Pain: Overview

Pain is the most common reason individuals seek medical attention. According to the American Pain Society (APS), 50 million Americans are partially or totally disabled by pain, and 45% of all Americans seek care for persistent pain at some point in their lives.

Defining Pain
What is pain? The International Association for the Study of Pain gives this definition: “an unpleasant sensory and emotional experience” (Merskey and Bogduk, 1994). Pain is recognized as a complex phenomenon derived from sensory stimuli and interpreted by the individual (Sternbach, 1978). There are no biological markers of pain. Therefore, the most accurate evidence of pain and its intensity is based on the patient's self-report (Turk and Melzack, 1992). A simpler definition might be that pain is “whatever the person says it is, existing whenever he/she says it does” (Teno et al.). Pain may include a range of physiological, emotional, and sensory symptoms, such as aching, throbbing, burning, numbness, squeezing, pressure, cramming, and tightness. These sensations may vary in severity, persistence, source, and management.

Prevalence
Pain is reported to be twice as prevalent in the elderly as in younger individuals (Crook et al., 1984). In community-dwelling elders, the prevalence of pain ranges from 25-50% (Mobily et al., 1994). In the long-term care setting, prevalence can be as high as 85% (Stein et al., 1996). According to the American Geriatrics Society (AGS) Panel on Chronic Pain in Older Persons (1998), chronic pain in the long-term care setting is generally under-recognized and undertreated. Treatment for chronic non-cancer pain among those with non-terminal illness especially, has been neglected. Teno et al., in their study “The Prevalence and Treatment of Pain in US Nursing Homes,” found that pain abounds in nursing homes, and that nearly one-sixth of all nursing home residents were reported to be in daily pain. For residents with cancer, slightly more than one in five was in daily pain. Symptoms of pain were noted on the last assessment of nearly one in five individuals who died, and the final pain assessment for these residents was, on average, 47 days before death.

Barriers and Misconceptions Regarding Recognition of Pain in LTC
Pain is under-recognized for many of the same reasons that the early signs and symptoms of many other conditions, such as depression, congestive heart failure, and adverse effects of medications are under-recognized in the long-term care setting. The clinical practice guidelines for “Chronic Management in the Long-Term Care Setting” from the American Medical Directors Association (AMDA), identified some of the following barriers regarding the recognition of chronic pain in the long-term care setting:

Co-existing Illnesses, Multiple Diagnoses, and Multiple Medication Use Barriers
Illness such as depression, multiple diagnoses such as DJD, diabetes, cancer (occurring at the same time), as well as multiple medication use may reduce residents’ ability to interpret or report pain. The use of multiple medications also may modify response to pain, hindering staff ability to recognize that a resident is in pain.

Cognitive and Communication Barriers
Cognitive impairment, delirium (common among the acutely ill elderly), and dementia, which occurs in as many as 50% of the institutionalized elderly pose serious barriers to pain assessment. Residents may be unable to report feeling pain or to respond to caregivers’ questions about pain because of cognitive or sensory impairments, or because of difficulties with language or speech. Direct care staff or supervisors may fail to recognize the behaviors or language of the cognitively impaired residents that suggest the presence of pain.

Cultural and Social Barriers
Racial, ethnic, and gender biases held by both residents and caregivers may hinder residents from reporting pain and may reduce caregivers’ sensitivity to the signs and symptoms of pain. Strongly held religious beliefs may prevent residents from acknowledging pain or accepting treatment for pain.
Atypical Presentation
Elderly residents in general may not show the typical signs and symptoms of a condition or may not exhibit the expected signs and symptoms to the same degree as younger residents.

Staff Training and Access to Appropriate Tools
Care giving staff may not have knowledge of or be skilled at assessing pain or at using valid tools that are available to screen for pain.

System Barriers
High turnover of direct caregivers, poorly functioning care teams, insufficient commitment to pain management by the leadership in long-term care facilities, and the highly regulated nature of the long-term care setting may result in a system that fails to give priority to the recognition, assessment and treatment of pain. Other factors may include inappropriate nurse/resident ratios, physician reluctance to use opioids for non-malignant pain, the lack of staff knowledge or appropriate tools, and the fear of regulatory scrutiny.

In addition to the above-mentioned issues regarding the under-recognition of pain, there are several specific reasons rooted in the nature of pain and societal attitudes toward it. Pain is subjective and lacks objective biological markers.

Some of the common misconceptions about chronic pain in elderly people include:

- Residents in long-term care say they are in pain in order to get attention.
- Elderly residents are likely to become addicted to pain medication.

The most accurate and reliable evidence of the existence of pain and its intensity is the residents’ self-report. Elderly people often describe discomfort, hurting, or aching, rather than use the specific word “pain.”

Unrelieved chronic pain is not an inevitable consequence of aging. The presence of pain is always abnormal. Certain conditions that cause chronic pain are more common in the elderly. Some of these conditions include: joint disease, osteoporosis, neuropathic pain, peripheral vascular disease, immobility, and amputations.

Chronic Pain in LTC
Most chronic pain in the long-term care setting is related to arthritis and musculoskeletal problems. Surveys have found that nearly one in four nursing facility residents had some form of arthritis (AGA, 1998). Older people with chronic pain may experience deconditioning, gait disturbances, falls, slow rehabilitation, multiple medication use, cognitive impairment, malnutrition, social withdrawal, and depression.

Institutional Commitment
Many factors make pain assessment and management in the long-term care setting challenging. Institutional commitment is essential to overcoming these barriers. The leadership of the organization must ensure that a commitment to resident comfort permeates all aspects of the facility’s operation. There is consistency in the emphasis from the Agency for Healthcare Research and Quality (AHRQ), American Pain Society (APS), and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) related to the need for:

- Agency standards for collaborative and interdisciplinary approaches
- Individualized pain control plans
- Assessment and frequent reassessment
Both pharmacological and non-pharmacological strategies to alleviate pain
Establishment of a formalized approach to pain management
This system-wide interdisciplinary approach has become known as “institutionalizing pain management.” This process focuses on identifying and breaking down system barriers to effective pain management, while using several methods to incorporate the basic principles of pain management into patterns of daily practice.

The Wisconsin Cancer Pain Initiative (Weissman, 2001) developed the eight-step process for “Building an Institutional Commitment to Pain Management.” This process can guide an organization through the process of developing a pain management program:

- Develop an interdisciplinary workgroup
- Analyze current pain management practices in your care setting
- Articulate and implement a standard of practice for pain management
- Establish accountability for pain management
- Provide information about both pharmacologic and non-pharmacologic intervention to clinicians to facilitate order writing, interpretation, and implementation of orders
- Promise individuals and families a quick response to their reports of pain
- Provide education for all staff
- Continuously evaluate and work to improve the quality of pain management

The AMDA Guidelines for “Chronic Pain Management in the Long-Term Care Setting,” outline the following areas as critical in building an institutional commitment to pain management:

**Communication**
Communication mechanisms must be in place to ensure that information about a resident's pain is routinely conveyed and acted on by the appropriate staff. The use of a common vocabulary to describe pain and standard pain assessment tools that are understood by everyone should be used.

**Education**
Health care professionals at all levels need better education about pain management. Education about pain assessment and treatment is an essential element of orientation and training. Nursing assistants and other direct care giving staff should receive training and mentoring in pain recognition.

A pain management program should include correcting misconceptions and myths about pain. The education should help staff identify and overcome their own cultural and gender biases. Staff should be trained in the proper use of pain assessment tools, and how to promote and coordinate pain management.

**Staffing**
There is some evidence that staffing patterns that allow staff to remain with the same residents for extended time periods may improve pain detection.

**Pain Assessment and Management**
Almost all long-term care residents have predisposing factors for developing pain according to AGS clinical practice guidelines for “The Management of Persistent Pain in Older Adults” (1998). For this reason, a high index of suspicion regarding the presence of pain is warranted. Because some individuals may be reluctant to acknowledging feeling pain, the questions screening for the presence of pain should be phrased in different ways, such as “Does it hurt anywhere?” or “Do you have any aching or soreness?” If the resident is cognitively impaired, you can ask the family as well as the resident. You should also observe for nonspecific signs and symptoms that suggest pain. These questions and observations should be part of the initial screening for pain.

Once pain has been identified, a comprehensive pain assessment should be completed, as well as a comprehensive plan of care. Ongoing monitoring for pain should be specified in the comprehensive plan.
of care which should include pain management goals such as: sleeping through the night, participating in 30 minutes of physical therapy, and transferring to commode without assistance. There are many areas on the MDS 2.0 that could assist staff in identifying possible indicators of chronic pain. These could include sleep cycle (E1), change in mood (E3), functional limitation in range of motion (G4), pain site (J3), weight loss (K3), skin lesions (M1), and activity pursuit patterns (N).

According to the above-mentioned AGS guidelines, a comprehensive pain assessment should include the following characteristics: intensity, character, frequency (or pattern or both), location, duration, and aggravating and alleviating factors. The initial assessment should also include a thorough analgesic medication history, indicating current and previously used prescription medications, over the counter medications and “natural” remedies, the medication’s effect and side effects, if any. The assessment should incorporate evaluation of physical function including activities of daily living, and performance measures of function, e.g. range of motion. Lastly, the evaluation should include an assessment for psychosocial function, depression, and social networks.

A quantitative assessment of pain should be recorded by the use of a standard pain scale. Residents with cognitive, language, or sensory impairments should be assessed with scales that are tailored for their needs and disabilities, e.g. numerical pain (0-10), visual pain (pain thermometer and faces scale), and verbal descriptor scales.

Pain assessments, at a minimum, should be completed on admission, each quarter, with any change in condition, and at any time pain is suspected. Ideally, pain assessments should be completed weekly or more frequently, especially if the resident is being monitored for response to pain medication or has active pain symptoms. Staff should be observing for nonspecific signs and symptoms that suggest the presence of pain:

- Moaning, groaning, whimpering, crying
- Bracing, guarding, rubbing a body part
- Fidgeting, increasing or recurring restlessness
- Striking out, increasing or recurring agitation
- Eating and sleeping poorly
- Change in gait
- Change in behavior (especially in cognitively impaired residents)
- Inability to participate in activities of daily living (ADLs)

**Pharmacologic and Complementary Approaches**

There is a wide range of pharmacologic, physical, and behavioral treatments related to the differing etiologies of pain. The following is an abbreviated overview of some strategies for pain management in the older adult:

**Pharmacologic Treatment**

Pharmacological treatment involves the use of analgesic drugs. All pharmacologic interventions carry a balance of benefits and burdens. The resident should be given an expectation of pain relief, but it is unrealistic to suggest or sustain an expectation of complete pain relief for some residents with chronic pain. A trial and error period should be anticipated when new medications are initiated and while titration occurs. Dosing for most residents requires careful adjustments to optimize pain relief while monitoring and managing side effects. The adage “start low and go slow” is probably appropriate for most drugs known to have high side-effect profiles.

Pharmacologic therapy is most effective when combined with non-pharmacologic strategies to optimize pain management. The timing of medication is important. For continuous pain, medications are best given on regular basis. Additional doses may be required before participation in activities that are known to exacerbate pain. Adjuvant drugs are medications not classified formally as analgesics but found to be helpful in certain intractable pain syndromes. Some of these adjuvant drugs include: tricyclic antidepressants, anticonvulsants,
corticosteroids, anti-arrhythmics, and baclofen. With all medication the least invasive route of administration should be used.

**Complementary Therapies**
Therapies used in conjunction with medication could include physical modalities, physical/occupational exercise therapy, and psychosocial/spiritual interventions. The use of these therapies may decrease the need for pain-reducing drugs, but should not be used as substitutes for medication. Complementary modalities should be introduced early to treat generalized weakness and deconditioning as well as aches and pains.

**Physical Modalities**
Cutaneous stimulation includes the application of superficial heat and cold. Superficial application of heat, acting via conduction, increases the blood flow to the skin and superficial organs and decreases the blood flow to inactive tissue, such as the underlying musculature. Heat also decreases joint stiffness. It can be applied as a hot pack, hot water bottle, hot and moist compresses, an electrical heating pad (dry to moist), and commercially available chemical and gel packs.

Cold therapy, which causes vasoconstriction and local hyperesthesia, is effective in reducing inflammation, edema soon after and injury, and muscle spasm, and is recommended when heat is ineffective in reducing spasm. Ice packs, towels soaked in ice water, or commercially prepared chemical gel packs can be used. The duration of the ice pack is 15 minutes or less. Cold should not be used if there has been damage by radiation therapy. It is also contraindicated for any condition in which vasoconstriction increases symptoms, such as peripheral vascular disease.

In addition to hot/cold therapies, counterstimulation techniques can be implemented. Techniques such as Transcutaneous Electrical Nerve Stimulation (TENS; a method of applying controlled, low-voltage electrical stimulation to large, myelinated peripheral nerve fibers via cutaneous electrodes), therapy, and acupuncture, are believed to activate endogenous pain-modulating pathways by direct stimulation of peripheral nerves.

Chiropractic is also a complementary treatment that incorporates cutaneous stimulation as well as manipulation of the vertebral column in the belief that this will maintain proper functioning of the neuronal pathways to organs. It is also believed to provide direct relief to specific joints and vertebrae via direct manipulation of those areas.

**Physical/Occupational Exercise Therapy**
Exercise is important for the treatment of subacute and chronic pain because it strengthens weak muscles, mobilizes stiff joints, helps restore coordination and balance, and enhances resident’s comfort. When residents are unable to maintain function, simple range-of-motion exercises and massage can be provided to minimize discomfort and preserve muscle length and joint function. Positioning, by using braces, splints, wedges, etc. is another simple method to promote comfort and to prevent or relieve pain.

**Psychosocial/Spiritual Interventions**
Staff may utilize cognitive/behavioral interventions as well as spiritual interventions to assist a resident in alleviating pain. Focusing on perception and thought, cognitive techniques are designed to influence how one interprets events and bodily sensations. Giving residents information about pain and its management, help residents think differently about their pain. Behavioral techniques, by contrast, are directed at helping residents develop skills to cope with pain and helping them modify their reaction to pain.

Relaxation and guided imagery can be used to achieve a state of mental and physical relaxation. Mental relaxation means alleviation of anxiety; physical relaxation means reduction in skeletal muscle tension. Relaxation techniques include simple deep breathing exercises, music, and assisted relaxation. Pleasant mental images can be used to aid relaxation therapies.

Distraction is the strategy of focusing one's attention on stimuli other than pain or the accompanying negative emotions. Some examples of distraction might be listening to music, aromatherapy, watching television, and talking to family and friends. Some other distraction techniques may include
psychotherapy for a short term, such as hypnosis, which can be used to manipulate the perception of pain. Reframing is the process of taking a negative thought and replacing it with a more positive one.

Peer support groups offer practical help for residents as well. They can provide experience, empathy, and credible support. Pastoral counseling and prayer can also be helpful especially as pain may raise issues of spirituality for the resident and the family.

Build from Success

According to the palliative care program of the Medical College of Wisconsin (Weissman, 2001), improving pain management practices in long-term care facilities is hard work; it takes an amazing amount of time, resources and commitment to effect positive change. However, once the process is started, and small tasks have been successfully completed, the next task does not seem quite so insurmountable. We always encourage teams to start with the easy tasks first, then build from success. The challenge is to take the first step.

References


American Pain Society. Available online: http://www.ampainsoc.org

American Medical Director’s Association. Available online: http://www.amda.com


Joint Commission on Accredidation of Health Organizations (JCAHO). Available online: http://www.JCAHO.org


Weissman DE. Improving Pain Management in Long-Term Care Facilities. Innovations in End of Life Care 2001; 3(1). Online: http://www.edc.org/lastacts