

# PAIN MANAGEMENT MARKET OVERVIEW

ANITA HOLDCROFT

*Imperial College and Chelsea and Westminster Hospital, London, England*

## 1 INTRODUCTION

Worldwide an estimated one and a half billion people repeatedly endure moderate to severe pain. However, pain relief is not restricted to this population because pain is often of short duration. Both acute and chronic pain are associated with disability and distress that reduce quality of life. The International Association for the Study of Pain (IASP) has issued definitions (Table 1) and a classification of pain states based on temporal, site, and disease patterns [1]. The American Pain Foundation in 2002 through a Mason–Dixon Poll identified that more than 50 million Americans (18% of the total population, and set to increase to over 100 million in a decade) suffer chronic pain, thus making pain symptoms appear to be of epidemic proportions (<http://www.painfoundation.org/page.asp?file=Library/PainSurveys.htm>; accessed July 28, 2006). For example, 49% of 625 respondents had pain that varied from mild (31%), moderate (43%), moderate/severe (18%) to severe (7%), and of this group with pain, 40% of people experienced pain almost every day.

The definition of pain has recognized shortcomings because it is a sensation that is modified by biological and external influences. For example, the central nervous system actively alters the nerve transmission generated by a noxious stimulus, either by inhibition or excitation at different sites from the spinal cord to the cerebral cortex. In addition, social and cultural influences, beliefs, and biases can influence the sensation and may be linked to negative emotions such as anger, fear, and depression.

The European approach to this global reduction in quality of life in pain patients has been led by the European Federation of IASP Chapters (EFIC). This organization has called for recognition of pain not as merely a symptom but as an important health concern and a disease in its own right. It has sought partnership with groups, such as the International Alliance of Patients' Organisations (IAPO), and industry in order to represent patient interests and to build up a network of resources. These resources range from Web-based information to specialized journals and include education, curriculum development, evidence-based reports, and research tools. One of the best evidence-based reports is that from the Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine in 2005 on Acute Pain Management and it advocates acute pain management as a basic human right [2].

The response to surgery or trauma is an acute pain sensation that directly follows a noxious event and acts as a warning to seek help. When the pain persists, often the tissues have healed and different physiological systems are activated, leading to complex physical, behavioral, and psychological symptoms. These can result in dependence on medication, overuse and inappropriate use of health care, disability, poor sleep, isolation, and depression. The undertreatment of pain has been well recognized as a public health problem. Hence there have been professional and political pressures to make available and use opioid drugs to manage severe pain. Across the world the frequency of opioid use for pain relief has increased but, interestingly, at one U.S. medical center differences in the amount of prescribed