Barriers to the Treatment of Chronic Pain that Result in Emergency Room Congestion

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Abstract

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Chronic pain is a debilitating condition that involves millions worldwide. "The prevalence of chronic pain among adults in the United States has been estimated to range from 2% to 40% of the general population" (Glajchen, 2001, p. 211). Unfortunately, chronic pain is a common problem that presents major challenges for healthcare providers. Patients with chronic pain are five times more likely than patients without chronic pain to utilize health care services (Becker, et al., 1997). "Most painful conditions can be relieved with proper treatment, yet many people in pain and their healthcare providers often face a range of barriers that can prevent proper pain management" (National Pain Care Policy Act of 2009, 2011).

The considerable number of patients suffering from chronic pain has partially contributed to the devastation of our health care system; a socioeconomic drain. "The annual cost of chronic pain, including medical expenses, lost income, and lost productivity, is an estimated $100 billion" (American Pain Society, 2000). "Persons with chronic pain tend to seek medical care from emergency departments nationwide despite the fact that the emergency department is a less-than-optimal environment for meeting their specific and specialized needs" (Woodhouse,
Peterson, Campbell & Gathercoal, 2009, p. 399). As a result, emergency departments have become overcrowded with people who seek treatments for chronic pain which could have been treated in primary care offices or free clinics. Congested emergency departments continue to be a serious problem, threatening the security of our healthcare system (Paul, Reddy & DeFlitch, 2010).

The aims of this paper are to examine (a) the burden of chronic pain experienced by adults living in the United States, (b) the relationship between chronic pain and utilization of emergency departments, (c) the barriers to adult chronic pain management, and (d) strategies for the effective management of adult chronic pain in the United States health care system.

Key Words: chronic pain, congested emergency rooms, health care systems, health care crisis, barriers in treating chronic pain and strategies.
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Introduction

Chronic pain can have numerous consequences for those affected and it has become a serious public health issue affecting millions. Chronic pain in adults is defined as “pain that continues or recurs over a prolonged period, caused by various diseases or abnormal conditions” (Encyclopedia of Medicine, 2008). According to 2006 data, “approximately 76 million people in the U.S live with chronic pain, making it more widespread than heart disease, cancer and diabetes combined” (US Department of Health and Human Services, 2006). In today’s medical field, chronic pain can be exceptionally difficult to treat.

Chronic pain is a strenuous challenge not only for persons with pain, but also for family, friends, and health care providers creating a significant burden for everyone involved. Chronic pain can affect every aspect of one’s life causing anxiety and depression and resulting in an inability to perform activities of daily living. People with chronic pain frequently are confronted with multiple barriers and often seek treatment from several providers and specialists without relief. They may endure repetitive testing and undergo pointless procedures. Furthermore, people with chronic pain can be subject to longer hospital stays and many trips to the emergency department that are preventable. The frequent use of health care services without effective relief from pain is partly responsible for the rapid rise in health care costs in the United States. “The annual cost of chronic pain, including medical expenses, lost income, and lost productivity, is an estimated $100 billion” (American Pain Society, 2000).

Consequently, there has been a tremendous growth in the use of emergency departments by people seeking treatment for chronic pain. While some pain may truly be a medical emergency, a large majority of people with chronic pain can be treated successfully at urgent care centers or in primary care practices. “A continued increase in the number of emergency
visits for non-emergency causes is likely to be unsustainable in our current health care system” (Weinick, Burns & Mehrotra, 2010, p. 1635).

**Statement of the Purpose**

The purpose of this paper is to examine the literature concerning congested emergency departments, barriers to the treatment of chronic pain in adults, and strategies for effective management of chronic pain. Issues considered include the burden of chronic pain experienced by adults living in the United States (U.S.), the relationship between chronic pain and the utilization of emergency rooms, barriers to adult chronic pain management and strategies for effective management of adult chronic pain to reduce ineffective emergency department use in the U.S health care system.

**Theoretical Framework**

There are several theories available to explain why people suffering from chronic pain continue to face multiple barriers when seeking treatment, and why there has not been significant change despite growing evidence of health care deficits. The gate-control theory was chosen to delineate current problems with treating chronic pain and the consequences faced as a result of poor pain management.

The gate-control theory was introduced by Melzack and Wall (1965) to explain the relationship between pain and emotion. Their paper, “Pain Mechanisms: A New Theory,” has been described as one of the most influential ever written in the field of pain. They were able to conclude that “pain is not just a physiologic response, but that psychological variables (behavioral and emotional responses) influence the perception of pain” (McEwen & Wills, 2002, p. 291). For instance, if a person has had a negative experience or suffered from significant pain
in the past, they may experience heightened emotions and their pain may seem exaggerated. However if they are content, distracted or have support, their pain may be decreased and manageable.

The gate-control theory has provided a conceptual framework for elucidating peoples’ suffering from chronic pain and the need for more effective pain management and education (McEwen & Wills, 2002). Hekmat, Burke and Howell (1994) focused their attention on the timing medications were given for pain. They were able to observe pain was reduced or even prevented when medication was given before the onset of sensation instead of waiting for the pain to occur. Although pain is subjective and everyone’s threshold is different, the gate-control theory provides sufficient evidence that there is a need for more effective pain management programs for those seeking to understand and treat their pain appropriately. Gate control theory guides this paper by providing a multidimensional definition of pain. Pain is conceptualized as a combination of physiological, psychological, and social factors.

**Literature Review**

**Search Strategies**

A comprehensive search was conducted and focused on gathering empirical evidence to examine the aims of the paper. A literature search was conducted using Google Scholar, MEDLINE and the Cumulative Index to Nursing and Allied Health Literature. Key words used in the search included chronic pain, congested emergency rooms, health care systems, health care crisis, barriers in treating chronic pain and strategies.

The search was limited to full text research articles, adults and journals in English with a date range of 2001-2011. Articles chosen were screened by title and abstracts to ensure relevant information. A total of 35 articles were reviewed. There were four articles regarding chronic
pain, four articles regarding congested emergency rooms, eight articles regarding health care systems, eleven articles regarding health care crisis, four articles regarding barriers in the treatment of chronic pain and four articles examining strategies for effective pain management. These categories formed the sections of the literature review.

**Congested Emergency Departments**

Utilization of emergency services continues to increase rapidly as our growing population seeks immediate care for non-urgent, urgent and emergent health issues. As a vital component of our health care system, emergency medicine provides services for all people regardless of ability to pay. As the demand for emergency services increases, the U.S. has been faced with crowded emergency departments and astonishing long wait times. This predicament compromises patient safety, since sufficient and timely care can no longer be provided. Regardless of the reason for ED congestion, it is essential to reduce barriers to chronic pain management if reduced wait times and improved hospital flow is to be achieved. According to Trzeciak & Rivers (2003), “emergency department overcrowding is widespread in U.S. cities and has reportedly reached crisis proportions” (p. 402).

Cordell et al. (2002) conducted a retrospective cross-sectional study to determine the prevalence of pain in the ED. The study concluded, after reviewing the data on 1665 consecutive ED visits that 1019 patients complained of pain and 869 had pain as the chief complaint representing 52.2% of the 1665 encounters (Cordell et al., 2002). While this study does not reveal specifically the prevalence of patients with *chronic* pain, it does however suggest pain is one of the most common reasons that patients seek medical care and despite the high prevalence and cost of pain, little attention has been focused on treating pain appropriately. Until further
consideration is given, emergency departments will continue to consume the burden of chronic pain.

Bernard and Wright (2004) evaluated the extent of chronic pain in adult ED patients. The authors reported an increased awareness concerning acute pain in ED patients; however, they recognized little attention had been devoted to caring for persons with chronic pain. A prospective study revealed out of the 476 ED patients interviewed, 77% of noncritical ED patients had reported complaints of pain on presentation, and pain was the reason for the visit in 69.5% of ED visits (Bernard & Wright, 2004). Results of this study revealed persons with chronic pain were frequent users of emergency services with many reporting four or more emergency room visits in a year's time.

Woodhouse et al. (2009) conducted a study utilizing a quasi-experimental, retrospective, pre-test/post-test, split-plot design. The study was designed to explore the efficacy of a brief emergency department-based behavioral health intervention to determine if the intervention reduces utilization of ED services by patients with chronic pain. Data collected confirmed “behavioral health consultation may be useful to reduce utilization of ED services by chronic pain patients, particularly those who consume most of the services” (Woodhouse, 2009, p. 402).

**Barrier to Effective Treatment of Chronic Pain in Adults**

This section is composed of three subsections: clinician related barriers, person related barriers, and overcoming the barriers. Each section is now described.

**Clinician Related Barriers.** The lack of awareness in pain control within the medical community is a major contributing factor in the under treatment of pain. Inadequate training and assessment skills, concerns about scrutiny from regulatory agencies and fear of addition or side
effects can inhibit a provider from treating chronic pain adequately. Matthias et al. (2010) examined providers’ perspectives in their experiences caring for patients with chronic pain by interviewing 20 providers (10 men & 10 women) from five primary care clinics. They found many providers had negative feelings compounded by descriptions of hostile interactions, suspicion and distrust of patients, and fear of being fired. The study used a qualitative design and open ended in-depth interviews. The results revealed several issues related to the treatment of chronic pain. Issues they addressed as confounding to effective chronic pain management include lack of adequate patient-provider relationships, feeling pressure to treat with opioids, distrust or secondary gain, suspicion of diversion, difficult interactions with patients, creditability of patients, lack of adherence and the emotional toll it takes on providers.

Findings of this study are worrisome for both the patient and provider. Although further research is needed to determine the extent of such barriers present, the study does illustrate clinical implications and the need for providers to obtain instrumental and emotional support as they confront the many challenges while treating chronic pain.

Clinical shortcomings related to chronic pain management are problematic and contribute to the alarming trend of a rising incidence of suffering patients. If patients can establish relationships with their primary care providers and be treated effectively, reliance on EDs could decrease substantially. To provide effective and responsible pain management, primary care providers need to know and be able to employ assessment and treatment strategies consistent with national standards, state regulations, and institutional policies (Arnstein & St. Marie, 2010).

For clinicians to adequately treat pain education is certainly a high priority, nevertheless in medical school and residency, the priority remains low. Arnstein and St. Marie (2010) documented that 81.5% of attending physicians rated their medical school education and 54.7%
rated their residency training as inadequate regarding chronic pain management. According to Fromer (2005) "physicians lack knowledge of even the most basic principles of pain relief, as well as newer pharmacologic advances and side-effect management" (p. 51).

Polomano et al., (2008) concluded that several physicians are inexperienced and not prepared to evaluate pain, which can ultimately lead to poor pain control or have other adverse effects such as overmedicating resulting in serious injury.

Continuous and systematic evaluation is another key aspect of effective chronic pain management. Grover et al. (2010) evaluated a pilot program consisting of thorough case management for those that frequently used EDs to determine if case management was effective in decreasing ED visits. In this study chronic pain was a common reason for ED visits. The observational retrospective study enrolled and followed 96 patients in a case management program consisting of a multidisciplinary team including physicians, nurses, social services and pain specialists. The authors concluded that "case management for frequent users of the ED is an effective way to reduce repeat use of emergency services and to reduce radiation exposure from repetitive diagnostic imaging" (Grover, Close, Villarreal & Goldman, 2010, p. 342). Ironically, frequent ED visits can prove to be detrimental for a person seeking care for chronic pain as extensive workups with repeated exposure to radiation may occur when ruling out occult illness.

In summary, provider education can change practice. The complex problems of inadequate pain management do not have a quick fix; however, the benefits of good pain control are endless. Although pain is rarely eliminated, treatment should provide acceptable relief. With attentive providers, adequate case management and effective and regular assessments and treatment, emergency department visits for chronic pain have potential to be greatly reduced.
**Person Related Barriers.** Many factors affect how pain is experienced and pain thresholds vary considerably depending on the individual. "The manner in which a patient expresses pain, whether emotive, vague, stoic, diffident, or demanding may reflect personality or cultural variations that are not easily appreciated by every physician or nurse" (Rupp & Delaney, 2004, p. 501). Personal barriers include reluctance to report pain, concerns about addiction, belief that pain is untreatable, fear of new symptoms, fear of learning abnormal test results, and fear of being a burden. Moreover, other barriers to pain management are the lack of support, costs of medications or visits with providers (no insurance), lack of knowledge or accountability, and psychological (mental & emotional) issues. In addition, the fear of cognitive impairment secondary to taking pain medications may also be a factor why patients do not communicate about their pain effectively. According to Glajchen (2001) patients revealed several important concerns which included fear of addiction, tolerance and side effects.

The consequences of person-related barriers in controlling chronic pain are major impediments and can have devastating effects, eliminating all of life’s enjoyments. As a provider, it is essential to intervene and help the person that faces these potential barriers, including educating and providing adequate pain control to attain optimum function.

**Overcoming the Barriers.** There is a tremendous amount of work to do in overcoming and managing the barriers of suboptimal pain management. Such action could be successful in reducing congestion in EDs across the U.S. Gaps in research and practice continue to remain a problem despite the numerous evidence-based studies available. "Barriers to effective pain management are numerous, complex, and resistant to change" (McCaffery, 2001, p. 18). Agencies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
and the American Pain Society can collaborate with healthcare providers and institutions to create improved standards of care, ultimately overcoming barriers in pain management.

Nonetheless, patients must often rely on emergency departments for their care when faced with little alternative. Research gathered by Billings et al. (2000) suggested reducing wait times at clinic’s and doctors offices, expanding office hours, and enhancing telephone consultation capacity to enable patients to get care more timely and appropriate. Brennan, Carr and Cousins (2007) concluded:

“reform will require an integrated approach to address the problem of under-treated pain at all levels: education for health undergraduates and graduates, including adult health professionals, adoption of universal pain management standards by professional bodies, promotion of legislative reform, liberalization of national policies on opioid availability, provision of affordable opioids, promotion of pain control programs in all nations, irrespective of resources, and continuing activism of the WHO in collaboration with the foremost international pain relief organizations” (p. 218).

The physical and emotional effects of living with chronic pain can be devastating. It is essential to identify all present barriers, eliminate them and work with patients to remain active in their care. To conclude, there is no easy answer in overcoming barriers to effective pain management. Managing chronic pain properly requires more than an emergency department is capable of. Although treatment in the emergency room may be necessary in an acute pain crisis, patients with chronic pain would benefit from more continuous interventions. Responsibilities of an emergency department must be understood to ensure that the integrity of the system is not jeopardized. Emergency medicine is significantly important, domestically and globally.
Strategies for Effective Pain Management

Implementing mandatory continuing education for health care providers on chronic pain management and educating providers on opioid use, misuse, diversion and addiction are vital components for consideration. According to Upsher, Luckmann and Savageau (2006) there are several physicians that feel uncomfortable with treating pain, and many who express frustration with their training in pain management. All health care providers who prescribe, dispense, and administer opioids need optimal education with respect to a universal-precautions approach.

“This education includes using screening tools, periodically monitoring for treatment efficacy/tolerability and any aberrant behavior: and referring patients with addiction disorders to appropriate resources in the community” (Arnstein & St. Marie, 2010, p. 3). In addition, educating patients, families and communities while tracking chronic pain in data bases similar to cancer and diabetes, will considerably decrease the amount of patients presenting to emergency departments.

One extremely important strategy to effective pain management consists of recognizing all options available in reaching a cogent decision. Multimodality therapeutic options are needed. These include a mix of pharmacotherapy, psychosocial interventions, surgical interventions, alternative medicines, and rehabilitation techniques which can all be managed by a health care provider who practices holistically.

Conducting optimal pain assessments frequently and having patients keep a pain diary will address pain in a timely and appropriate manner. Pain is complex and unique; therefore, evaluation of the pain including type, intensity and category will assist the care provider in finding the best treatment plan. Improving communication among providers and patients, encouraging patients to report pain and take medications as prescribed, will facilitate optimal
pain control. Recognizing side effects and the treatment of any adverse effects, such as nausea, will allow patients to remain on a regular medication regimen.

Additionally, any persons being treated for chronic pain should have regularly scheduled assessments. This is vital to ensure that prescribed treatments are effective and diminish pain without causing adverse effects. Finally, providers can promote coping behaviors. "To maximize the success of a pain management strategy, physicians can assist the patient in reporting pain, taking pain medication exactly as prescribed, increasing activity level, participating in rehabilitation, and using cognitive behavioral techniques" (Glajchen, 2001, p. 215).

To conclude, pain management helps improve function and preserve quality of life. Ways to modernize the treatment of pain are continually being sought. While chronic pain can be extremely stressful and debilitating, having a dedicated provider with a knowledgeable understanding of medications, exercise and diets modification, people can be more successful in managing their pain effectively.

**IMPLICATIONS FOR NURSE PRACTITIONERS**

Managing chronic pain can be an extremely challenging and frustrating experience for both health care providers and patients. Assessment can be difficult since all self-report ratings of pain are subjective and difficult to confirm by outside observers, such as the clinician. In addition, pain intensity can be further complicated by other co-morbidities. As health care providers, it is essential that we educate our patients to be active in their health management. The unmet need for patient education in chronic pain management can have several consequences including personal and economic strain. Research on those in management for chronic pain is
unmistakable; people who learn to handle their pain effectively are those who become actively involved in their own treatment (Grinstead, 2010).

Despite the increase in patients suffering from chronic pain, there is little emphasis placed on treatment, and the problem is further compounded due to lack of knowledge. Indisputably, clinician related barriers are prevalent. "Physicians are in the position to improve the plight of chronic pain patients but must overcome numerous barriers obstructing effective treatment" (Glajchen, 2001, p. 217). Several articles reviewed emphasized the importance of using treatment guidelines in order to improve pain control. Although many guidelines exist, further investigation is needed to determine if these guidelines will improve outcomes and overall patient and provider satisfaction.

Summary

A complex phenomenon, chronic pain can have devastating effects creating stress, anxiety, depression, irritability, social withdrawal, loss of sleep, loss of appetite, and diminishing the quality of life for those affected. Pain continues to be the number one reason to seek medical care and although pain can almost always be controlled, millions continue to suffer. Several causes have been identified to determine barriers to chronic pain and despite rigorous efforts from health care agencies and evidence based guidelines; treatments remain compromised and less than acceptable in many cases.

Clinician related barriers are by far one of the most significant problems due to inadequate assessment skills, poor communication with patients in chronic pain, lack of knowledge and the low priority given to people in pain. However, since the American Pain
Society has declared pain as the fifth vital sign, pain awareness has been on the rise attracting attention across the U.S.

The importance of emergency medicine is undisputable. It provides access to those with emergent events, is the gatekeeper for admission to inpatient hospitalization, and supplies care to those without insurance. As the rapid growth of ED visits stretch beyond capacity, EDs will be increasingly unable to accommodate all persons seeking care. There have been many efforts made to relieve congestion in emergency departments, however there are still many barriers preventing effective pain management. We can be certain the number of emergency room visits will continue to rise until professionals are trained adequately and clinical guidelines are implemented for appropriate treatment plans to treat those who suffer from chronic pain.
References


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Woodhouse, J., Peterson, M., Campbell, C., & Gathercoal, K. (2009). The efficacy of a brief behavioral health intervention for managing high utilization of ED services by chronic
doi:10.1016/j.jen.2009.02.008