ARTICLES

OVERCOMING BARRIERS TO PAIN RELIEF IN THE CARIBBEAN

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Keywords
developing world, practice guidelines, medical ethics, education, duties, healthcare, treatment

ABSTRACT
This paper examines pain and pain relief in the Caribbean, where pain is widely perceived as an unavoidable part of life, and where unnecessary suffering results from untreated and under treated pain. Barriers to pain relief in the Caribbean include patient and family attitudes, inadequate knowledge among health professionals and unduly restrictive regulations on the medical use of opioids. Similar barriers exist all over the world. This paper urges medical, nursing and public health professionals, and educators to examine attitudes towards pain and pain relief and to work towards making effective pain relief and palliation more accessible. It recommends that i) health professionals and officials be better educated about pain, palliation and opioids, ii) regulatory restrictions be updated in light of clinical and scientific evidence, iii) opioid procurement policies be adjusted to facilitate increased medical use, iv) medical charts and records be modified to routinely elicit and document patients levels of pain, and v) educational campaigns be developed to inform the public that moderate and severe pain can be safely relieved at the end of life and other stages of life. The professional, respectful, and beneficent response to patients in pain is to provide rapid and aggressive pain relief or to urgently consult a pain or palliative specialist. When a health system hinders such efforts the ethical response is to identify, facilitate and advocate for overcoming barriers to improvement.

INTRODUCTION
Medical advances have led to significant increases in human longevity. The benefits associated with increased life spans, however, are challenged by personal and socio-economic burdens associated with aging, illness, injury and the dying process. Many in wealthy nations are able to access elements of hospice and/or palliation that relieve pain and ease the burdens of dying. Fewer are able to access effective pain relief when crippling or disabling pain occurs earlier in life. Wealthy nations are able to provide higher standards of healthcare and pain relief than lower income countries. Caribbean nations have diverse populations and economies but generally have middle income status. This paper examines pain relief in the Caribbean and suggests means of increasing the quality of, and access to, pain relief in Caribbean and other developing nations. English-speaking Caribbean nations are primarily populated and governed by people of African descent. These nations have national health systems that offer universal healthcare although small user fees are increasingly charged for some services. The quality and quantity of healthcare varies, and some nations lack resources with which to effectively manage prevalent conditions or
fulfill their own targets for primary care. The view that pain is God’s will is widely held and many perceive pain as an unavoidable part of life.¹ It became apparent at a caregiver workshop in 2008 that some of the least educated in the region do not know that medications like Aspirin often effectively relieve pain. Given these factors it is unsurprising that Caribbean health systems do not prioritize pain relief or palliation.

PAIN

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage.² Over 20 million people globally have cancer but over half of them live in poor nations where there is no pain relief or palliative support.³ The prevalence and severity of cancer pain increases with disease progression and so effective palliation involves assessment, treatment with type-specific interventions, reassessment and adjustment of interventions. Health systems in most poor nations are generally short staffed, under resourced, and unable to provide such care.

Cancer and non-cancer pain can be relieved safely and effectively with opioid medications.⁴ Many nations, associations, and institutions have guidelines for palliative care and pain management that draw on the World Health Organizations (WHO) three step analgesic ladder which recommends oral morphine as the safest, most effective means of relieving moderate to severe pain.⁵ Oral morphine is relatively inexpensive but its availability is limited by numerous barriers including procurement systems. The International Narcotics Control Board (INCB) monitors global consumption of opioids and regulates opioid import/export for over 150 nations. The INCB aims to prevent illegal use and trafficking of opioids but also notes that millions of people:

. . . needlessly suffer acute and chronic pain caused by childbirth, surgery, trauma and diseases, such as cancer and AIDS. While global consumption of opioid analgesics for the treatment of moderate to severe pain has more than doubled over the past decade, that increase occurred mainly in Europe and North America. In 2006 those two regions accounted for 89% of global consumption of morphine. . . 80% of the world population lives in developing countries and consume only 6% of the morphine distributed worldwide.⁶

A WHO collaborating centre (the Pain and Policy Studies Group (PPSG)) documents the annual opioid consumption in milligrams per capita (mg/capita) for the more than 150 nations that report to INCB. Morphine consumption is one measure of whether pain relief is widely provided in a given nation. In 2006, Canada reported 62.0 mg/capita and France 43.5 mg/capita while Jamaica reported 1.1 mg/capita and Grenada 0.5 mg/capita.⁷ Consumption in the English-speaking Caribbean ranged from 1.8 mg/capita in St. Lucia to 0.15 mg/capita in Guyana.⁸ Attempts have been made in some Latin American nations to increase medical access to and use of morphine,⁹ and unpublished PPSG data indicates that such attempts correlate with increases in consumption (personal communication).

PAIN IN THE CARIBBEAN

Pain is often associated with cancer but there are numerous other causes of pain. Interrupted blood flow causes sickle cell patients to suffer severe headaches and pain in the joints, extremities and orofacial region,¹⁰ and 54% of sickle cell patients in the U.S. have pain even when they are not in a crisis or seeking treatment.¹¹ Sickle cell crises

⁸ Ibid.
⁹ Macpherson, op. cit. note 1.
generate numerous Caribbean hospital admissions where patients are treated predominantly with pethidine, 
12 although the WHO recommends against pethidine which has severe side effects and poor efficacy. 13 Caribbean pethidine consumption in 2006, however, ranged from a high of 5.5 mg/capita in Grenada to a low of 3.0 in St Vincent and the Grenadines compared with Canada’s 21.2 and France’s 0.23 mg/capita. 14 In addition, headache and migraine pain is common in the Caribbean and was associated with reduced productivity among 25% of employees surveyed at one hospital. 15 

Pain in the Caribbean is untreated and undertreated both in hospitals and at home. 16 Caribbean cancer patients may under report pain for fear of distracting doctors from treating their disease. 17 Caribbean doctors rarely prescribe oral morphine even for terminally ill cancer patients with severe pain, although palliative and pain guidelines recommend this as safe, effective and practical in poor nations. 18 When morphine is prescribed for hospitalized patients in the Caribbean, some nurses withhold it until they observe what they regard as signs of severe suffering. 19 Such actions and inactions violate recommendations for early and aggressive pain relief to prevent unnecessary suffering and reduce the amount of medication needed to obtain effective relief. 20 

Caribbean health systems and pharmacies sometimes run out of morphine, 21 and regulatory bodies and procurement policies maintain unnecessarily onerous restrictions on the medical use of opioids. Like physicians and nurses in much of the world, most in the Caribbean have inadequate knowledge about pain management, unfounded concerns about side effects and taboos against morphine. Even in Britain where hospice was pioneered, medical schools still do not routinely teach current information about morphine or pain relief. 22 Globally, the medical use of morphine is impeded by inadequate knowledge among health professionals and policy makers, limited infrastructure and resources and obstructive regulatory barriers. 23 We further examine the status of pain relief in Jamaica, a large and comparatively wealthy Caribbean nation and in Grenada, a small and less wealthy one.

PAIN RELIEF IN JAMAICA

Jamaica is the largest English-speaking Caribbean nation (10,991 km2) with a population of 2.7 million. 24 Its economy is dominated by tourism, bauxite mining and agriculture. The Ministry of Health receives about 5% of the gross national product and provides about half of Jamaica’s healthcare, the rest being provided privately. 25 Significantly more health dollars are spent on curative rather than preventive or supportive care, and other nations also prioritize curative over palliative treatment. 26 Cancer accounts for 15% of Jamaica’s non-communicable diseases, 27 17.7% of all deaths, 28 and in 1999 alone for 2407 deaths. 29 HIV prevalence among adults was estimated at 1.3% in 2008. 30

14 Ibid.  
19 Kreitzschitz & Macpherson, op. cit. note 16.  
20 Librach & Squires, op. cit. note 13.  
21 Macpherson, op. cit. note 1; Kreitzschitz & Macpherson, op. cit. note 16.
Jamaica has a shortage of nurses and physicians because many emigrate to developed countries. Few doctors work outside the main towns where some specialist services are unavailable.\textsuperscript{31} Jamaica has two hospices for cancer patients and one service for chronic pain. A charity based eight bed hospice is maintained in a private Catholic hospital that is funded by donations and nominal charges and is staffed by nurses. The government supports a 29 bed hospice staffed primarily by nurses and one radiation oncologist/palliative specialist. Chronic pain is treated elsewhere by three consultant anaesthetists. These services are available only in the capital city of Kingston.

Anecdotally, the most common causes of severe pain in Jamaica are injury, kidney and gall bladder stones, sickle cell crises, cancer metastases, post-operative pain, migraine and chronic lower back pain. Jamaican patients fear pain but older people generally perceive it as part of aging and they attempt to bear it without complaint. Younger people tend to expect pain relief but may not receive it because doctors and nurses emphasize curative efforts, pay insufficient attention to diagnosing or treating pain, and are misinformed about the safety and efficacy of opioids.

The medical curriculum at the University of the West Indies (UWI) in Jamaica has no formal lectures on pain assessment, pain relief or palliation but anaesthesics clerkships introduce management of acute and post operative pain. Medical students are introduced to the management of chronic pain when they visit the government’s Hope Institute for Cancer during their training. With such limited training, therefore, many Jamaican doctors and nurses mistakenly believe that morphine causes addiction and respiratory failure. Their reluctance to prescribe morphine is compounded by some patients’ refusal of morphine even in the face of agonizing pain. Refusal is rooted in the fear of death and the perception that opioids are prescribed only to those who will not recover.

**PAIN RELIEF IN GRENADE**

Grenada is a small nation comprising 344 km\(^2\) with a population hovering around 100,000. Its economy was centred on agriculture and tourism until Hurricane Ivan struck in 2004. Since then construction and banking industries have become significant contributors as well. Cancer is common but there is no cancer registry so the number of related deaths is unavailable. Anecdotally HIV prevalence is low and the most recent publicly available data indicates a cumulative total of 121 AIDS patients in 2002.\textsuperscript{32} Anecdotally, most morbidity and mortality in Grenada is due to cancer, diabetes and diseases of the cardiovascular, renal and respiratory systems.

The capital city, St George’s, has one public hospital and one small private hospital. Additionally there are two small public hospitals in outlying areas. None employ pain or palliative specialists but the main public hospital established an oncology service in 2007. Government and private homes for the aged provide medical and nursing care but no hospice, palliative care or pain clinics exist. Hospitalized patients may receive intravenous morphine for severe pain but key informants indicate that oral morphine is not available even through private physicians or pharmacies. Severe pain and disability is common among end of life patients at home and in hospital,\textsuperscript{33} but the standard care for moderate to severe pain associated with any condition or stage of life is pethidine.

The Ministry of Health has hosted several workshops on pain relief in collaboration with St. George’s University to update the knowledge of its doctors, nurses and pharmacy officers. The Ministry of Health has also established a steering committee charged with identifying aspects of palliative and hospice care that could be adopted and maintained with Grenada’s limited resources. This committee proposed that the WHO three step analgesic ladder be adopted as policy, and that proposal was approved by Cabinet in 2007 although no change is yet visible.

**OVERCOMING BARRIERS**

Caribbean barriers to effective pain relief include patient and family attitudes, inadequate knowledge among health professionals and unduly restrictive regulations on opioids. Overcoming these barriers require taking several critical approaches outlined here. We urge Ministers of Health, public health officials, health advocacy organizations and others to discuss and implement these efforts.

Educating health professionals

Health professionals including pharmacy officers and other officials need education about pain, palliation and opioids. To this end medical curricula should adopt formal content teaching the fundamentals of palliation. Continuing medical and nursing education should reinforce and expand upon the fundamentals to support the ability and willingness to assess and treat pain aggressively. Such efforts will increase demand for morphine and

\textsuperscript{31} Aarons, *op.cit.* note 18.

\textsuperscript{32} PAHO, *op. cit.* note 29.

\textsuperscript{33} Kreitzshitz & Macpherson, *op. cit.* note 16.
put pressure on governments to procure larger and more adequate amounts.

**Re-examine regulatory restrictions**

Regulatory restrictions need to be re-examined and updated by pharmacy officers and health officials in light of clinical and scientific evidence. Such modifications would ease restrictions that hinder prescribing and refilling oral morphine, particularly for incapacitated patients who cannot leave home. Physicians should be able to prescribe oral morphine for several weeks at a time rather than for a few days and both public and private pharmacies should be able to provide it. Increased morphine access for patients with severe pain and their caregivers does not encourage diversion or abuse.

**Reduce bureaucratic obstacles**

Opioid procurement policies need adjustment to reduce bureaucratic obstacles and encourage medical importation and use. This will facilitate procurement of larger quantities and make them more accessible to pharmacists, physicians and patients in pain, in urban and rural or remote areas.

**Recording pain assessment in routine care**

Hospital charts and medical records need modification to elicit and record pain assessments as a part of routine care. This will encourage physicians and nurses to diagnose and classify pain, promote the treatment of pain and facilitate monitoring of improvement. Such information is invaluable to assessing, monitoring and responding to national needs.

**Public education campaign**

Public education campaigns need to inform people that agonizing pain can be safely relieved at the end or any other stage of life. Public health officials are well placed to design and implement preventive and educational programs. Early management of pain not only minimizes suffering but reduces the cost of treatment and time lost from employment. The welfare of patients, their families and the general public will be enhanced by informing them that severe and prolonged suffering often associated with dying and other conditions can be safely relieved. Pain relief enables even dying patients to extend their employment and productivity and to maintain and enjoy meaningful relationships.

**THINGS PROVIDERS SHOULD KNOW**

Pain relief is a human right. It remains unfulfilled because health professionals are uniformed about relevant clinical and scientific advances. This right would be better met if medical and nursing curricula routinely taught fundamental aspects of palliation. All health professionals might then understand that regular and prophylactic use of morphine in individually optimized doses safely relieves pain, side effects are treatable and patients can be easily weaned from high doses as they get well. Morphine relieves pain and suffering but does not hasten death when administered in accordance with WHO guidelines, and lives may be extended when morphine enables dying patients to rest, sleep, eat and take a renewed interest in life. Behavioural and physiological responses suggest that even neonates and young children perceive pain, but their pain is rarely relieved even when dying.

In some institutions, pain is routinely assessed as the fifth vital sign and noted on patient charts. Assessment of the cause, type, level of intensity and physiological mechanisms involved bear on treatment decisions. Relatively few physicians or nurses elicit or document such information, or know that pain relief speeds recovery and improves outcomes. Even oncologists are not routinely trained in palliation. Few medical curricula or textbooks teach how to relieve pain, prevent breakthrough pain or improve function.

Somatic pain manifests as a gnawing sensation and is associated with metastases, inflammation, surgery and referred pain. Visceral pain is described as squeezing or pressure, typically poorly localized. Neuropathic pain involves burning, shock like sensations, pruritis and other unpleasant symptoms. There are standardized measures of intensity that distinguish between mild, moderate and severe pain. Moderate and severe pain hinders employment, productivity, social activities and emotional welfare. Acute pain is more easily managed than chronic, but some patients suffer both simultaneously. Chronic

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38 Librach & Squires, op. cit. note 13.


pain leads to significant changes in personality, lifestyle and productivity, and its management is challenging.

CONCLUSION

This paper explored barriers to pain relief in the Caribbean. Similar barriers exist all over the world. We encourage readers to examine local attitudes towards pain and pain relief, and to work toward making effective pain relief and palliation more accessible. These issues demand greater attention from medical, nursing and public health professionals, educators and officials.

Ethical principles require providers to believe and respond compassionately to patient self reports of pain and suffering. When patients report moderate, severe or persistent pain the professional, respectful and beneficent response is to rapidly treat aggressively or consult a pain or palliative specialist. When health systems hinder such efforts the ethical response is to identify, facilitate and advocate for means of improvement. The result of such efforts will matter immensely to patients with moderate or severe pain and their caregivers. While such pain may be abstract to many readers, it will eventually strike each of us and/or our loved ones. The probability that we will obtain relief when needed will remain low until morphine becomes more medically accessible.

Biography

Cheryl Macpherson is Professor and Chair of Bioethics at St George’s University, Grenada. She collaborates on capacity building in Caribbean health care and has publications on pain relief, Caribbean culture, professionalism and research ethics. Her interests include global ethics, bioethics education, and ethical considerations regarding the health impacts of climate change. She is also Vice President of the Bioethics Society of the English-speaking Caribbean (BSEC).

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