The assessment of pain in older people

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ABSTRACT – Pain is under-recognised and under-treated in older people. It is a subjective, personal experience, only known to the person who suffers. The assessment of pain is particularly challenging in the presence of severe cognitive impairment, communication difficulties or language and cultural barriers. These guidelines set out the key components of assessing pain in older people, together with a variety of practical scales that may be used with different groups, including those with varying levels of cognitive or communication impairment. The purpose is to provide professionals with a set of practical skills to assess pain as the first step towards its effective management. The guidance has implications for all healthcare and social care staff and can be applied in all settings, including the older person's own home, in care homes, and in hospital.

KEY WORDS: assessment, cognitive impairment, older people, pain, pain scales

Background

Pain is under-recognised and under-treated in older people. National UK statistics have indicated that pain or discomfort was reported by about half of over 65 year olds, and 56% of men and 65% of women aged 75 years and over.[1] Higher prevalence estimates are obtained from samples of institutionalised older people, where 45–83% of patients report at least one current pain problem.[2,3]

Pain is a subjective, personal experience, only known to the person who suffers. The experience of pain is multidimensional and may be described at several levels:

- Sensory dimension: the intensity, location and character of the pain sensation
- Affective dimension: the emotional component of pain and how pain is perceived
- Impact: the disabling effects of pain on the person's ability to function and participate in society.

The purpose of this guideline is to provide professionals with a set of practical skills to assess pain as the first step towards its effective management. The guidance does not seek to differentiate between acute and persistent pain as the literature relating to pain in older people shows that such a distinction is impractical.

For more detailed guidance and evaluation of the supporting literature, please see the full guideline.[4,5]

The challenge of impaired cognition and communication

Assessing pain becomes even more challenging in the presence of severe cognitive impairment, communication difficulties or language and cultural barriers. However, even in the presence of severe cognitive and communication impairment, many individuals may have their pain assessed using appropriate observational scales.

Verbal and numerical rating scales best quantify the intensity of pain in older people with no cognitive/communication impairment and can also be used with appropriate assistance in many patients with mild to moderate impairments.

Rating scales should be presented in a format that is accessible for the individual. People who lack verbal and numeracy skills, eg those with cognitive impairment or communication impairment following stroke, may be able to respond to a suitably adapted pictorial rating scale.[6,7,8] Assistance from a speech and language therapist or psychologist may help to facilitate self-report in the presence of more severe impairment.

Scales should use large clear letters/numbers and be presented under good lighting. Once the most appropriate scale has been chosen to suit the individual person's strengths, staff should continue to use this for sequential assessment in order to observe the response to treatment.

People with very severe cognitive/communication impairment may not be able to self-report pain even with full assistance. Clinicians may need to rely on behavioural responses, but these can be hard to interpret.

*The Guideline Development Group (GDG) was convened by the British Geriatrics Society and the British Pain Society in conjunction with the Clinical Standards Department of the Royal College of Physicians. For membership of the GDG, please see the end of the paper.

Box 1. Key components of an assessment of pain.

- Direct enquiry about the presence of pain
  - including the use of alternative words to describe pain
- Observation for signs of pain
  - especially in older people with cognitive/communication impairment
- Description of pain to include:
  - sensory dimension
    - the nature of the pain (eg sharp, dull, burning etc)
    - pain location and radiation (by patients pointing to the pain on themselves or by using a pain map)
    - intensity, using a standardised pain assessment scale
  - affective dimension
    - emotional response to pain (eg fear, anxiety, depression)
  - impact: disabling effects of pain at the levels of
    - functional activities (eg activities of daily living)
    - participation (eg work, social activities, relationships)
- Measurement of pain
  - using standardised scales in a format that is accessible to the individual
- Cause of pain
  - examination and investigation to establish the cause of pain

Table 1. Observational changes associated with pain.

Type	Description
Autonomic changes	Pallor, sweating, tachypnoea, altered breathing patterns, tachycardia, hypertension
Facial expressions	Grimacing, wincing, frowning, rapid blinking, brow raising, brow lowering, cheek raising, eyelid tightening, nose wrinkling, lip corner pulling, chin raising, lip puckering
Body movements	Altered gait, pacing, rocking, hand wringing, repetitive movements, increased tone, guarding,* bracing**
Verbalisations/vocalisations	Sighing, grunting, groaning, moaning, screaming, calling out, aggressive/offensive speech
Interpersonal interactions	Aggression, withdrawal, resisting
Changes in activity patterns	Wandering, altered sleep, altered rest patterns
Mental status changes	Confusion, crying, distress, irritability

*Guarding = 'abnormal stiff, rigid, or interrupted movement while changing position'.
**Bracing = a stationary position in which a fully extended limb maintains and supports an abnormal weight distribution for at least three seconds.

Assessment

The key components of an assessment for anyone suffering from pain are shown in Box 1. It is particularly important to use observations for signs of pain in older people with cognitive or communication impairment (Table 1).

Types of scale used to assess pain

A list of existing scales and the evidence for their use is available in the full guideline.[4,5] Table 2 provides examples of scales which are suitable for clinical use in different categories of patient. It is not yet clear which observational scale is the most suitable for widespread use with people who have severe cognitive impairment, so an example has been selected on the basis of simplicity and availability. Ongoing validation studies are likely to inform the selection of scales for use in the near future.

Implications and implementation

The guidance has implications for all healthcare and social care staff and can be applied in all settings, including the older person's own home, in care homes, and in hospital.

There is no significant funding implication for implementation, but rather a requirement that all healthcare professionals think about the possibility of pain in all contacts with older people, enquire about it routinely, be aware of behaviours that indicate underlying pain and have pathways for management.

The proper evaluation of pain in older people does require staff training and the additional time required to undertake a proper evaluation will inevitably impact on staff time in already over-pressed services. However, if pain is sought out, addressed and relieved, the lot of older people would be greatly enhanced. Moreover, relief from the disabling effects of pain may potentially save staff time in other areas such as the provision of

Table 2. Types of scale for assessing pain.

Type of pain assessment	Practical suggestions for scale selection	Comments and references
Self-report		
Older people with no significant cognitive/communication impairment *and* Older people with mild to moderate cognitive/communication impairment	Numeric graphic rating scale	High validity and reliability in older people[9–11] Can be used in mild/moderate cognitive impairment[9,12] Vertical as opposed to horizontal orientation may help to avoid misinterpretation in the presence of visuo-spatial neglect eg in patients with stroke
	Verbal rating scale or numerical rating scale (0–10)	High validity and reliability in older people[9–11]
Older people with moderate to severe cognitive/communication impairment	Pain Thermometer[6]	Easy to use Validity has not been fully evaluated[6]
	Coloured Visual Analogue Scale[7]	Well understood in early and mid-stage Alzheimer's disease[8]
Observational pain assessment		
Older people with severe cognitive/communication impairment (no single recommendation currently possible)	ABBEY Pain Scale[13,14]	Short and easy to apply scale[13] Requires more detailed evaluation
Multidimensional assessment		
Older people with minimal cognitive impairment	Brief Pain Inventory[15,16]	15-item scale assessing: severity, impact on daily living, impact on mood and enjoyment of life

support for basic self-care activities etc. These basic guidelines should be a routine part of the training and care provision of all healthcare professionals.

Methodology

The guidance has been developed in accordance with the requirements for concise guidelines as detailed at www.rcplondon.ac.uk/college/ceeu/conciseGuidelineDevelopmentNotes.pdf A fuller version of this guidance is published in booklet form.[17]

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References

1 National Statistics Online. Self-reported health problems: by gender and age, 1996–97: social trends dataset. www.statistics.gov.uk/StatBase/xsdataset.asp?More=Y&vlnk=670&All=Y&B2.x=86&B2.y=13 (accessed 22 May 2007).
2 Helme RD, Gibson SJ. The epidemiology of pain in elderly people. *Clin Geriatr Med* 2001;17:417–31.
3 Ferrell BA, Ferrell BR, Osterweil D. Pain in the nursing home. *J Am Geriatr Soc* 1990;38;409–14.
4 British Geriatrics Society, 2007. www.bgs.org.uk/Publications/Clinical%20Guidelines/clinical_guidelines_index.htm
5 British Pain Society, 2007. www.britishpainsociety.org
6 AGS Panel on Persistent Pain in Older Persons. The management of persistent pain in older persons. *J Am Geriatr Soc* 2002;50:S205–24.
7 Scherder EJA, Bouma A. Visual analogue scales for pain assessment in Alzheimer's disease. *Gerontology* 2000;46:47–53.

Summary of the guidelines

Recommendation	Grade
1 Pain awareness	
All healthcare professionals should be alert to the possibility of pain in older people, and to the fact that older people are often reluctant to acknowledge and report pain.	C
2 Pain enquiry	
Any health assessment should include enquiry about pain, using a range of alternative descriptors (eg sore, hurting, aching).	C
3 Pain description	
Where pain is present, a detailed clinical assessment of the multidimensional aspects of pain should be undertaken including: • *sensory dimension*: the nature, location and intensity of pain • *affective dimension*: the emotional component and response to pain • *impact*: on functioning at the level of activities and participation.	C
3.1 Pain location	
An attempt to locate pain should be made by: • asking the patient to point to the area on themselves • the use of pain maps to define the location and the extent of pain.	C
3.2 Pain intensity	
Pain assessment should routinely include the use of a standardised intensity rating scale, preferably a simple verbal descriptor scale or a numeric rating scale, if the person is able to use these.	C
4 Communication	
Every effort should be made to facilitate communication particularly with those people with sensory impairments (use of hearing aids, glasses etc).	C
Self-report assessment scales should be offered in an accessible format to suit the strengths of the individual.	
5 Assessment in people with impaired cognition/communication	
People with moderate to severe communication problems should be offered additional assistance with self-report through the use of suitably adapted scales and facilitation by skilled professionals.	C
In people with very severe impairment, and in situations where procedures might cause pain, an observational assessment of pain behaviour is additionally required (see Table 1).	
Pain behaviours differ between individuals, so assessment should include insights from familiar carers and family members to interpret the meaning of their behaviours.	
6 Cause of pain	
Careful physical examination should be undertaken to identify any treatable causes. However, staff should be aware that pain can exist even if physical examination is normal.	C
7 Re-evaluation	
Once a suitable scale has been identified, serial assessment should be undertaken using the same instrument to evaluate the effects of treatment.	C

8 Hadjistavropoulos T, Herr K, Turk D *et al.* An interdisciplinary expert consensus statement on assessment of pain in older persons. *Clin J Pain* 2007;23:S1–43.
9 Chibnall JT, Tait RC. Pain assessment in cognitively impaired and unimpaired older adults: a comparison of four scales. *Pain* 2001;92: 173–86.
10 Herr KA, Spratt K, Mobily PR, Richardson G. Pain intensity assessment in older adults. *Clin J Pain* 2004;20:207–19.
11 Kaasalainen S, Crook J. An exploration of seniors' ability to report pain. *Clin Nurs Res* 2004;13:199–215.
12 Stolee P, Hillier L, Esbaugh J *et al.* Instruments for the assessment of pain in older persons with cognitive impairment. *J Am Geriatr Soc* 2005;53:319–26.
13 Abbey J, Piller N, De Bellis A *et al.* The Abbey pain scale: a 1-minute numerical indicator for people with end-stage dementia. *Int J Palliat Nurs* 2004;10:6–13.
14 Abbey J, De Bellis A, Piller N *et al.* Abbey pain scale. In: The Royal Australian College of General Practitioners – 'Silver Book' National Taskforce. *Medical care of older persons in residential aged care facilities.* www.racgp.org.au/silverbookonline/4-6.asp
15 Keller S, Bann CM, Dodd SL *et al.* Validity of the brief pain inventory for use in documenting the outcomes of patients with noncancer pain. *Clin J Pain* 2004;20:309–18.
16 Pain Research Group, University of Wisconsin-Madison. Brief pain inventory. In: The Royal Australian College of General Practitioners – 'Silver Book' National Taskforce. *Medical care of older persons in residential aged care facilities.* www.racgp.org.au/silverbookonline/4-7.asp
17 Royal College of Physicians, British Geriatrics Society and British Pain Society. *The assessment of pain in older people: national guidelines.* Concise guidance to good practice series, No 8. London: RCP, 2007. www.rcplondon.ac.uk/pubs/brochure.aspx?.e=233

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