

Chapter 2

Pain, Pain Everywhere...Almost

F. Michael Gloth, III

*There was a faith healer from Deal
Who said, "Although pain isn't real
When I sit on a pin
And it punctures my skin
I dislike what I fancy I feel."*

English Limerick

Reports on the prevalence of pain in our society are staggering. This is particularly true for seniors [1]. Data indicate that half of the people over the age of 65 are not functioning at their optimal level because of interference from pain [2–4]. In 1997, a telephone survey was reported as indicating that >50% of older adults had taken prescriptions of pain medication beyond a 6-month period and that 45% had seen at least three physicians for pain, in the prior 5 years [5]. For certain populations, the numbers are even more disconcerting. For example, in a nursing-home environment, estimates are that anywhere from half to 80% of residents have pain, with analgesics being used in 40–50% of residents [6–9]. Further analysis indicates that almost a quarter of patients with daily pain did not receive any analgesics [10]. Additionally, long-term care data indicate that over 40% of patients, who were known to have pain at an initial assessment, had worsening or severe pain at the time of the second assessment 2–6 months later [11]. Many of these seniors, including those with diseases recognized to have a strong association with pain, such as cancer, are inadequately or not treated at all with analgesics [12, 13]. Even dying patients can be expected to suffer persistent severe pain in the long-term care setting, at rates exceeding 40% [11].

Pain exacts a terrible toll on our society as well as the individuals who directly suffer from pain. In 2005, the White House Conference on Aging identified pain management among the top 50 priorities in the next decade (Resolution 21: Improve The Health and Quality of Life of Older Americans Through Disease Management and Chronic Care Coordination and Resolution 34: Reduce Healthcare Disparities

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Among Minorities by Developing Strategies to Prevent Disease, Promote Health, and Deliver Appropriate Care and Wellness from <http://www.whcoa.gov>). Patients with pain are more likely to have a host of other complications associated with pain [10, 14]. The overwhelming majority (98% in one study) of patients who finally do get to a pain center for chronic pain have developed a psychiatric diagnosis as well [15]. In veterans, estimates are that 70% have some pain-related disability [16]. These effects have a direct negative impact on physical and cognitive functioning in suffering patients, and, indirectly, spouses, family, and other caregivers suffer as well [17, 18].

Pain is not a normal part of aging, and it may present differently in different cultures, populations, or settings. Perhaps the most common differences have been reported between males and females. Women may experience pain differently than men. For example, women may report higher levels of pain, but they also are more likely to have chronic conditions associated with pain [19]. Whether or not there are true sex differences in pain perception or pain reporting, however, remains open for discussion [20].

- One is likely to encounter a greater prevalence of painful syndromes in the older adult compared to younger counterparts [21–23]. For example, neuropathic pain is quite common. In older adults, diabetes and Varicella (the virus that causes chicken pox and shingles) are common causes of neuropathic or nerve pain. Herpes zoster or shingles attacks over half a million Americans each year. Almost one in 12 report pain at 1 month, and about half of those still have pain at 1 year. This postherpetic neuralgia with prolonged pain is more common among people older than 60 years of age [24]. Over half of patients with slowly progressive neuromuscular disease report moderate to very severe pain [25]. Arthritis alone affects well over 20 million Americans with an increase to 40 million expected by 2020 [26]. Twenty-nine percent of Medicare patients in nursing homes with a fracture in the prior 6 months suffer with daily pain [27].

Terminology Issues

Pain may be even more prevalent than some figures indicate. The term “pain” may be avoided, with preference for “discomfort,” “ache,” “hurt,” “crick,” or a plethora of other terms that make up the pain vernacular. For this reason, inclusion of other terms and colloquialisms germane to the population being evaluated is necessary.

The medical community also has a variety of terms that need to be recognized and understood for adequate communication regarding pain. The International Association for the Study of Pain developed a Subcommittee on Taxonomy in the late 1980s to define and clarify many of the medical terms used in the field [28]. Some of the more common terms and definitions appear below:

Allodynia – pain due to a stimulus which does not normally provoke pain.

Analgesia – absence of pain in response to stimulation which would normally be painful.

Anesthesia dolorosa – pain in an area or region which is anesthetic.

Causalgia (complex regional pain syndrome) – a syndrome of sustained burning pain, allodynia, and hyperpathia after traumatic nerve lesion, often combined with vasomotor dysfunction.

Central pain – pain associated with the central nervous system.

Dysesthesia – an unpleasant abnormal sensation, whether spontaneous or evoked.

Hyperesthesia – increased sensitivity to stimulation, excluding the special senses.

Hyperalgesia – an increased response to a stimulus, which is normally painful

Hyperpathia – a painful syndrome, characterized by increased reaction to a stimulus, especially a repetitive stimulus, as well as increased threshold.

Hypoesthesia – decreased sensitivity to stimulation, excluding the special senses.

Hypoalgesia – diminished pain in response to normally painful stimulus.

Neuralgia – pain in the distribution of a nerve or nerves.

Neuritis – inflammation of a nerve or nerves.

Neuropathy – a disturbance of function or pathological change in a nerve; in one nerve, mononeuropathy; in several nerves, mononeuropathy multiplex; if diffuse and bilateral, polyneuropathy.

Nociceptor – a receptor preferentially sensitive to a noxious stimulus or to a stimulus which would become noxious if prolonged.

Noxious stimulus – a stimulus which is damaging, or potentially so, to normal tissues.

Pain threshold – the least experience of pain which a subject can recognize.

Pain tolerance level – the greatest level of pain which a subject is prepared to tolerate.

Paresthesia – an abnormal sensation, whether spontaneous or evoked.

Reasons for Poor Pain Control in Seniors

Despite such high prevalence of pain and painful syndromes in older adults, there have been relatively few studies in older populations with pain [29]. Studies have indicated that <1% of the thousands of papers published on pain focus on the aging society [30]. This lack of research may explain part of the failure to provide adequate pain relief to seniors. A variety of other factors also seem to contribute to the dismal performance of the health-care profession in providing substantial pain relief to older adults in pain.

The reasons cited for lagging performance at the clinician level include inadequate training, lack of effort to obtain appropriate assessment (including the use of formal assessment instruments), and reluctance to prescribe opioids [31, 32]. The lack of knowledge due to inadequate training may foster some of the other reasons mentioned [33]. Ironically, health-care professionals acknowledge receiving inadequate instruction on pain management during medical school and residency training, which may explain the inadequate prescribing of analgesics [34, 35]. Oftentimes, what has been learned seems to be incorrect, as an exaggerated opinion

about the effects of opioids with regard to addiction, tolerance, respiratory depression, and sedation is expressed by many health care professionals [30, 36].

Patients have also been responsible for some of the lack of success in managing pain. Fears associated with taking opioids and a reluctance to report pain have created additional obstacles in the efforts to overcome pain [30]. Most of the concerns are not based in fact. Addiction rarely occurs in anyone taking opioids for pain. In reality, addiction risk with opioids is low ($<0.1\%$) when analgesics are used for acute pain in patients who are not substance abusers [37]. Even chronic use of morphine rarely leads to addiction when used to control pain [38]. Multiple studies have shown that people taking chronic opioids function similarly to those with no medications [39]. Even driving ability with long-term morphine use for analgesia in cancer patients was not substantially different than those without such medication [40]. Reflecting these facts, the American Geriatrics Society released new guidelines on Persistent Pain in Older Persons: Pharmacological Management of Persistent Pain in Older Persons in May of 2009, advocating the use of opioids in persistent pain situations that did not respond to nonopioid medications [41].

In a survey of nursing-home residents, some other factors that may impair the inclination of residents to report pain were identified [42]. In this survey, residents expressed the opinion that the staff lacked the time to adequately assess and treat pain. There was also a sentiment that if pain did not impair function, then treatment of persistent pain was unnecessary. Also expressed was the belief that it was not reasonable to complain of pain if there was not a physical deformity or well-defined pathology. Oftentimes, there is a false impression that pain is a normal consequence of getting older and that once chronic pain develops, there is little potential of responding to treatment.

Additional barriers to adequate pain control exist. These encompass not only those from the health-care professional and the patient but also various institutional barriers [43–45]. Additional factors based on the source include:

Senior patients – Beliefs that pain cannot be avoided and should simply be tolerated, reluctance to discuss pain symptoms unless explicitly asked, misinformation about opioids (e.g., addiction potential or likelihood and degree of side effects), lack of display of typical signs and symptoms or display to a lesser degree than younger patients, cognitive or sensory impairment that limits ability to report pain, and biases may hinder patients from reporting pain, coexisting illnesses (especially depression) may reduce a patient's ability to interpret or report pain, medications may modify responses to pain, and pain may be misconstrued to be an inevitable consequence of aging, a punishment for past actions, or something that cannot or will not be treated or will incur the ill feelings of care providers if a complaint is registered.

Health professionals – Lack of training or skill at using assessment techniques and screening instruments, inadequate knowledge about opioids, overestimation of rates of addiction and respiratory depression, belief that pain is a normal part of aging, provision of care by individuals without formal pain management training, disbelief of a patient's report of pain, reluctance to refer

for consultation in a timely fashion, or belief that sleep following administration of pain medication is due to an adverse event from the medication rather than a normal response of an exhausted person who has finally achieved a level of comfort.

Institutional or system – High turnover of staff limits the experience in using pain assessment techniques. Lack of a systematic approach to screening and prevention, inherent inefficiencies in the use of ancillary health-care personnel, lack of individual accountability within the system, poorly functioning care teams, poor leadership and commitment to pain management at a management level, and excessive regulations (especially in long-term care) may result in failure to give priority to recognition, assessment, and treatment of pain. Extensive documentation requirement (particularly with opioids) may deter health-care professionals from appropriately prescribing effective treatments. This may also impose time constraints, which may impede physicians from focusing adequately on pain control. Other factors such as inadequate reimbursement and financial incentives for pain management efforts, negative reinforcement in training programs for attending to pain while being rewarded for less important and more detailed interventions such as daily laboratory blood testing of metabolic profiles, lack of training for pain management skills, lack of recognition and interaction among various medical disciplines (and even among different pain groups), limited access to diagnostic or therapeutic facilities or experts, inadequate pharmacy services (including insufficient stocking of medications for pain, like opioids), insufficient staffing for proper pain assessment and interventions, inflexible access to medications based on formulary selections, and other restrictive policies and procedures may also contribute to failure in treatment of pain (Table 2.1).

There are other areas for improvement. Despite the fact that two third of people who consider a nursing home their place of residence will die there, few of them will ever be enrolled in hospice [46]. In a later chapter on “suggestions for change,” the roles of patient, health-care professional, and systems are addressed as they pertain to improved hospice referral to optimize end-of-life pain care.

Treatment and Recurrent Pain

One of the challenges for clinicians working in the field of pain management is the modification of behavior that follows adequate treatment of pain. Once pain relief is achieved, a patient is very likely to enter a cycle not generally discussed (Fig. 2.1). Once pain is controlled, an individual usually becomes more functional and then more active. This can lead to irritation of the area that previously caused pain. Such irritation can lead to increased inflammation and consequently, a recurrence of pain. Thus, successful pain control is perceived as short-lived, and this cyclical process

Table 2.1 Obstacles to good pain management in older adults

Patient-related	Health professional-related	System-related
• Fears of addiction with opioids· Reluctance to report pain • Lack of confidence in response to reporting pain • False belief that without defined pathology or loss of function treatment is not necessary • False belief that pain is a normal part of aging • Fear of being labeled a “bad” patient • Misconception that chronic pain is not amenable to therapy • Lack of typical signs and symptoms compared to younger patients • Comorbid conditions or medications may affect the ability to report pain	• Inadequate training· Lack of assessment • Misinformation about addiction with opioids • Exaggerated risk of respiratory depression with opioids • Misinterpretation of sedation with opioids • Ignorance of development of tolerance to nausea etc. with opioids • Lack of time/priority for diagnosis and treatment • False belief that pain is a normal part of aging • Disbelief in patient’s report of pain • Misinterpreting sleep as medication-induced somnolence • Reluctance to refer	• Insufficient research • High staff turnover with new staff unfamiliar with assessment and treatment techniques • Lack of individual accountability within the system • Poor oversight and functioning of care teams • Inadequate administrative support for pain management efforts • Lack of trained leadership • Excessive regulation • Overly burdensome documentation requirements • Inadequate reimbursement for pain management • Insufficient access to resources and training

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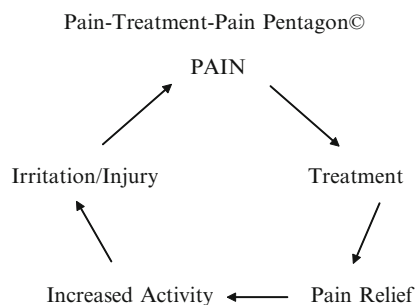


Fig. 2.1 The Pain Pentagon represents a cycle of pain, treatment, improved function and activity, producing further local irritation or remote injury, resulting in new or recurrent pain. This illustrates the risk of reinjury and the potential impact of increased activity accompanying successful pain intervention, which paradoxically may strain deconditioned areas of the body after long periods of rest due to prior underlying discomfort. Used with permission. © 2003 F. Michael Gloth, III, M.D. Used with permission

makes good pain control more challenging. This sequence of events should be recognized so that adequate counseling can take place to prevent such a cycle of pain.

It also should be recognized that prolonged pain could lead to disuse atrophy. Again, the resolution of pain may lead to further activity. In this setting, the lack of muscular

balance may be associated with misalignment of the spine or increased trauma on insufficiently supported joints. Consequently, injury and pain can result (Fig. 2.1).

More Regulation Not the Answer

While there has been some progress, it has been very slow and minimal, at best, with pain rates still far too high [47]. Oftentimes, bureaucrats, health policy makers, and legislators try to resolve issues with even more regulations or laws. Additional regulation does not seem to be the answer, and neither will more government oversight prove to be beneficial. While the intent of additional regulation is often admirable, it is important to assess the impact of regulations. In a study of the impact of the Omnibus Budget Reconciliation Act of 1987 on the tangible measurement of pressure sores in nursing-home residents, Coleman et al. showed no change in the prevalence of pressure sores from the early 1990s compared to the late 1990s [48]. In the nursing home where there is an unparalleled onus of regulations, additional regulation is more likely to negatively affect patient care rather than accomplish the goal of improved pain management [49].

Nursing homes must maintain above 80% occupancy to have a positive balance sheet. Close economic margins have limited the ability to hire new staff as nursing homes struggle to remain solvent. Regulations are costly and time-consuming. Rarely is there a mechanism in place to evaluate the efficacy and burden of regulations once implemented. If ineffective, a mechanism should be in place to subsequently drop such regulations. Nursing homes continue to see costs escalate (in part due to a continual onslaught of new regulatory requirement and surveys) without funding to accommodate the additional financial burden. Genesis Health Ventures, Inc. initially filed for Chap. 11 in U.S. Court on June 22, 2002. Shortly after emerging from bankruptcy, the company's CEO resigned in mid-2002, indicating the need for work to reform nursing-home reimbursement, and reportedly remarked, "We need a permanent stable funding source for this industry to continue to exist. If Congress does nothing, the industry will collapse [50]." The significance of those words was amplified later that year as Genesis again experienced familiar financial difficulties and reportedly sought to sell off much of its nursing-home business.

In the pain field, the damage of overregulation has been impressive. The money wasted in association with State, Federal, and system regulatory requirements consists not only of taxes and revenue taken directly from the citizens and consumers to pay bureaucrats who oversee the regulations but also of indirect costs associated with lost energy that goes into filling out forms and the costs related to the distraction of creative power and diversion away from pain evaluation [51]. In most regulatory settings, the state surveyors have little to hold them accountable for decisions that are too frequently arbitrary, capricious, and fail to meet even cursory standards of proof. Also, there is little to ensure that regulators have adequate knowledge and experience in the nursing-home arena.

Conclusion

Pain does not exempt any population or any setting. Older adults are particularly susceptible to the grips of pain. If not by further regulation, how is pain relief to be fostered? The final chapter of this book, which deals with "Suggestions for change....," addresses this further. Recognition of the problem is the first step to resolution. For many physicians as well as other health-care professionals, the reason to enter medicine was primarily motivated by a desire to relieve suffering. Regrettably, data presented in this chapter and elsewhere indicate that all too often, the health-care professionals fail in resolving pain, one of the clearest factors associated with suffering. This is especially true when the person in pain is a senior. Sympathy and compassion are essential, but saying "I feel your pain" does not provide resolution. While recognizing and acknowledging that pain exists is necessary, it is not sufficient. There must also be proper assessment and, of course, proper intervention. Even this approach is incomplete. To be complete, there must also be attention to the prevention of pain. The chapters that follow in this edition of *The Handbook for Pain Relief in Older Adults* provide a comprehensive approach to help relieve suffering and to facilitate comfort.

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