Pain Assessment in Hawaii Nursing Homes

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Abstract

Nursing home personnel from adult long-term care facilities on Oahu were surveyed on their pain assessment practices with demented and non-verbal residents. Many reported having difficulties evaluating pain in these residents. Observation and standardized pain assessment scales were most frequently used pain assessment methods. Recommendations are made about how to improve pain assessment with demented and non-verbal patients.

Introduction

The population of individuals over the age of 65 in Hawaii is growing at a rapid rate. It is estimated that this group of elderly will double by the year 2025.[1] However, extended life expectancy and increasing age are associated with likelihood of living with chronic and/or disabling conditions, many of which are associated with experiences of pain. The consequences of untreated pain can be dire, including depression, fatigue, decreased socialization, sleep and appetite changes, and increased physical disability.[2,3]

Studies on the prevalence of pain among community and nursing home residents indicate ranges from 25% to 80%.[4,5,6-21,7] A recent Minimum Data Set (MDS)[8] report by the American Medical Association determined that 2.2 million of nursing home residents across the United States suffer from persistent pain.[9] In Hawaii, in 1999 there were 5,268 nursing home residents, with nearly 38% reporting experiencing severe pain.[9] These ratings were collected through an analysis national repository of MDS data.

Assessment of pain among nursing home patients is crucial and is the initial step in treatment planning. Furthermore, research indicates that inappropriate pain assessment measures used for pain detection result in under-diagnosis and under-treatment of pain.[10-12] In addition, reporting habits of the elderly, acceptance of these pain reports by the medical professionals and their reluctance to administer analgesics to frail elderly[13] are additional factors in poor pain treatment. Patient communication, memory and/or emotional disabilities can also hinder pain assessments.

A number of studies evaluated appropriateness of various pain assessment tools to be used with non-verbal, confused, demented, and cognitively impaired elderly.[11,14,15] These pain assessment approaches can be divided into two categories: behavioral observation and patient self-report. Behavioral observation methods include, but are not limited to, observation of changes in behavior and functioning including sleep, appetite, physical activity, mobility, and facial/body language. A number of behavioral observation schedules have been developed.[14,16-19] Several patient self-report scales are also available, as seen in Figure 1.

Figure 1.– Pain Assessment Measures

- Observational Assessment McGill Pain Questionnaire [20]
- Visual Analog Scale of Pain Intensity [21]
- Verbal Rating Scale of Pain Intensity [21]
- A Faces Scale of Pain Intensity [22]
- Rand COOP Chart [23]
- Memorial Pain Card Subscale [24]

However, nurses and direct care personnel may not be aware of such assessment tools, and may rarely, poorly or inconsistently use them.[25] According to Coyne and colleagues, nursing and medical personnel are usually poorly trained in pain assessment, with most receiving 1-4 hours of pain management content during their curricula.[26]

In this study we inquired regarding pain assessment practices among nursing home/direct patient care personnel on the island of Oahu, Hawaii. The respondents were all asked about their use of published and well-researched pain assessment measures. The measures (Figure 1) selected included both observational and patient self-report assessment tools. We did not provide specific descriptions and/or information regarding the assessment measures.

Methods

A non-experimental design and a descriptive approach were used to examine pain assessment techniques among nursing homes and extended geriatric care facilities on the island of Oahu, Hawaii. A fourteen-item survey was mailed to 23 nursing homes/extended care facilities listed in the GTE Pages Directory for Oahu.

Participants

9 out of 23 nursing homes/extended care facilities responded to the survey. 78% of the facilities were located in Honolulu (n=7). Two facilities were located outside of Honolulu, one of the Windward side of Oahu, another on the North Shore. Numbers of beds in the facilities that participated ranged from 5 to 182 (Mean number of beds = 70). A total of 20 individual surveys were returned com-

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pleted. Overall response rate was 39%, with an average of one participant from each of the facilities (range of participants per institution 1-5). 90% of the surveys were completed by females (n=18). 30% of the respondents had an Associate's Degree (n=6), and 25% were Registered Nurses (n=5). Equal number of respondents had a Master's in Nursing Degree (n=4) or a combination of degrees (n=4). One participant was a Licensed Practice Nurse.

Instruments

A 14-item survey was constructed that included both closed- and open-ended questions. This survey was developed specifically for this study. The survey included items on demographics, pain assessment tools, frequency of pain assessment, whether report of pain is recorded, and whether participants experienced difficulty in assessing presence of pain and intensity among the non-verbal and demented residents.

Statistics

All of the variables were analyzed using descriptive statistics.

Results

100% of the participants reported that they treat pain and painful conditions at their facility. We did not inquire about the age range of the patient population; however, 100% of respondents reported their facilities treat individuals over the age of 65. 60% of participants reported that they conduct pain assessments with every patient they work with during their shift, and all of them reported that they record their evaluations following each inquiry. However, only 40% reported that they conduct pain assessments on a schedule (i.e., at the same time of day), regardless of the presence or absence of pain complaints from the patient. 70% of participants reported consistency with pain assessment measure(s) (i.e., using same assessment procedure(s) with the same patient). The most frequently utilized approach used by 35% of respondents, was a combination of behavioral observation, faces (i.e., a row of human faces with the range of facial expressions) and verbal analog scales, followed by the combination of behavioral observation, faces, visual and verbal analog scales (30%). 15% of participants reported using both observation and verbal analog scales, 10% reported using the McGill (a standardized pain questionnaire), and 5% reported using a combination of behavioral observation, visual and verbal analog scales. Other pain assessment methods reported included observation of changes in mood, physical functioning (e.g., appetite, sleep, movement), motor agitation, and facial grimacing.

Frequency of pain assessment during a single 8-hour shift varied greatly: 35% of participants stated that they evaluate pain on an "as needed" basis; 25% ask once during their shift; 25% ask twice; 5% ask 3 times; 5% ask 4 times; and 5 % ask 10 times.

75% of participants responded that they find it difficult to assess presence of pain among patients with dementia. 65% indicated having difficulties evaluating presence of pain among patients who are non-verbal.

Discussion

This study is the first one to document pain assessment practices in nursing homes on the island of Oahu, Hawaii. Due to a small number of participants and an incomplete response rate, it is difficult to make definitive conclusions about the quantity and quality of pain assessment practices. Furthermore, due to a limited number of facilities with multiple participants, we are unable to report on any differences in pain assessment methods by different personnel in the same facility. Further research utilizing larger, more complete samples is recommended. Such studies will provide information regarding pain assessment and treatment practices in Hawaii to contribute to future program planning.

Although our findings are not conclusive, we did find that most care personnel reported having difficulties evaluating pain in demented and non-verbal elderly. This is a serious concern, since many nursing home residents suffer from cognitive and other conditions that affect their ability to communicate about their concerns, including pain.

A number of ways to improve pain assessment practices among nursing home personnel can be suggested. Awareness about potential cultural differences in expression of pain and treatment seeking behavior in a culturally diverse population of Hawaii is one of the essential and necessary tools for successful clinical practice.[27,28] Learning about patient pain beliefs and myths about pain may assist health professionals to discuss some of the barriers experienced by patients and health practitioners about pain control. Professional training and continuing education should provide information on specific pain assessment tools and measures, teach about misconceptions on pain and aging, and provide hands-on experiences assessing difficult patients. Many professionals in this study are already using standardized pain assessment tools in their work, indicating a good foundation for further strengthening pain assessment skills. Improving multidisciplinary communication with primary care physicians in order to provide comprehensive care to nursing home residents is also very important.

Measures of patient self-report vary significantly by degree of complexity, ranging from extensive questionnaires and/or interview assessments, to brief visual, verbal and number rating scales. Many nursing home residents experience communication, comprehension, and sensory problems [15], making it difficult for them to respond to such assessment tools. Ferrell and colleagues [2] reported that one out of five institutionalized patients they interviewed was unable to respond to "Yes" or "No" questions, therefore being unable to report presence and/or significance of their pain experience. Additionally, those individuals who were able to respond regarding presence of pain were unable to quantify their pain experience.[2,29] Therefore self-report measures need to be designed using simple cognitive parameters that would enable nursing home residents to report and to quantify their pain.

Finally, care personnel need to be aware that not every pain assessment tool will be appropriate for every patient. Verbal, visual and/or faces scales may not be simple enough for demented and/or non-verbal elderly. These assessment tools require abstract thought, ability to recall previous experiences/events, comprehension, verbal ability, and ability to recognize emotions in self/other all of which are impaired in individuals with dementia and in some people who are unable to respond verbally to questions and instructions. Patient-administered and/or physician-, nurse-administered questionnaires generally are not appropriate to use with demented patients. However, some non-verbal patients who are cognitively intact may prefer to complete such measures, because it provides

them with an opportunity to report their concerns about their pain experience.

Flexibility and incorporation of pain measurements into patients' daily routine are some of the ways to improve assessments and patient care. Because there is variability in patient pain behaviors, initial pain assessment should focus on regular observation of the patient in a number of daily activities. A measure frequently suggested in pain assessment literature is a brief observation schedule, developed by Simons and Malabar.[14] This scale includes patient demographic information, a pain assessment chart to record time, response and site of pain, and a list of 25 observable pain behaviors. Observable behaviors include verbal responses to pain, facial expressions, body language, physiological changes, behavioral changes, feedback from others, and state of consciousness. This instrument represents a promising approach to use in nursing homes.

Pain assessment with demented and non-verbal patients is a critical issue, particularly since the number of individuals over 65 is growing rapidly in the State of Hawaii. Further research, training, and use of multidisciplinary treatment approaches will provide significant improvements in quality of life, physical and emotional functioning among nursing home patients.

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