

Cancer pain management and palliative care

The management of pain for older people with cancer is complex and multimodal. Older individuals are more likely than younger people to have other medical problems and disabilities; comorbidities may be a predictor of poorer pain control, greater symptom burden, greater functional impairment, increased use of healthcare services, and mortality.¹

Patricia Schofield Director, Centre for Advanced Studies in Nursing (CASN), Centre of Academic Primary Care, University of Aberdeen

Amanda Clarke, Senior Lecturer, Centre for Advanced Studies in Nursing (CASN), Centre of Academic Primary Care, University of Aberdeen, Foresterhill Health Centre, Westburn Road, Aberdeen

email p.a.schofield@abdn.ac.uk

It is known that amongst palliative care patients, including older patients, pain is a major burden.^{1,2} A campaign by the International Association of the Study of Pain (IASP) in 2006–2007 aimed to raise awareness of pain in later life; recognising that current knowledge of pain in older people is incomplete and called for increased research, better educational programmes and dissemination of new knowledge about pain in older age. According to the IASP, up to 80% of older people with advanced cancer report pain; however, compared with younger people, they are less likely to receive adequate analgesia, may be overlooked for anti-cancer treatments that could be beneficial for pain and are much less likely to access specialist palliative services.³

Older people often have more than one condition that may benefit from palliative care; for example, a person with cancer may also have chronic respiratory disease or dementia. This has resulted in specialists (such as consultants in palliative medicine) broadening their expertise to encompass the management of many other conditions other than cancer, whilst prompting generalists (such as medical consultants or GPs) to consider the palliative care needs of older patients and their family carers.

Palliative care

Before considering the pain associated with cancer and the palliative approach to care, we should first

determine some of the definitions used. Whilst there is no agreed definition of palliative care, The World Health Organisation suggest that it is: "...an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual."⁴

Inherent within this definition is the suggestion that relief from pain and other distressing symptoms is a priority. The founding of modern palliative care began in the late 1960s, when Cicely Saunders opened the first modern hospice to provide palliative care for people who were dying of cancer. Consequently, palliative care tended to be associated with patients who were not receiving active treatment. In the 1980s, however, palliative care shifted the focus to people with AIDS and palliative care began to be more widely applied by acknowledging:

- That many aspects of palliative care are appropriate much earlier in the trajectory of a disease
- That palliative care can benefit patients with life threatening illnesses other than cancer
- That palliative care can, and often should, be provided alongside disease modifying treatments
- That such care should explicitly embrace a holistic approach to care and management; one that is centred on the person and their family.

This is summarised by the National Council for Palliative Care's (NCPC)⁵ definition of palliative

care as: "...the active holistic care of patients with advanced progressive illness. Management of pain and other symptoms and provision of psychological, social and spiritual support is paramount. The goal of palliative care is achievement of the best quality of life for patients and their families. Many aspects of palliative care are also applicable earlier in the course of the illness in conjunction with other treatments."⁵

Nevertheless, palliative care still tends to be aligned with specialist palliative care services and the hospice movement, which developed with an emphasis and focus on cancer care and, in particular, the care of younger cancer patients. Indeed, older adults with cancer are much less likely to access these specialist services than their younger counterparts.³

Terminal care

Terminal care is part of palliative care and refers to the management of patients' needs when it is clear that they are in a progressive state of decline and will die soon. It is therefore focused on the last few days of a patient's life.^{6,7} The term was used in the 1980s but, as Seymour and Ingleton⁸ point out, has declined in use for two reasons: palliative care now is viewed as a process and philosophy of care from diagnosis until death and into bereavement; it is no longer always clear when a person is dying; concomitantly with the increase in chronic diseases, is uncertainty about whether death is likely to occur and when this might happen.⁸ This is even more problematic in terms of the care of older people who are in the last phase of life because comorbidity can make care and treatment, including that of pain, complex and sometimes difficult to manage effectively.⁹ As a result, the term end-of-life care is often preferred to the more familiar terms of "hospice," "palliative" and "terminal" care⁸ in relation to older people approaching the end of their lives; this encompasses a broader approach that is applicable in different care settings and, potentially, over a longer time frame.⁸

End of life care

The End of Life Care Strategy¹⁰ recognises the need to respond to the changes in epidemiological trends that currently show that most deaths follow a period of chronic illness—including cancer—but also other conditions such

as heart disease, stroke, chronic respiratory disease, neurological disease or dementia. End of life care refers to when a person is known to be in the last stages of their life but is not clearly "dying" and has been defined as an: "...approach that treats, comforts and supports older individuals who are living with, or dying from, progressive or chronic life-threatening conditions. Such care is sensitive to personal, cultural and spiritual values, beliefs and practices and encompasses support for families and friends up to and including the period of bereavement."¹¹

Whichever definition is selected, implicit within all, is that the care of older people with cancer who are nearing the end of their lives must include the management of pain. Further, it is recognised that palliative care includes life threatening conditions other than cancer. Significantly, these life threatening conditions may also produce pain. For example, a small study amongst a group of people with multiple sclerosis, found that 68% reported pain.¹² In diseases such as end stage cardiac disease, there are reports of pain ranging from 37%¹³ to 77%¹⁴ and this pain was shown to increase in the 12 months before death.¹³ Other diseases have similar reports of the incidence of pain such as renal disease (50%)¹³ and chronic obstructive pulmonary disease as high as 77%;¹⁵ however, the variation in duration of pain is considerable; for example, during the last 24 hours of life⁷ or for the last six months of life.¹⁶

The approach taken to palliative care, therefore, can vary amongst diseases trajectories and can be required over years, months or days and there are huge variations between conditions. In addition, the disease-focused models of palliative care organisation, provision and delivery, whilst appropriate for younger cancer patients, may not be the most appropriate for meeting the complex health needs of older people.^{17,18} Older people are perhaps less likely to be provided with specialist palliative care services than their younger counterparts because they are seen to require an unpredictable and long-term need for care as a result of multiple pathologies. This complicates healthcare delivery as treatment for one illness, such as for pain control, may impact adversely on another disease process.

Cancer pain, palliative care and older people

Pain is one of the most common and feared symptom by patients with cancer and will be experienced regardless of the disease site, with more than one pain



being reported in different anatomical sites.¹⁹ Up to 80% of older people with advanced cancer report pain, with the majority reporting moderate pain.² Predictors of cancer pain in older people include female gender, advanced disease, comorbidities, lower social support, depressed mood, and lower physical functioning.² Pain is not always related to the cancer but to other causes; for example, anti-cancer treatments such as surgery, chemotherapy and radiotherapy.²

According to the ISAP, there are multiple barriers to effective cancer pain management in older people that may be more common in older than in younger patients. Barriers include lack of knowledge about pain and analgesia; reluctance to report pain; fear of opioid tolerance, addiction and adverse effects; and concern that the reporting of pain will not be taken seriously.² Older people also tend to access information and support for cancer and pain to a lesser extent than younger people and the risk for inadequate treatment and lack of access to appropriate services may be greatest for older people in long-term care.²

Barriers to effective pain management are even more acute for those older people who find it

difficult to articulate their pain; for example, those with cancer who also have other conditions such as dementia, some forms of stroke, or Parkinson's disease. Non-verbal manifestations of pain must be recognised and interpreted so that the distress caused can be alleviated. The Assessment of Pain in Older People guidelines²⁰ provides tools for this purpose. Numeric rating and verbal descriptor scales are recommended for cognitively intact older people and those with mild-to-moderate cognitive impairment. Observational scales may be used with patients unable to verbally self-report their pain.

According to the British Geriatric Society,²¹ the following are important factors in enabling older people to live comfortably until they die:

- Comprehensive assessment (especially the frailest with complex comorbidity)
- Enhanced communication and honest prognostication to identify treatment priorities as part of effective clinical decision making
- Adopting principles of palliative care
- Advanced planning and integrated care pathways to enhance the quality of end of life care

- Giving older people access to specialist palliative care teams, where appropriate, regardless of diagnosis or place of care.²¹

These factors should also be considered when planning the holistic management of older people with cancer in pain.

Pain management

Saunders' insight from her clinical work and research contributed to new understandings of pain relief in people with life threatening conditions.²² She introduced the concept of "total pain"²³ that is widely recognised as important in assisting a fuller understanding of the complexity of the feelings, which are experienced by cancer patients.¹⁹ This places emphasis on the person and their experience of illness; recognising that the patient's pain might arise from physical, psychological, spiritual or social distress, rather than simply referring to the body and its manifestations of disease.¹⁸ Saunders¹⁵ suggested that pain from a somatic source can bring about feelings of anger, anxiety or depression and that such feelings may also impact upon physical pain, culminating in "total pain". An individual's concern, for example, about delays in diagnosis or loss of dignity may all impact upon their physical experience of pain. Saunders believed that total pain is best addressed by a multidisciplinary, interprofessional approach, using a combination of treatments (for example, physical and psychosocial) to ease the different types of pain. These are the principles that underpin the palliative care approach to pain.¹⁹

The multidimensional character of pain is emphasised by the National Guidelines in Assessment of Pain for Older People²⁰ which describe pain 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.²⁰

These guidelines recognise the need for a holistic, person-centred assessment and also that treatment may benefit from pharmacological and non-pharmacological methods of pain control. The World Health Organisation's (WHO) three step analgesic ladder is widely used for this purpose. It should be pointed out, however, that there has been some debate over the years regarding its effectiveness and appropriateness¹ with some authors suggesting that step two is redundant and that steps

four and five should be added to provide the option of opioid switching and anaesthetic interventions.²⁴ Originally published in 1989, the ladder has been republished again in 1996²⁵ and 2006.²⁶ The principles that underpin the use of the ladder are:

- By the mouth: oral medications are preferable, unless the patient cannot swallow
- By the clock: medications should be given at regular intervals and before the effects of the previous dose have diminished
- By the ladder: the use of different drugs should be sequential
- For the individual: there is no standard dose of opioid drugs and each patient will require to have their dose titrated to meet their needs
- Attention to detail:²⁵ when giving regular drugs, the first and last doses of the day should fit around the individual's waking and bed times.

Step one

The first step of the ladder is for patients assessed with mild pain. The recommended drugs for this level are paracetamol or a non steroidal anti-inflammatory drug,²⁷ according to the patient's preference and risk for gastrointestinal side-effects. These drugs can be purchased easily by patients as over-the-counter medicines, and it is important that the professional makes a full assessment of the medications taken already by the patient before commencing step one.

Step two

For patients whose pain does not respond to step one, or who report mild to moderate pain, a weak opioid should be added to their regimen. Their treatment should correspond to no less than 30mg of codeine per tablet.²⁴ Side effects (such as constipation—which may be particularly problematic for older adults) may be an issue, even with mild opioids, and so prophylactic treatments should be commenced.

Step three

This step involves the introduction of strong opioids: it is recommended²⁷ that this is the starting point for moderate to severe cancer pain. There is evidence^{28,29} that both patients and prescribers are anxious about the use of strong opioids and so may continue to use weak opioids, even when they have been unsuccessful.

A small randomised controlled trial³⁰ gave one group of patients weak and non opioids and the other group strong opioids for terminal cancer pain. For both groups, quality of life and performance status improved to a similar level, but the group receiving strong opioids had a greater improvement in their pain score and reported a higher level of satisfaction with their treatment. The study concluded that strong opioids could be used effectively for mild and moderate pain (Visual Analog Scale score of below 7).

The fear of hastening death with the use of opioids is a constant theme in the literature.³¹⁻³⁴ This concern has an impact on both prescribing and for patient concordance with medication regimens. Four studies³¹⁻³⁴ retrospectively examined a total of 1779 sets of notes of palliative care patients with 1355 of those patients receiving strong opioids or an increase in their dose of strong opioids. All of the studies concluded that there was no relationship between the use of strong opiates, the increase in dose of strong opiates and the timing of death in a dying patient. Whilst there are still concerns about "double effect" these have been shown to be unfounded in many studies³⁵ and the importance of freedom from pain as a vital part of enabling older people to live as comfortably as possible until they die^{24,36} and effective palliative care must not be underestimated.

Adjuvant analgesics

Topical treatments such as the topical lidocaine plaster (Versatis) or capsaicin cream may be used in the treatment of neuropathic pain. The management of neuropathic pain is also now commonly treated with anticonvulsant and antiepileptic drugs. Drugs such as amitriptyline are widely used for pain independently of the antidepressant effect. In addition, anticonvulsant drugs are used for neuropathic pain such as carbamazepine and gabapentin.

Conclusion

Palliative care increasingly is seen in many general healthcare settings and is no longer associated with cancer alone. A palliative care approach requires collaboration amongst the clinical team, in consultation with the older person and their family, to share information continually and effectively, using

validated pain assessment tools. In spite of its critics, the three step analgesic ladder still stands the test of time and provides a really useful framework for use in prescribing analgesic drugs. It is important that all staff adhere to these guidelines to enable patients—whatever their age—to receive person-centred pain management in different care settings.

Conflict of interest: none declared

References

- 1 Burton AW, Cleeland CS. Cancer Pain: progress since the WHO guidelines. *Pain Practice* 2001; **1**(3): 236–42
- 2 IASP (2009) Cancer pain in Older People. Available online at: http://www.iasp-pain.org/AM/Template.cfm?Section=Fact_Sheets1&Template=/CM/HTMLDisplay.cfm&ContentID=7198 Accessed 1st September 2009
- 3 Seymour J, Witherspoon R, Gott M, et al. End-of-life Care. Bristol: The Policy Press in association with Help the Aged, 2005
- 4 World Health Organisation (1990) Cancer Pain Relief and Palliative Care Geneva WHO: 11 (World Health Organisation technical report series 804).
- 5 National Council for Palliative Care http://www.npc.org.uk/palliative_care.html Accessed 23rd July 2009
- 6 McGuire DB. Occurrence of cancer pain. *Journal of National Cancer Institute Monographs* 2004; **32**: 51–55
- 7 Solano J, Gomes B, Higginson I. A comparison of symptom prevalence in far advanced cancer, AIDS, heart disease, chronic pulmonary disease and renal disease. *Journal of Pain and Symptom Management* 2006; **31**(1): 58–69
- 8 Seymour J, Ingleton C. Overview: Chapter 10. In S Payne, J Seymour and C Ingleton (eds) *Palliative Care Nursing: Principles and evidence for practice* (2nd Ed). Open University Press, Berkshire 2004: 181–211
- 9 Kafetz K. What happens when elderly people die? *Journal of the Royal Society of Medicine* 2002; **95**: 536–38
- 10 Department of Health. End of Life Care Strategy. Promoting High-quality Care for all Adults at the End of Life. London: DH, 2008