Assessing Pain in Cognitively Impaired Older Adults With Cancer

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Patients with cancer may experience acute, chronic, and uncontrolled pain. About 75% of patients with advanced cancer experience some form of pain. The most common types of cancer pain are somatic, visceral, and neuropathic. Somatic pain occurs as the result of injury to tissue or bone, visceral pain occurs in body organs, and neuropathic pain involves the neurologic pathways and is described as a tingling or burning sensation (McDonald, 1999). Healthcare professionals must assess pain accurately so that they may take appropriate steps to provide a pain-free state for patients.

Oncology nurses report pain control to be one of the more challenging aspects of caring for patients with cancer. Three decades ago, Margo McCaffery proposed a realistic definition of pain that guides nursing practice today. “Pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does” (McCaffery, 1968, p. 95). Assessing pain becomes more difficult when patients with cancer are cognitively impaired. Prior to such assessment, healthcare providers must distinguish between impairment related to opioid use and impairment secondary to dementia, delirium, Alzheimer’s disease, or a cerebral vascular accident. Opioid-related cognitive dysfunction tends to be subtle in the earlier stages of cancer, and delirium is likely to be present in patients with advanced cancer (Lawlor, 2002). In patients with advanced disease, careful clinical assessment is essential, and either dose reduction or use of a different opioid might be necessary.

The ability to assess pain is hindered in cognitively impaired older adults by the subjective nature of pain and the inappropriate use of assessment tools (McDonald, 1999). Traditional pain scales may not be appropriate for use with cognitively impaired older adults. This article describes methods and tools that can be used to assess pain in this population and specific behavioral indicators that healthcare providers should recognize to assess pain accurately among this population, and the most appropriate pain scales to use when assessing pain in this population.

Key Words: cognition disorders, pain measurement, aged impaired older adults with cancer. Compounding this problem is the fact that cognitive impairments can occur in varying degrees. Not all patients with cognitive impairments are alike; therefore, care must be individualized.

Simons and Malabar (1995) studied pain behaviors in older adults with a variety of medical conditions. Nurses observed pain behaviors in cognitively impaired older adults using the Scale of Discomfort designed by Hurley and colleagues (Simons & Malabar). The behaviors used to assess discomfort were breathing noisily, having an absent look of contentment, looking sad, looking frightened, frowning, having an absence of relaxed body posture, looking tense, and fidgeting. Simons and Malabar found that pain interventions, such as analgesia administration, eliminated the behaviors in a vast majority of the patients studied. When pain behaviors persisted, changing the analgesia effected the desired change (Simons & Malabar).

A more recent study (Kovach, Griffie, Muchka, Noonan, & Weissman, 2000) examined nurses’ perceptions regarding assessment and treatment of pain in people with late stage dementia. Thirty nurses were interviewed, and all agreed that cognitively impaired older adults provided behavioral cues to indicate pain. Facial grimacing and restless body movements were the most...
common signs described (Kovach et al.). Moaning and individualized changes in behavior also were common symptoms. The nurses who participated in the study noted that assessing pain in cognitively impaired patients was not a subject included in their nursing school education. Many also noted that assessing pain in such a population depended greatly on knowing the patient and paying attention to slight changes in behavior.

Krulewitch et al. (2000) compared three pain assessment tools used by caregivers for the cognitively impaired: the Faces Pain Scale (FPS), Nonverbal Visual Analog Scale (VAS), and Philadelphia Pain Intensity Scale (PIS). The FPS consists of seven pictures of faces with expressions ranging from a smile, depicting no pain (scored 0), to a face reflecting exacerbating pain (scored 6). Participants are instructed to choose the face that best represents their pain. The VAS is a 10-cm, linear scale anchored with “no pain” and “worst pain.” Participants mark pain intensity on the line. The PIS contains six questions. For questions one through five, subjects are asked to respond with “not at all,” “a little,” “moderately,” “quite a bit,” or “extremely.” For question six, participants are asked how many days per week they experience pain. Krulewitch et al. found that 44% of 156 subjects were able to complete the FPS. 44% were able to complete the VAS, and 79% were able to complete the PIS. A third of the participants were unable to complete two of the scales. Agreement between caregivers and the cognitively impaired subjects was significant on all three pain measures. Of the three pain scales studied, the PIS was deemed most appropriate for use with this population. More cognitively impaired subjects were able to complete the PIS than the VAS and the FPS, and it had the strongest correlation between patients and caregivers (Krulewitch et al.).

Of the 2 million elders residing in nursing homes, 49%–83% experience pain and 50% are cognitively impaired (Epps, 2001). Ferrell, Ferrell, and Rivera (1995) studied 217 residents of a nursing home who were dependent in all activities of daily living. The study was designed to evaluate what percentage of nursing home residents with substantial cognitive impairments (including deficits in memory, orientation, and visual or spatial skills) could be accurately assessed using five pain scales: the McGill Pain Questionnaire (MPQ), Numeric Rating Scale (NRS), VAS, Memorial Pain Card (modified Turskey Scale), and Rand Dartmouth Primary Care Cooperative Information Project (COOP) Functional Assessment Chart for Pain. Arthritis was the most common etiology identified as the primary complaint (70%), followed by old fractures (13%), neuropathies (10%), and malignancies (4%). Of the five pain scales, 83% of the study subjects were able to complete at least one, with the highest completion rate reported for the MPQ (65%), a 78-word descriptor scale. For the purpose of the study, questions were divided into 20 subsections. Subjects were asked to indicate words that described their pain. Scores were calculated by the sum of the rank values of words chosen in each of the 20 categories (Ferrell et al.). The Memorial Pain Card and the COOP chart had completion rates of 59% and 57%, respectively. Subjects demonstrated the most difficulty using the VAS and the NRS. Of the 217 subjects, 17% were unable to complete any of the tools. They were not comatose or incapable of feeling pain and were able to make their needs known in a qualitative, but not quantitative, manner (Ferrell et al.).

Setting the Stage for Assessment

The effective and appropriate assessment of pain in cognitively impaired older adults is a challenge. It is an ongoing process that requires the use of verbal and nonverbal cues. To adequately assess pain in such patients, a proper working environment is essential.

Cognitively impaired older adults easily can become overstimulated. This can be expressed by agitation, depression, or combativeness (Victor, 2001). Therefore, before beginning assessments, healthcare providers must eliminate distractions such as conversations, loud noises, or televisions. When talking to patients, simple, specific questions pertaining to the here and now are most appropriate. Maintaining eye contact and speaking in a calm manner also is required (Victor). When repeating questions, use the same words to avoid confusion. Avoid invading patients’ personal space (e.g., sitting on a bed with a patient, leaning in too close to a patient sitting in a chair). However, hearing deficits, which are common among older adults, can compound the problem. Invasion of personal space can be perceived as threatening to cognitively impaired older adults and may alter assessment findings (Victor).

Behavioral Indicators

Behavior is the key to understanding pain in confused people. Pain always should be ruled out as a causative factor when behavior changes occur (McDonald, 1999). When assessing behavioral cues in cognitively impaired older adults, healthcare providers working consistently with patients must look for subtle changes in behavior. Nurses have the most direct contact with patients; therefore, they are in the best position to notice subtle changes (Kovach et al., 2000). According to Kovach and colleagues, indicators for which nurses should be alert include, but are not limited to, facial grimacing, restless body movements, changes in behavior (individualized), moaning, tense muscles, agitation, combative ness, pulling away when touched, changes in mobility, holding of a certain body part (splinting), and withdrawal.

Parke (1998) noted that pain cues represent changes in overt behaviors, sounds, or appearances. Examples of changes in overt behaviors include aggressiveness, restlessness, and agitation. Changes in sounds include increases or decreases in verbalization or vocalization. Changes in appearance may include facial expressions or body language. Understanding cognitively impaired older people includes being familiar with their everyday personality traits, thought and behavior patterns, and activities of daily living preferences.

The more time spent with cognitively impaired older adults, the more opportunity healthcare providers have to learn particular traits. Recognizing change is the initial step in determining whether cognitively impaired older adults are experiencing pain (Parke, 1998). Patients’ family members and friends often are attuned to changes in their loved ones’ behavior, and their input also can assist healthcare providers in assessing pain.

Another way to determine when cognitively impaired older adults are in pain is intuitive perception. However, not all healthcare providers experience intuitive perception. It develops from having relationships and experiences with a variety of cognitively impaired older adults who are experiencing pain (Parke, 1998). All healthcare providers have had internal feelings that something was not right with their patients. Acting on such an intuitive perception could be the step needed to initiate a pain-free state for a cognitively impaired older adult experiencing pain.

Using behavioral indicators helps nurses to develop an individualized approach to pain assessment rather than a standardized approach. Assessment based on individual experiences will improve pain assessment for cognitively impaired older adults with cancer.
Pain Scales

Numerous tools are available to assess pain. Choosing the most appropriate one for cognitively impaired older adults with cancer presents a difficult challenge. The VAS, Verbal Descriptor Scale (VDS), FPS, and MPQ are used most commonly. However, in studies of pain assessment among cognitively impaired older adults, 17%–33% were unable to complete a pain scale or questionnaire (Ferrell et al., 1995; Krulewich et al., 2000). Therefore, for some patients, nurses might need to rely solely on nonverbal cues when assessing pain in cognitively impaired older adults.

Visual Analog Scale

The VAS is the most commonly used instrument to measure pain intensity. The scale is a unidimensional approach to pain assessment and consists of either a vertical or horizontal line 10 cm in length. The value 0 represents no pain, and 10 represents worst pain. Patients place a line at the point between 0 and 10 that best represents how severe their pain is. The scale is easy to administer to individuals who are cognitively intact, but it may be too abstract for cognitively impaired older adults. According to Herr and Garand (2001), failure to understand how to use the VAS was related to educational level, cognitive impairments, and motor abilities.

When administering the VAS to cognitively impaired older adults, a vertical presentation is preferred over a horizontal one (Herr & Garand, 2001). Conceptualizing pain increasing just as temperature rises may be easier (Herr & Mobily, 1991). A study by Stephenson and Herman (2000) indicated that a vertical line was easier for patients with a variety of pain problems (i.e., abdominal, dental, labor, postoperative, and orthopedic) to use than a horizontal line.

Verbal Descriptor Scale

The VDS is another easy to administer, unidimensional pain scale. It consists of words that describe different levels of pain intensity (i.e., “no pain,” “mild pain,” “moderate pain,” “severe pain,” “and extreme pain”). Patients place a mark next to the word that best represents pain intensity experienced at that time. According to Herr and Garand (2001), 100% of 89 older adults were able to complete the VDS. When evaluated for use among mild to moderately cognitively impaired older adults, 73% were able to complete the scale.

Faces Pain Scale

The FPS was developed for use with pediatric patients. The eight-point scale depicts varying levels of discomfort through facial expressions. Patients select the expression that best represents their present state of pain (Herr & Mobily, 1991). The FPS has been used on cognitively impaired older adults with moderate success. The scale is a reliable and valid alternative for assessing pain in patients with mild to moderate cognitive impairments (Herr & Garand, 2001). The ability to complete the FPS has been evaluated in a sample of diverse ages, including 83 adults older than 60. The FPS was selected as the easiest to use by 47% of the participants older than 60 (Herr & Garand).

McGill Pain Questionnaire

The MPQ is a four-part, multidimensional approach to pain assessment that measures both physiologic and psychological dimensions of pain (McGuire, 1984). One part consists of drawings of the human body on which patients indicate location of pain. The second part is comprised of 20 lists of words that describe the quality of pain. Patients select only the words that describe their pain. The third part assesses patterns of pain. The fourth part evaluates the intensity of the pain on a 0–5 scale with corresponding word descriptors (McGuire). The MPQ is longer than the other scales discussed in this article and may not be appropriate for cognitively impaired older adults. A shorter version of the MPQ that consists of a 15-word descriptor list may be more appropriate for use with this population. For the shorter version of the MPQ, patients circle the word that best describes their pain. However, the shorter version does not locate pain. According to Ferrell and colleagues (1995), none of the unidimensional pain intensity scales is ideal for assessing pain in cognitively impaired older adults.

Choosing the Right Method

Wynne, Ling, and Reinsburg (2000) compared the VAS, VDS, FPS, and the short version of the MPQ to determine which scale was most useful for use with residents of nursing homes. Sixty-four percent of the residents studied were cognitively impaired. Of the 37 patients who completed the study, 49% were unable to use the VDS, 43% were unable to use the VAS, 39% were unable to use the FPS, and 27% were unable to use the short version of the MPQ. The results suggested that the short version of the MPQ may be the easiest instrument to use to assess pain among residents of nursing homes.

The importance of continuity in care in identifying subtle behavioral changes that may be suggestive of pain among cognitively impaired older adults with cancer is noted in the literature. However, many barriers to ensuring continuity of care and continuous pain assessment of the cognitively impaired exist in the current system of health care. Having the same clinicians care for such patients is not always possible, but an effort can be made in hospitals, clinics, offices, and home care to have one (or a few) healthcare providers care for those with cognitive impairments so that changes can be better assessed over time. Information from family members is valuable and always should be included when assessing patients with cognitive impairments.

Good lighting, appropriate wording, and the avoidance of overstimulation are the first steps to assessing pain in cognitively impaired older adults with cancer. Being aware of specific behavioral indicators and intuitive perception can help healthcare providers assess pain in patients with severe cognitive impairments. Finally, the VAS in vertical presentation, the VDS, the short version of the MPQ, and the FPS are tools appropriate for use in assessing pain in patients who have mild to moderate cognitive impairments. Although challenging, thorough pain assessment of cognitively impaired older adults with cancer is possible. To be effective, assessment must be ongoing and comprehensive so that a pain-free state can be achieved in such patients.

Conclusion

Pain is common among cognitively impaired older adults with cancer. Accurate
assessment of pain is necessary so that interventions can be applied to enhance quality of life. Using a combination of behavioral indicators and pain scales can significantly improve pain assessment in this population. Healthcare providers are responsible for assessing pain individually and correctly and ensuring that pain is managed effectively in such patients. Although significant advances have been made in this field, additional research is needed to further assess pain in cognitively impaired older adults with cancer.

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References


Rapid Recap

Assessing Pain in Cognitively Impaired Older Adults With Cancer

- The assessment of pain in cognitively impaired older adults is hindered by the subjective nature of pain and the limitations inherent in using assessment tools that require adequate cognitive and motor ability.
- The assessment of pain in cognitively impaired older adults with cancer is an ongoing process and includes being alert for verbal and nonverbal cues.
- Behavioral indicators of pain include facial grimacing, restless body movements, changes in behavior, moaning, muscle tension, agitation, combativeness, pulling away when touched, changes in mobility, holding a certain body part, exiting behavior, and withdrawal.
- Good lighting, appropriate wording, and the avoidance of overstimulation are the first steps to assessing pain in cognitively impaired older adults with cancer.
- The Visual Analog Scale in vertical presentation, the Verbal Descriptor Scale, the Faces Pain Scale, and the short version of the McGill Pain Questionnaire appear to be the most appropriate tools to use when assessing pain in this population.
- The use of a combination of behavioral indicators and pain scales can significantly improve pain assessment in this population.