUS (Lefebvre-Chapiro 2001), Abbey pain scale (Abbey et al 2004) and the Pain Assessment in Advanced Dementia (PAINAD) scale (Warden et al 2003). There has been variability in their development, for example, PAINAD was developed from literature and based on two other observational scales and PADE was developed after a period of observation, and further studies are required to confirm their usefulness in all populations (Herr 2010).

The Abbey pain scale (Abbey et al 2004) contains the six behaviours identified by the AGS and its use was advocated in the UK by the RCP et al (2007). When trialled in acute care it helped to raise awareness of pain, but was found to be subjective (Gregory 2012). The PAINAD scale (Warden et al 2003) contains five categories and was initially developed and tested in long-term care in the US. It was subsequently tested in acute care by DeWaters et al (2008) with cognitively intact (n=13) and cognitively impaired (n=12) hip fracture patients. They found a positive correlation between the PAINAD and self-report scale, supporting PAINAD’s reliability and validity. This was, however, a small study limited to a specific patient group of 25 hip fracture patients.

Reviews of behavioural assessment tools have concluded that observed behaviours may indicate distress rather than pain and expressed concern about their reliability and validity (McAuliffe et al 2012). For example, initial testing of the PAINAD scale was conducted with 19 white men with advanced dementia (Warden et al 2003) and the Abbey pain scale was developed and tested in nursing homes in Australia involving 61 residents and 61 nurses. Reliability and validity of the scale was judged by the nurse agreeing that the resident had pain (Abbey et al 2004). This has led to concerns that the assessment tools may not be suitable for use in other settings, such as acute care (McAuliffe et al 2012). Choice of an observational behavioural assessment tool will depend on patient population and usefulness of the tool (Herr 2010).

Behavioural pain assessment tools are not used in everyday practice and there is debate about their usefulness (Herr 2010, McAuliffe et al 2012). Their use is complex and a number of issues need to be considered to identify the reasons for this. Nursing workload and the time taken to complete the tools must be considered (While and Jocelyn 2009). Abbey et al (2004) claimed the time taken to use their tool was one minute, but this was in a care home setting where nursing staff were familiar with residents. Interpretation of behaviour relies on observers’ knowledge, experience and sensitivity to an individual’s pain which in turn influences their clinical judgement (Corbett et al 2012, McAuliffe et al 2012, Hadjistavropoulos et al 2014). Therefore, staff education and training in addition to their knowledge of the use of tools is important (McAuliffe et al 2012).

Intuition may play a part in pain recognition and it has been suggested that people who are familiar with the person living with dementia will be better able to identify changes in usual behaviour that might indicate pain (McAuliffe et al 2009, Chang et al 2011, Karlsson et al 2013). Detection of subtle changes in pain behaviour requires familiarity with the person that has developed over one to three months (McAuliffe et al 2009, Karlsson et al 2013). In nursing home settings carers develop this knowledge of residents to help them recognise subtle changes in behaviour that may indicate pain (Chang et al 2011). In contrast a survey of nurses working in acute care (Rantala et al 2014) found that 52% indicated that while knowledge of an individual was important, when an individual was new to a setting nurses did not have time to develop such knowledge.

To overcome this lack of knowledge, pain management for people with dementia and/or communication difficulties may be improved if family carers and informal caregivers are involved in assessment as they can provide some information...
about the person’s history and preferences (Schofield 2008, Herr 2010, McAuliffe et al 2012). A survey of family members of people with dementia and in pain found a lack of communication with staff (Buffum and Haberfelde 2007). Families or carers of patients with cognitive impairment including dementia are familiar with them, their history, idiosyncrasies and needs (Buffum and Haberfelde 2007, McAuliffe et al 2012). They could therefore be a valuable resource for determining pain and an individual’s preferred strategies for pain relief (Schofield 2008, While and Jocelyn 2009). However, there is a lack of research that supports involving family carers and informal caregivers in pain assessment and management.

Conclusion
Assessment and management of pain in older people is challenging and complex, even more so when communication is difficult, particularly as a result of cognitive impairment. Policies and procedures for pain assessment in older people and those with cognitive impairment may need to be reviewed and developed to acknowledge this complexity. Holistic assessment involves a number of factors, not simply obtaining a pain score. It should include initial examination of an individual’s medical history for indications of potentially painful conditions, such as osteoarthritis and osteoporosis. Obtaining a pain intensity score using a numerical or verbal

References


rating scale is important when possible. A verbal scale may be more acceptable than a numerical scale for older people, especially when they have mild to moderate cognitive impairment. The ability to perform ADL and/or a change in ADL should also be taken into consideration as part of holistic pain assessment.

When communication and cognitive impairment is a problem a behavioural pain assessment tool is advocated and choice will depend on organisational context and usefulness of the tool. A number of behavioural pain assessment scales are available, but there is no evidence to suggest which, if any, is appropriate for all care settings.

Active encouragement is required in the use of observational behavioural pain assessment tools. To improve pain management staff should receive education on pain assessment in older people and use of a behavioural pain assessment tool. In addition, knowledge of an individual could be the key to pain recognition as it enables staff to detect subtle changes in behaviour. In acute care settings or when an individual is new to a care environment, those close to the individual, such as a family member and/or an informal carer can provide this knowledge. In addition to observation of behaviours for pain, it will help to provide a person-centred pain assessment.


