



## ISSUES IN MEDICINE

## Can the development of pain management units be justified in an emerging democracy?

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Inadequate pain management results in unnecessary human suffering. South Africa, a developing country with both First-World and (largely) Third-World socio-economic circumstances, has transformed with the transition to democracy. Health resources are limited and directed at catering for a growing population where life-threatening conditions like HIV/AIDS, violent crime and poverty prevail. Is pouring limited resources into pain management justifiable when life-threatening conditions remain under-resourced?

Chronic pain is viewed as a disease entity in its own right with bio-psychosocial symptoms and signs requiring specific treatment.<sup>1</sup>

Little information is available on pain management in developing countries.

### Acute pain

In a review of acute pain services in 105 hospitals across 17 European countries, only 34% had organised acute pain services.<sup>2</sup> Postoperative pain was experienced by 80% of patients.<sup>3</sup> Inadequately relieved postoperative pain can lead to complications such as deep-vein thrombosis, lung infections, and myocardial ischaemia that may extend hospital stay. Others have concluded that acute pain services can be cost effective.<sup>4</sup> Twenty-five per cent of all patients presenting to pain relief clinics suffer from chronic post-surgical pain.<sup>5</sup> Unrelieved acute pain was found to be a risk factor in the development of chronic pain.<sup>6</sup> The first full-time acute pain management service in South Africa was established at Hillbrow Hospital

in Johannesburg in 1991. Patient and staff education in pain management was introduced. Up to 25 PCA pumps were in operation at any given time.<sup>7,8</sup>

### Non-malignant chronic pain

A study of chronic pain in Norway showed a prevalence of 24.4%. In a survey of 3 498 routine primary care visits, musculoskeletal pain occurred in 65% of adults aged 60 years and older.<sup>9</sup>

In the South African workforce a high prevalence of regional musculoskeletal pain has been found, with substantial variation between industries.<sup>10</sup>

Pain of predominantly neuropathic origin is prevalent in about 8% of the general population. Neuropathic pain can occur as a result of neurological disease, trauma, metabolic disease, or as a result of neurotoxins. Chronic headaches affect mainly the young population. Migraine affects 10 - 20% of the world population. Chronic pelvic pain affects mainly young, economically active females.<sup>11</sup> Post-traumatic development of the less common complex regional pain syndrome involves yet another group of patients presenting to pain relief units. Early diagnosis and mobilisation improves their healing and recovery.

### Malignant chronic pain

The World Health Organization has identified cancer pain as a major international problem. Unrelieved cancer pain is a significant problem in South Africa; one study found that nearly one-third of 426 patients with cancer pain in South Africa experienced severe pain. HIV/AIDS-related pain may be associated with infections (candida, herpes zoster), tumours (Kaposi's sarcomas) or neuropathies related to the disease itself or to the drug treatment regimen.<sup>12</sup>

### Economic implications of chronic pain

Chronic pain creates a major public health problem that impacts negatively on quality-of-life issues and health care costs. Pain severity accounts for more than one-fourth of the variance in physical disability in those older than 65 years. Global costs related to spinal degenerative disease can amount to 1 - 2% of annual gross domestic product. An early intervention programme to prevent chronicity in high-risk patients with

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acute low back pain has been studied. In high-risk patients the early treatment phase was found to be cost effective.<sup>13-15</sup>

Chronic pain management involves medical, social and economic components. A study by Zimmerman found that a population accessing specialty pain relief units made less use of other health care services. The use of pain relief units contains costs.<sup>16</sup> A qualitative systematic review of the economic effectiveness of multidisciplinary pain clinics in treating chronic non-malignant pain found that acceptance of validated criteria of outcome measurements should occur before cost effectiveness can be assessed adequately.

In the case of spinal pain, marked saving was shown for outpatient pain unit compared with surgical management.<sup>17</sup> Spinal cord stimulation resulted in 15% of chronic pain patients returning to work. In patients with failed back surgery syndromes, spinal cord stimulation proved cost effective.

Peripheral nerve and spinal cord stimulation have initial high costs, offset by long-term economic benefits. The costs of running a multidisciplinary pain relief unit are low compared with the costs of other tertiary medical units.<sup>18</sup>

## South Africa

South Africa lags behind developed countries and even many underdeveloped countries as far as membership of the International Association for the Study of Pain (IASP) is concerned. Access to First-World pain management units is difficult for the vast majority of poor South Africans. In the public health system, chronic pain relief units are poorly resourced and available in few major tertiary hospitals. Medical school undergraduate pain management training remains limited. Health care funders in South Africa do not recognise chronic pain as a separate medical entity.

South African patients suffer from similar pain pathology to those in the developed world, but published data are limited. The incidence of trauma from violent crime is high. Resources are limited to treat this effectively.<sup>19</sup> In the geriatric population, degenerative spinal disease is common. Lumbar surgery is frequently performed, often with the persistence of chronic pain.<sup>20</sup>

Relief of post-surgical pain is often suboptimal. The HIV/AIDS epidemic in our country continues unabated.<sup>21</sup> Patients with AIDS suffer significantly from pain; this constitutes a major problem leading to unnecessary suffering, absenteeism

and 'presenteeism' (workers being at work, but not fully functional). Job loss due to pain experienced from HIV/AIDS-related neuropathy spells disaster for a mother supporting a young family. The importance of adequate pain control to enable her to remain employed cannot be over-emphasised.

Inequity and inadequate resources plague health services in South Africa, but new health policies aim to ensure universal access to health care, including palliative care for cancer. Available knowledge advocates pain management education and the establishment of adequate pain clinics. Pouring resources into pain management is justifiable and the challenge is to make this a reality.

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