



# Towards Effective Pain Management: Breaking the Barriers

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*"Pain is a more terrible lord of mankind than even death itself."*

-Albert Schweitzer

Pain is a common cause of agony and suffering affecting millions of people around the globe.<sup>1</sup> Ibn Sina, a famous Muslim scholar known in the West as Avicenna, was one of the first scholars to give an excellent description of pain, its types, and treatments.<sup>2</sup> He postulated that the true cause of pain was a change in the physical condition of the organ regardless of the presence or absence of an ongoing tissue injury.<sup>2</sup> Interestingly, this ancient description of pain is consistent with our modern understanding of the pathophysiology of pain as defined by the International Association for the Study of Pain (IASP): an "unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage".<sup>3</sup> Pain is generally classified as acute or chronic according to its duration. If pain lasts for three months or more, it is usually considered chronic pain.<sup>3</sup> Studies indicate that almost one out of five people suffer from moderate to severe chronic pain, and that one in three are unable or less able to maintain an independent lifestyle due to pain.<sup>4</sup> Epidemiological data from developed countries showed that up to 50% of the general population could be affected with chronic pain.<sup>1</sup>

Pain has been identified as one of the commonest reasons for patients to seek medical advice.<sup>5</sup> Uncontrolled pain can lead to catastrophic consequences on physical, mental, social, and financial levels. In the postoperative period, serious complications such as poor wound healing, infections, cardiac ischemia, and ileus might occur due to inadequate pain management.<sup>6</sup> This is explained by

the fact that pain causes stress, which in turn results in the activation of the sympathetic system and triggers a cascade of negative effects on various body systems.<sup>6</sup> Moreover, uncontrolled postoperative acute pain can be transformed into chronic pain if it is not managed timely and adequately.<sup>6</sup> Mentally, patients with chronic pain commonly suffer from negative emotions, irritability, and anger.<sup>7</sup> The impact of chronic pain on mental health is illustrated further by the evidence of a higher prevalence of psychological distress, anxiety, and depression among patients who suffer from chronic pain.<sup>8</sup> Socially, pain leads to strain and disruption of relationships, the inability to perform routine physical activities, and a growing dependency on others. Pain has a huge economic burden since it is closely linked with disability and unemployment.<sup>9</sup> It is estimated that the annual cost of pain is much greater than the annual costs for major chronic diseases such as heart disease, cancer, and diabetes.<sup>9</sup> Therefore, considering all of the harmful consequences of uncontrolled pain, it would not be surprising to discover that pain is indeed associated with a significant increase in both morbidity and mortality.<sup>10,11</sup>

Despite the progress seen in the various fields of medicine, pain management still remains a challenge. These challenges include obstacles for the development of effective medications due to complex pathophysiological mechanisms, the overlap and multiplicity of pain pathways, and the common occurrence of adverse effects.<sup>12</sup> Inadequate pain management affects 80% of the global population, and poses a serious problem in more than 150 countries.<sup>13</sup> Specific vulnerable groups such as the elderly, pregnant and breastfeeding women, children, people with substance abuse, and the mentally ill are at greater risk for inadequate pain management.<sup>13</sup>

Several barriers (system-related, staff-related, nurse-related, physician-related, and patient-related) have been identified that hinder the health care professionals from achieving optimal pain management.<sup>13</sup> System-related barriers include a lack of clearly defined standards and pain management protocols, and limited access to pain specialists and analgesics.<sup>13-15</sup> Staff-related barriers include inadequate knowledge and skills, and lack of teamwork.<sup>13-15</sup> Lack of knowledge and false concerns about addiction and overdosing are examples of physician-related barriers.<sup>13-15</sup> Nurse-related barriers include inadequate knowledge, heavy workload, and lack of time.<sup>13-15</sup> Reluctance to take analgesics, fear of side effects, and fear of addiction are examples of patient-related factors.<sup>13-15</sup> Additional barriers that have been identified by nurses in a pediatric setting are insufficient physician orders, especially before procedures, and insufficient time to premedicate patients before procedures.<sup>16</sup> In an emergency setting, overwhelming attention is usually given to acute serious conditions placing pain management as a lower priority.<sup>17</sup>

Education is the cornerstone of any effective strategy to remove the barriers towards optimal pain management. Pain management should be introduced as a core and a major topic of the curriculum of any medical school and in all residency training programs, so that future physicians never forget to address pain management in any patient encounter. Pain management educational programs should be held regularly for all medical staff. Training of health care professionals should include communication and team working skills. Particular attention should be given to strengthen the communication and collaboration between doctors and nurses so that they work as one homogenous team. A culture that promotes pain relief and always makes it a priority should be introduced. In such culture, achieving optimal pain management must be the goal for every healthcare professional rather than a goal for a specific team. Pain assessment must be done routinely with every patient in every clinical setting. Standard pain management protocols should be introduced and should be carefully monitored especially in busy and clinically demanding areas. Improvement in pain management should be

an important quality improvement goal for every health institution. Solutions for shortages of medical staff must be developed to reach a reasonable and acceptable workload. Legislations to facilitate access to all analgesics should be implemented so that access to people in need becomes smooth and easy.

## REFERENCES

1. McQuay HJ, Moore RA, eds. *Epidemiology of chronic pain*. Seattle: IASP Press; 2008.
2. Tashani OA, Johnson MI. Avicenna's concept of pain. *Libyan J Med* 2010 Sep;5.
3. International Association for the Study of Pain (IASP) taxonomy [cited 2017 July]. Available from: <http://www.iasp-pain.org/Taxonomy#Pain>.
4. International Association for the Study of Pain (IASP) [cited 2017 July]. Available from: <https://www.iasp-pain.org/files/Content/ContentFolders/GlobalYearAgainstPain2/20042005RighttoPainRelief/factsheet.pdf>.
5. Mäntyselkä P, Kumpusalo E, Ahonen R, Kumpusalo A, Kauhanen J, Viinamäki H, et al. Pain as a reason to visit the doctor: a study in Finnish primary health care. *Pain* 2001 Jan;89(2-3):175-180.
6. Wells N, Pasero C, McCaffery M. Improving the Quality of Care Through Pain Assessment and Management. In: *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Hughes RG, editor. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008. p. 469-489.
7. Henwood P, Ellis JA. Chronic neuropathic pain in spinal cord injury: the patient's perspective. *Pain Res Manag* 2004;9(1):39-45.
8. Bair MJ, Robinson RL, Katon W, Kroenke K. Depression and pain comorbidity: a literature review. *Arch Intern Med* 2003 Nov;163(20):2433-2445.
9. Gaskin DJ, Richard P. The economic costs of pain in the United States. *J Pain* 2012 Aug;13(8):715-724.
10. Mäntyselkä PT, Turunen JH, Ahonen RS, Kumpusalo EA. Chronic pain and poor self-rated health. *JAMA* 2003 Nov;290(18):2435-2442.
11. Torrance N, Elliott AM, Lee AJ, Smith BH. Severe chronic pain is associated with increased 10 year mortality. A cohort record linkage study. *Eur J Pain* 2010 Apr;14(4):380-386.
12. Borsook D. A future without chronic pain: neuroscience and clinical research. *Cerebrum* 2012 May-Jun;2012:7.
13. Mędrzycka-Dąbrowska W, Dąbrowski S, Basiński A. Problems and barriers in ensuring effective acute and post-operative pain management – an international perspective. *Adv Clin Exp Med* 2015 Sep-Oct;24(5):905-910.
14. Glajchen M. Chronic pain: treatment barriers and strategies for clinical practice. *J Am Board Fam Pract* 2001 May-Jun;14(3):211-218.
15. Zuccaro SM, Vellucci R, Sarzi-Puttini P, Cherubino P, Labianca R, Fornasari D. Barriers to pain management: focus on opioid therapy. *Clin Drug Investig* 2012;22(32) (Suppl 1):11-19.
16. Czarnecki ML, Simon K, Thompson JJ, Armus CL, Hanson TC, Berg KA, et al. Barriers to pediatric pain management: a nursing perspective. *Pain Manag Nurs* 2011 Sep;12(3):154-162.
17. Bawa M, Mahajan JK, Aggerwal N, Sundaram J, Rao KL. Barriers to Pediatric Pain Management in Children Undergoing Surgery: A Survey of Health Care Providers. *J Pain Palliat Care Pharmacother* 2015;29(4):353-358.