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The assessment and management of pain among older people in care homes: current status and future directions

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Abstract

Pain is highlighted as a significant, yet neglected problem among older people, particularly in long-term care settings. The effects of inadequate assessment and treatment of pain among older people may lead to multiple problems.

Problems arise due to cognitive impairment of clients and inadequate assessment by healthcare professionals. Analgesics are under-used and there is a need for improved education of both healthcare professionals and older people regarding attitudes to pain and ageing. Research is needed into the prevalence of pain among older people in United Kingdom (UK) care homes, how best to further educate healthcare professionals regarding pain management and how to enable older people to be facilitative partners in this process.

Keywords: Pain; Assessment; Management; Older people; Care homes

1. Introduction

Europe has experienced the transition to an older population profile over the last century which reflects a world-wide demographic trend towards an ageing population (Pickering et al., 2001). The European Union has identified the provision of health and social care for this population as a crucial challenge for the 21st century. In a shift away from merely extending life, ways of reducing morbidity and coping with disability, preventing incapacity, extending the quality of life and enhancing the functional independence of older people will be an important component of service provision (European Commission Research Directorate, 2002). In Britain, the number of people aged over 65 years has doubled in the last 70 years and the number of people over 90 years is expected to double in the next 25 years which will increase the need for healthcare (DoH, 2001). Further, recent estimates for the UK indicate that approximately 157,500 older people live in nursing homes and 288,750 older people live in residential homes (Royal Commission on Long-Term Care, 1999). The UK government has pledged to provide high-quality care and treatment, regardless of age, to treat older people with respect and dignity and to allocate fair resources for conditions that affect them, while at the same time easing the financial burden of long-term care (DoH, 2001).

2. A significant problem

Pain has been highlighted as a significant problem for many older people and further, they are more susceptible to the experience of pain than any other sector of

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the population (Wallace, 1994; Hicks, 2000). This is partly due to the high prevalence of musculoskeletal disorders, phantom pain, pressure ulcers, cancer and other medical conditions in this age group (Ferrell, 1991). Despite the care home setting exhibiting a high prevalence of pain (Fox et al., 1999) and functional disability, which is potentially made worse by pain (Ferrell et al., 1995), pain remains a neglected phenomenon in older people in the UK (Closs, 1994). It is suggested that older people, despite being more likely to have chronic illnesses causing pain than younger people, do not receive adequate pain treatment (Gagliese and Melzack, 1997; Winslow, 1998). This paper discusses evidence of how pain is assessed and managed in care homes for older people.

Searches were conducted of electronic databases, journals, books, abstracts, lecture notes, letters, conference proceedings, reports, relevant organisations, reference lists from any of the above, and any other form of relevant references that could be found. Medline, CINHAL, The British Nursing Index and Ageline were all searched for English language papers dating back to 1995, using the following terms: pain, older people, elderly people, care homes and nursing homes. MeSH headings searched were: pain, homes for the aged and ageing. The last electronic search was conducted on 30th May 2002. For the purposes of this paper, the term 'care home for older people' may be defined as either a residential home visited by district or community nurses or a nursing home employing their own nurses. The material retrieved formed the basis of this integrative review.

3. Lack of research into pain among older people in care homes

The recent Health Survey for England (HSE, 2000), commissioned by the Department of Health, to assess the general health of older people and their use of health services, did not directly assess for the incidence of pain. However, the survey found that 30% of older people living in care homes reported a long-standing illness of a musculoskeletal nature, the majority of whom reported arthritis, rheumatism or a problem of bones, muscles or joints. Of those reporting arthritis or rheumatism, 78% said that they were disabled by it and 64% said that they were disabled by the other problems (HSE, 2000). Much of this disablement is likely to be due to pain. Data on consumption of medications suggest that pain is a significant problem, with 22% of drugs prescribed for musculoskeletal problems. Approximately 75% of drugs were prescribed for central nervous system (CNS) problems among older people living in care homes. Of these medications, 56% were analgesics. This equates to around 35% of all medications prescribed for this population, which combined with those for musculoskeletal disorders suggests that around 57% of prescribed drugs are likely to be for painful conditions (HSE, 2000).

Compared with the general population, there has been relatively little investigation into/attention to the assessment of pain among older people (Herr and Garand, 2001; Kamel et al., 2001). Indeed Closs (1996) has noted that research literature concerning pain in older people in the United Kingdom (UK) is sparse. Pain among older people in long-term care settings is a particularly understudied area (Ferrell et al., 1990; Sengstaken and King, 1993; Davis, 1997; Fox et al., 1999). Considering that this population is at greater risk of functional decline due to chronic illnesses, it is noteworthy that so little emphasis is placed on pain management (Ferrell et al., 1990). Furthermore, most epidemiological studies of pain in older people are not designed with a view to examine pain as a major aspect of the study and records of pain reports may be examined retrospectively (Helme and Gibson, 2001). Consequently, large-scale epidemiological data on pain in older people are generally limited, making it difficult to know the true extent of the prevalence of pain among older people in care homes, including those in the UK. Data from the few studies of pain among older people resident in care homes conducted in North America estimate that the prevalence ranges from 49% to 83% (Ferrell et al., 1995; Fox et al., 1999). In one study, pain was reported as a major problem among older people in long-term care in the United States (US), with 71% reporting pain and 75% of these stating the substantial effect of pain on their functional ability (Ferrell et al., 1990).

4. Potential effects of untreated or under-treated pain

Pain has been defined as: 'An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage' (IASPST, 1979, p. 250). Pain has also been described by Hicks (2000, p. 392), as: 'a highly individualised, unpleasant experience involving all aspects of the person, amenable to intervention, yet when left unattended, resulting in decreased overall quality of life'.

The effects of untreated or under-treated pain may have undesirable physical and psychological consequences (Closs, 1994), with evidence to suggest that improved pain relief contributes to a reactivation of a person's physical and mental activity (Lansbury, 2000). Multiple, interrelated problems caused by the inadequate treatment of pain in older people which are relevant to the care home setting, have been highlighted by several authors. These include: the impairment of enjoyable recreational activities, impaired mobility, decreased socialisation, anxiety, sleep disturbances, impaired posture, impaired appetite and impaired

memory (Ferrell et al., 1990); and depression (Ferrell et al., 1990; Wall, 1999). Stein (2001) has also noted impairment of excretory functions (bowel and bladder) and impaired dressing and grooming due to untreated pain.

Pain-induced decline in mobility and activity may further lead to increased risk of pressure sores, muscle atrophy, impaired posture, subsequent exacerbation of frailty and further decline in mobility. Immobility, impaired posture and muscle atrophy are then likely to increase the risk of trauma, particularly from falls. Falls are one of the major causes of death among older people and the most important cause of hospitalisation in this population (Nuffield and York, 1996). Lack of mobility due to untreated pain may also lead to lack of adequate food intake (Neel, 2001). Indeed, pain-induced loss of appetite is cited as a risk factor affecting nutritional intake (Ferrell, 1995; Copeman, 2000). This may lead to an increase in levels of malnutrition, a phenomenon which is already prevalent among older people in long-term care (Copeman, 2000). Malnutrition results in further exacerbation of many of the health problems experienced by older people. For example, muscle atrophy caused by immobility will be compounded by malnutrition, leading to further immobility, poor posture and even greater likelihood of falls. Malnutrition may also lead to the increased likelihood of fractures due to loss of bone density.

5. Barriers to effective pain management

Evidence points to the identification of several major barriers to pain treatment among older people. These are: attitudes of both carers and older people to pain and ageing; problems of pain assessment; the under-use of analgesic medications; and knowledge deficits and the consequent need for improved education in this area.

6. Attitudes to pain and ageing

In a US survey and case-note review ($n = 97$) of pain issues within a nursing home, Ferrell et al. (1990) found that older people may not report pain, and nurses or carers may not enquire about it. There is also evidence to suggest that both older people and their carers hold ageist attitudes regarding pain (Closs, 1994), and view pain as an expected consequence of the ageing process (Yates et al., 1995; Closs, 1996; Lansbury, 2000). It has also been suggested that older people do not report pain because they do not want to be a burden (Loeb, 1999; Lansbury, 2000), and that information from healthcare professionals about pain control is often lacking (Lansbury, 2000). In a US survey regarding the knowledge and attitudes to pain management among community-dwelling older people ($n = 125$), Brockopp et al. (1996) found that the majority of respondents felt that they were not taken seriously when they talked about their pain. Equally, the findings indicated that older people were not sufficiently prepared to be facilitative partners in the management of their pain. These attitudes may lead to neglect of pain that is otherwise treatable.

7. Problems of assessment

Ferrell et al. (1990) found that day-to-day living and activities in care homes may be too insensitive to facilitate pain detection. For example, if residents are largely immobile and inactive they may not display behaviours conducive to painful conditions. Weiner et al. (1999a) found that there was poor agreement between older people ($n = 42$) resident in two nursing homes in the US and nursing assistants ($n = 42$) with regard to pain intensity and that further research was needed to determine the underpinnings of differing perceptions of pain behaviour. Similarly, Horgas and Dunn (2001) found that while 49% of older people ($n = 45$) resident in a nursing home in the US stated they had experienced pain in the previous week, nursing assistants ($n = 16$) reported that 36% of resident older people had experienced pain during the same period. They concluded that the results of their study illustrate the need for increased attention to the issue of pain management for older people resident in nursing homes and that education on pain assessment was needed for their caregivers.

Wallace (1994) and Closs (1996) have noted how cognitive impairment in older people leads to difficulties of assessment. Some pain assessment scales have been found to be too difficult for older people to use (Loeb, 1999). Sengstaken and King (1993) found that pain was frequently undetected by physicians in care homes, even among communicative residents, through lack of questioning. They recommended that pain detection among communicative care home residents could be improved by more frequent, direct questioning and that the creation of new methods of pain detection among non-communicative residents was needed (Sengstaken and King, 1993).

Ferrell et al. (1995) found that 83% of cognitively impaired older people were able to complete at least one pain scale, but they concluded that much additional research was needed to develop innovative strategies to address the problem of pain assessment in this population. Weiner et al. (1999b) developed a structured pain interview (SPI) specifically for older people in nursing homes, which asks them about pain, discomfort and soreness and in which body parts, experienced on a daily basis. In a study of 158 nursing home residents in the US and the registered nurses ($n = 31$), this tool uncovered

considerable miscommunication between older people and staff highlighting the need for further research (Weiner et al., 1999b). Herr and Garand (2001) advocated the use of an SPI for older people as part of a systematic process whereby pain is recognised, assessed, documented and reassessed on a regular basis resulting in improved pain management for older people.

Epps (2001) found that pain is frequently under-detected due to physical and cognitive impairments, which may hinder communication with nurses or carers. No criteria exist for pain assessment in non-verbally communicative older people. Therefore research is needed to identify pain in this population by means of an easily used and reliable assessment tool (Epps, 2001). Towards this end, Kamel et al. (2001) studied the effect of utilising a combination of three pain assessment tools: the visual analogue scale (VAS), (asking the person with pain to draw a cross on a horizontal line), the pain faces scale, (asking the person with pain to indicate from a series of six faces with varying expressions of pain which one best reflects what their pain is), and the pain descriptive scale, (asking the person with pain to describe their pain as none, mild, moderate, severe or very severe). In comparing assessment using the three-tool combination ($n = 155$) with assessment utilising the question "do you have pain?" ($n = 150$), Kamel et al. (2001) found that the overall frequency of detecting pain in older people, even those cognitively impaired, was significantly greater using the combined method (Kamel et al., 2001). More studies of this type are now needed.

8. Under-use of analgesics

The under-use of analgesics, particularly opioids, is a major potential barrier to adequate pain management in older people (Brockopp et al., 1993; Ferrell, 1995; Herr, 2002). This under-use can arise from exaggerated fears of adverse effects, including addiction, and is compounded by inadequate or inaccurate knowledge of opioid pharmacology (Melzack, 1990; Portenoy, 1990; Herr, 2002). Morgan (1985) described the under-treatment of severe pain by physicians due to irrational and undocumented fears of opioid drug addiction as 'opiophobia'. In a survey of nurses ($n = 63$) in the US, Lander (1990) found that because of fallacies about the addiction potential of opioids, doctors routinely under-prescribed opioid medication and nurses exacerbated this by routinely under-administering prescriptions. Similarly, in the UK, Seers (1987) noted that 85% ($n = 28$) of surveyed nurses had overestimated the perceived risk of addiction to opioids when given for pain.

In a more recent postal survey of UK nurses ($n = 208$), regarding their knowledge and experience of pain and pain control in people aged 70 years or more, Closs (1996) found that among the 55% who responded, nurses were over-cautious regarding opioid analgesics. This was due to exaggerated fears of opioid-induced side-effects, particularly respiratory depression. The surveyed nurses were employed in 16 surgical wards (two cardio-thoracic, four orthopaedic and ten general) and 11 wards caring for older people. The distribution of nurses employed in each area was not specified. In the US, Joseph and Harvath (1998) have highlighted not only under-use of analgesics in care homes for older people, but also over-use of psychoactive medications. The resulting under-treatment of pain could lead to behaviour which is mistaken for dementia which then leads to yet further inappropriate prescriptions of psychoactive, sedative medications which may further mask older peoples' need for pain control (Joseph and Harvath, 1998).

In the US, Brockopp et al. (1996) found that older people themselves had inappropriate fears about opioid analgesics. Fear of becoming addicted to opioids was also a reason cited by Wallace (1994) and Loeb (1999) for older people refusing medication. In Australia, Lansbury (2000) found that perceived barriers by older people to pain management were concerns over the side-effects of analgesics, fear of loss of control or independence if engaged in treatment and the mismanagement of medications by healthcare professionals due to a lack of understanding of older people's needs.

While it is accepted that in some older people there is increased sensitivity to the effects of opioid drugs and in such cases they should be used with extreme caution (Forman, 1996), this does not justify the inadequate treatment of pain due to withholding opioids (Ferrell, 1995; Fine, 2001; Herr, 2002).

9. Knowledge and performance deficits

Friedman (1990) reiterated that generally patients with opioid-sensitive pain were under-treated due to exaggerated fears of addiction. This risk was over-estimated due to a lack of understanding among healthcare professionals of the relevant terminology and lack of knowledge about the proper use of opioids (Friedman 1990). According to Hill (1996), the reluctance to treat pain adequately is due not only to cultural and social barriers to appropriate opioid drug use, but is compounded by knowledge deficits regarding opioid pharmacology. Fine (2001) highlights the need for those who care for older people to update their pharmacological knowledge in regard to opioids.

Lander (1990) surveyed nurses ($n = 199$) employed on medical, surgical and paediatric wards of a general hospital in the US, although their distribution between each area was not specified. Among the 53% of nurses

($n = 63$) who responded, Lander (1990) noted that they were confident in their ability to judge pain and were likely to consider patients' pain reports in the context of their own beliefs. However, the survey indicated the existence of misconceptions about pain and pain management, in particular, considering opioid addiction to be a greater risk to patients than is the case. Lander (1990) concluded that overconfidence regarding clinical performance, combined with inadequate knowledge of pain and pharmacology could potentially result in the under-treatment of pain.

Reflecting problems in the UK, Seers (1987), undertook a survey comparing surgical patients' pain reports ($n = 80$) with estimations by nurses ($n = 28$) on three surgical wards of a London hospital, of patients' pain and the subsequent action taken. Seers (1987) noted that nurses frequently did not assess for or underestimated patient's pain and that nurses attitudes towards painkillers and their administration contributed to less than ideal pain relief. In a paper prepared for the RCN pain research interest group, Davis and Seers (1991) stated that unnecessary pain was being suffered by people in the care of nurses, partly due to nurses' lack of knowledge about pain. Furthermore, they suggested that it was not sufficient to assume that the subject of pain is addressed properly during initial nurse preparation and they recommended that a specific pain component should be included in the nursing curriculum. They highlighted the need for nurses to improve the standards of care related to pain management and to be active in instigating change. The authors recommended that the route to success lay in improved nurse education at all levels, both pre- and post-registration, but particularly within pre-registration programmes (Davis and Seers, 1991).

Forrest (1995) called for nurses caring for older people to improve their pain assessment skills and to incorporate tools for doing so into their nursing care regimes on a consistent basis. McCaffery and Ferrell (1997) noted that lack a of knowledge about pain management among nurses in the US has been evident for some years. While survey evidence has demonstrated that some progress has been made in recent times, knowledge deficits were still evident, particularly regarding pain assessment and issues concerning the use of opioid analgesics. McCaffery and Ferrell (1997) emphasised the need for continuing professional education. However, subsequently, McCaffery and Ferrell (1999) reiterated that too many nurses still lacked basic knowledge to manage pain appropriately, with Katsma and Souza (2000) and Herr (2002) highlighting the need for ongoing education on pain assessment and management specific to older people in long-term care.

Closs (1996) found that UK nurses in acute surgical areas tended to have better knowledge of pain issues (including pain in older people), than nurses employed in units caring for older people. She concluded that education was required regarding the special needs of older people which should be aimed at a wide spectrum of nurses who care for older people, regardless of seniority or experience, in particular the use of and risks associated with analgesic drugs. She also noted that older people need to be encouraged to report their pain and such reports need to be acted upon with the development of validated methods of pain assessment, especially with a view to providing better pain control for older people with communication difficulties being imperative. In a comparative survey (total $n = 24$) Gibbs (1995) found that nurses ($n = 14$) employed by the National Health Service (NHS) on wards for older people were able to offer more treatment strategies for pain relief than nurses ($n = 10$) employed in private sector care homes for older people. The study uncovered evidence of an expression of the need for better access to post-basic education in the areas of pain management and palliative care in both groups and of feelings of isolation among nurses in the private sector. These nurses felt that they were not given information about courses or the opportunities to attend them. Furthermore, in contrast to the NHS-employed nurses, none of the nurses in the private sector felt that support from clinical nurse specialists or senior doctors was available to them. Most nurses from both groups were resigned to the probability that if they were to attend courses they would have to do so in their own time and be self-funding (Gibbs, 1995). Similarly, Nazarko (1996) found in a survey of care home nurses ($n = 41$) that nurses often faced difficulties in acquiring the necessary funding and getting time off work to attend courses, even to meet basic post-registration education and practice (PREP) requirements.

Davies and McVicar (2000b) have noted that pain in the general population (including among older people) is still under-treated in the UK due to misconceptions regarding pain and the pharmacology of pain control, and is not likely to be addressed while such misconceptions persist. They suggest that nurses may even subconsciously pass these misconceptions on to patients and their families with the resultant risk of poor patient adherence to treatment. They pointed out that nurses are involved in pain assessment and evaluation, and with the requisite knowledge they could make important contributions to the formulation of effective care strategies, but this does not appear to happen currently in the UK (Davies and McVicar, 2000b). Recent surveys of nurses' knowledge of pain amongst older people in the US (Horgas and Pao-Feng, 1998; Glajchen & Bookbinder, 2001), Canada (Kaasalainen et al., 1998), Australia (Sloman et al., 2001) and Sweden (Blomqvist and Hallberg, 1999, 2001), have suggested that similar problems continue to occur in other parts of the world.

10. Implications for the future

Davies and McVicar (2000a) have suggested that despite some recent signs of improvement in the UK, the assessment of pain by nurses remains problematic. They endorsed the recommendations made nearly 10 years previously by Davis and Seers (1991), and reiterated that too little curriculum time is spent on teaching pain. They also stated that it is difficult to assess the uptake of Davis and Seers' (1991) recommendations because there is a paucity of research relating specifically to the pain content of nurse training. Davies and McVicar have advocated that nurses must be aware of their own attitudes and beliefs about pain to prevent attitudinal barriers developing. Furthermore, nurse educators must possess up-to-date knowledge and skills, conveying a positive approach to pain management and avoiding the perpetuation of negative attitudes (Davies and McVicar, 2000a). However, while more education is required, equally, it is important to ensure that access to such education is possible. Nurse's employers must ensure that nurses do not experience a lack of post-basic education opportunities and give them support in accessing ongoing professional development. Recent studies suggest that this may not be the case among nurses employed in UK care homes for older people (Gibbs, 1995; Nazarko, 1996). Furthermore, there is limited evidence to suggest that nurses in private sector care homes, who often experience a sense of isolation, could benefit from the activities of clinical nurse specialists being extended into these homes, thus enabling them to consider ways in which pain management may be improved (Gibbs, 1995).

The reported high prevalence of pain in older people in long-term care facilities has been described as a public health issue not only in the USA (Fox et al., 1999) but also globally (Pickering et al., 2001). This review has identified several barriers to the adequate treatment of pain in older people, in care homes in particular, which need to be addressed. There is evidence to suggest that both older people and healthcare professionals hold ageist attitudes leading them to believe that experiencing pain is an expected consequence of the ageing process. These beliefs may lead to the neglect of pain that is otherwise treatable. Also, pain may be under-detected due to cognitive and physical impairments, which may hinder communication with healthcare professionals. This under-detection combined with under-reporting of pain by older people is likely to be further exacerbated by the lack of knowledge of pain issues among healthcare professionals, resulting in significant under-treatment of pain.

The increasing number of older people requiring interventions for improved health and social care is identified as a crucial challenge for the 21st century (European Commission Research Directorate, 2002). It is likely that older people experience the highest incidence of pain. It is therefore a common problem which has the potential to influence the function and resultant quality of life of older people during their remaining years (Ferrell 1991).

The implications of where inadequate treatment of pain of older people may ultimately lead to is illustrated by the following case. In 2001, a Californian court found a doctor guilty of recklessness and abuse under California's 'Elder Abuse and Dependent Adult Civil Protection Act'. The charge was one of not providing adequate pain medication for an 85-year old man with cancer pain. An increased number of cases of this type are expected in the future (Pasero and McCaffery, 2001). Despite this, there is a lack of research both in the UK and globally (Closs, 1996; Herr and Garand, 2001; Helme and Gibson, 2001; Kamel et al., 2001), with pain being particularly understudied in long-term care settings (Ferrell et al., 1990; Sengstaken and King, 1993; Davis, 1997; Fox et al., 1999; Katsma and Souza, 2000).

The UK government's National Service Framework (DoH, 2001) for older people stated that older people should receive effective treatment and appropriate medication management and that the medication needs of older people should be regularly reviewed and discussed with older people and their carers. In view of the fact that almost half of NHS drugs expenditure is on older people, there is a need to ensure that such expenditure is spent in a cost-effective manner (DoH, 2001). For example, by preventing the potential for impairment and disability in this population caused by the under-use of analgesics and over-use of psychoactive medications (Joseph and Harvath, 1998). This is likely to improve and maintain the health of older people. If the UK government's pledge to provide high-quality care and treatment for older people (DoH, 2001) is to be realised, then the design and implementation of effective pain management and prescribing programmes for older people is now needed.

To effectively facilitate the above action in the UK, it is necessary to conduct research into determining the prevalence of pain among older people in care homes, how best to assess and manage their pain and how best to further educate healthcare professionals regarding pain assessment and management. Further research is also needed to determine how best to educate healthcare professionals and older people regarding attitudes to pain and ageing, as well as enabling older people to be facilitative partners in the management of their pain.

Effective pain management should reduce morbidity, enhance coping with disability, prevent incapacity and enhance the functional independence and overall quality of life of this population. This should also ease the financial burden of long-term care and result in

considerable savings of financial expenditure on healthcare.

11. Conclusion

The notion that being in pain is a natural part of the ageing process needs to be challenged together with the absence of sound evidence to inform nursing practice. Additionally, efforts to develop the professional practice of registered nurses should be extended to include those nurses working outside the hospital setting, as it is these nurses with whom older people have most contact. World wide demographic trends make the need to address the neglected pain control needs of older people a priority both for research and nursing practice.

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