



- **FACT SHEET No. 8**

## **Pain Education in Low-Resource Countries**

The problems of pain management in low-resource countries stagger the imagination of those in the developed world. In countries where access to morphine is less than 1/10th mg per capita each year, millions are dying with unrelieved pain. Because their populations have limited access to skilled pain care and essential medicines and therapies, estimates suggest 35 percent of people are living with disabling chronic pain.<sup>1</sup> Fifteen years ago, it was clear that pain education and management in developing countries was lagging that of more affluent areas of the world. Despite identification of the problem and funding of educational initiatives by IASP, disparities persist and more resources are needed.<sup>2-4</sup>

### **Why is it difficult to provide effective pain management?**

- **Deficiencies in provider education and training**

The largest obstacle to good pain treatment in many countries is the lack of training for health-care workers. Limited knowledge, inadequate understanding, biases, and insufficient emotional preparation prevent competent pain management. Comprehensive pain assessment and multimodal treatment approaches are poorly understood when pain is taught as a symptom, rather than a condition. Lack of training and myths may lead to unreasonable fears of opioid side effects and erroneous beliefs about the risk of addiction, even in cancer patients. In some cases, patients are denied appropriate analgesics because health professionals are too busy, uninterested, or unprepared to respond promptly with compassion and empathy for the patient's suffering.

- **Inadequate resources**

Constraints in staffing, equipment, and finances render facilities for pain services grossly inadequate or nonexistent in many developing countries. Inadequate resources and organizational skills preclude the establishment of acute pain teams and chronic pain clinics, approaches developed countries routinely employ to provide effective pain control using evidence-based methods, education, advice on difficult pain problems, and research.

- **Lack of opioid analgesics**

Moderate to severe pain requires opioid analgesics for treatment, according to the WHO; however, in many low-resource countries, concerns and policies focus on preventing addiction. In 1996, the International Narcotics Control Board (INCB) recommended improved opioid access.<sup>5</sup> However, progress has been too slow. In the African continent, opioid consumption was static from 1980 to 2006, averaging 0.5 mg per capita with only small increases since 2006; the Indian subcontinent remains static at 0.5 mg per capita.<sup>6</sup>

- **Misalignment of government policies and priorities**

National policies are the cornerstone for implementation of any population-based health-care program, and such policies are absent in many low-resource countries. Effective pain management can only be achieved if the government includes pain relief in the national health plan, education for clinicians, and appropriate controls over and access to opioids and other essential medicines.

- **Failure of public health advocacy and patient education**

The public health strategy approach, as pioneered for palliative care, is best for translating new knowledge and skills into evidence-based, cost-effective interventions. This has not occurred in the realm of pain care. Additionally, patients may have a poor understanding of their own medical problems and may expect persistent pain, which they think they must endure as an inevitable part of aging and illness.

## **What solutions are practical?**

The diversity of situations and problems encountered in the developing world means no single set of solutions apply globally. However, we know that some basic interventions are effective. Improvements in acute and chronic pain management are most likely to result from effective training programs, use of multimodal analgesia, and access to reliable drug supplies.



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**

- **Effective Training Programs**

Education of medical staff in pain assessment and coordinated pharmacological and non-pharmacological management is required before patients can experience increased access. Lobbying aimed at incorporating pain management, including use of opioid medications, in undergraduate medical, nursing, and related health-care training curricula seems a promising long-term strategy and ultimately could relax over-restrictive opioid policies.

The attitudes of the public, patients, caregivers, and policymakers also determine what occurs in practice. A sizeable proportion of the population needs information to help them understand what are appropriate attitudes regarding effective pain relief and medications. While mass education programs have worked in such areas as sexual health and HIV, it is not obvious whether broad initiatives in pain education can produce the required attitudinal changes to generate political will on this issue.

Several organizations have produced comprehensive educational packages, protocols, and guidelines for clinical practice, including IASP.<sup>2</sup> A one-day workshop called Essential Pain Management with initial funding from the Australian and New Zealand College of Anaesthetists is highly regarded.<sup>7</sup> And the Treat Pain Project of the American Cancer Society provides a 13-module training program that touches on opioid availability in sub-Saharan Africa.<sup>8</sup> Materials emphasizing low-cost management strategies and implementation of available treatments to improve the quality of life must be adopted and be culturally appropriate.

- **Education in coordinated pharmacological and non-pharmacological treatments**

1. **Pain assessment**

Educating and motivating clinical staff to assess and treat pain according to approved protocols is the most important part of the process. In an ideal world, assessment of pain should become as indispensable as measuring pulse and blood pressure—pain intensity as the “fifth vital sign.”<sup>9</sup> Assessment tools are simple to understand and are feasible, despite nursing staff shortages, and pain measures are adaptable to local circumstances<sup>10,11</sup>.

2. **Therapies for pain management**

- Non-pharmacological interventions for pain should be included in training programs. These should be actively prescribed and integrate culturally sensitive traditional remedies where appropriate.
- Psychological interventions may be implemented directly, and training programs should encourage discussion of pain management as part of the routine care of the patient. A simple explanation of the cause and likely duration of pain can dramatically improve a patient’s ability to cope, even when other interventions are not accessible. Professional education is essential so that providers can teach patients.



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**

- Access to health-care providers competent in pain management for the prescribing and administration of medication is necessary. Access to perioperative pain management will reduce chronic pain.
- **Education in access to reliable drug supplies**

### 1. Medication access and availability

Drug availability is essential.<sup>12</sup> The fact that morphine and other strong analgesics are controlled medications has given rise to a host of problems related to their *availability*, as countries have struggled to create safe and effective supply and distribution systems; their *accessibility*, as many countries have enacted drug-control laws that make it difficult for doctors to prescribe the medications and for patients to receive them; and their *cost*, as control measures and other factors have unnecessarily driven up the price of these medications, which can be produced at very low cost.

### 2. Regulation of controlled medications

Because of their potential for abuse, morphine and all other strong pain medicines are regulated under the Single Convention on Narcotic Drugs and national drug-control laws and regulations.<sup>13</sup> This means that opioid manufacture, import and export, distribution, prescription, and dispensation can only occur with government authorization, overseen by a body created in convention with the International Narcotics Control Board.

### 3. Supply and distribution

WHO has urged countries to create and sustain well-functioning supply and distribution systems and ensure that drug-control measures do not unnecessarily impede their availability and accessibility.<sup>5</sup> Under the UN drug conventions, countries are obliged to ensure the “adequate provision” of controlled medications while preventing their misuse or diversion.

## The way forward: Education, clinical training, and advocacy initiatives

- **Education**

The IASP Developing Countries Working Group (DCWG) established a program of grants of up to \$10,000 for bottom-up educational projects in 2002.<sup>4</sup> Strict criteria were, and continue to be, applied to the applications and, to date, almost 100 grants have been made and distributed in almost three dozen countries. Projects fall into several categories, the main ones being basic pain education, distance learning packages, and education in specific forms of pain management (for example, the control of pain in cancer patients and during childbirth). Two grants were provided for educating those involved in the storage and use of opioids in Egypt and Nigeria after their introduction to clinical practice.<sup>7</sup>



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**

- **Clinical training**

The original aims of the DCWG were to improve pain education, but recognition that clinical training should also be supported led to the development of IASP training centers, such as the one in Bangkok funded in collaboration with the World Federation of Societies of Anesthesiology (WFSA). There is also an IASP/WFSA Pain fellowship program based in South Africa. In addition, IASP has run [Pain Schools](#) in India and South America.

- **Advocacy**

Advocacy is a process of influencing public opinion at all levels, from the general public to government officials. To improve knowledge about pain, its effects, its treatment, and importantly, the provision of facilities for its management, a process began in 2004 with a joint meeting of the WHO, EFIC, and IASP. The slogan “The relief of pain should be a human right” was the focus, and this formed the basis of the IASP Global Year series. A further step in advocacy was taken in Montreal at the 2010 World Congress on Pain, when a summit involving clinicians, politicians, health-care providers, and pain sufferers aimed to stimulate similar networking events worldwide. It gave rise to the [Declaration of Montreal](#), a call for pain relief to be a basic human right.

Through projects in pain education, IASP and others have raised the level of interest, knowledge, and clinical skills in pain management in low-resource countries. These efforts have encouraged health-care providers and governments to give greater emphasis to pain control and, to some extent, relax the severe restrictions on the use of opioids and other drugs. In other words, the barriers to good pain management are being broken down to the benefit of pain sufferers worldwide.

Much work remains: Appropriate pain education is essential for all health-care professionals (and patients as well), and multidisciplinary teamwork is central to successful pain management. Pain education should be included in the curricula and examinations of undergraduate and postgraduate health-care students for competency and incorporated into continuing education programs.

## REFERENCES

1. Gureje O, Von Korff M, Simon GE, et al. Persistent pain and well-being: a World Health Organization study in primary care. *JAMA* 1998; 280: 147–151.
2. Charlton E (ed.) *Core curriculum for professional education*. 3rd ed. Seattle: IASP Press, 2005.
3. Soyannwo OA, Obstacles to Pain Management in Low-Resource Settings in: Kopf, A, Patel NB, Guide to Pain Management in Low-Resource Settings 2010 IASP Seattle; pgs 9-11.
4. Bond M. A decade of improvement in pain education and clinical practice in developing countries: IASP initiatives *British Journal of Pain* 2012 6(2) 81–84
5. World Health Organization, Cancer Pain Relief: a Guide To Opioid Availability (2nd ed. 1996).
6. Pain and Policy Study Group. AFRO Regional Opioid Consumption in Morphine Equivalence, mg/person [http://www.painpolicy.wisc.edu/sites/www.painpolicy.wisc.edu/files/afro\\_me.pdf](http://www.painpolicy.wisc.edu/sites/www.painpolicy.wisc.edu/files/afro_me.pdf) Accessed January 2, 2018.



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**

7. Goucke R., Morriss W. Pain management in Low and Middle Income Countries (LMIC) just put up with it? *Egyptian Journal of Anaesthesia* (2012) 28, 1–2.
8. O’Brien M, Mwangi-Powell F, Adewole IF, Soyannwo O, Amandua J, Ogaja E, Okpeseyi M, Ali Z, Kiwanuka R, Merriman A. Improving access to analgesic drugs for patients with cancer in sub – Saharan Africa. *Cancer control in Africa Series 5, Lancet Oncol* 2013; 14: e176–82
9. Joint Commission on Accreditation of Healthcare Organizations and the National Pharmaceutical Council, Inc. *Pain Current Understanding of Assessment, Management and Treatments*. 2001.
10. Soyannwo OA, Amanor-Boadu SD, Sanya AO, Gureje O. Pain assessment in Nigerians Visual Analogue Scale and Verbal Rating Scale compared. *West African Journal of Med.* 2000; 19: 242–5.
11. Akinpelu AO, Olowe OO. Correlative study of three pain rating scales among obstetric patients. *African Journal of Medicine and Medical Science* 2002; 31: 123–6.
12. WHO guideline manual “Achieving Balance in National Opioid Control Policy (2000)”.
13. Survey Findings: Global Overview of Barriers to Pain Treatment; Training for Healthcare Workers In: *Global State of Pain Treatment: Access to Palliative Care as a Human Right*. Global palliative care Human Rights Watch | May 2011 pg 13-14. ISBN 1-56432-771-X.

## AUTHORS

Elizabeth Ogboli-Nwasor, MBBS, DAWACS, FWACS, FICS, MPH, DA, WFSA  
 Department of Anaesthesia  
 Ahmadu Bello University Teaching Hospital  
 Zaria, Nigeria

Beth B. Hogans, MS (Biomath), MD, PhD  
 Associate Professor, Director of Pain Education  
 Johns Hopkins School of Medicine  
 Director, NIH Center of Excellence in Pain Education  
 Johns Hopkins University  
 Baltimore, Md., USA

## REVIEWERS

Olaitan Soyannwo, M.Med., DA, FWACS, FICS  
 Consultant Anesthetist, Pain and Palliative Care  
 University College Hospital, Ibadan  
 Director Centre for Palliative Care, Nigeria  
 Ibadan, Nigeria

Judy Watt-Watson, RN, MSc, PhD  
 Professor Emeritus  
 Lawrence S. Bloomberg Faculty of Nursing  
 Senior Fellow, Massey College  
 University of Toronto  
 Toronto, Ontario, Canada



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**

### **About the International Association for the Study of Pain®**

IASP is the leading professional forum for science, practice, and education in the field of pain. [Membership is open to all professionals](#) involved in research, diagnosis, or treatment of pain. IASP has more than 7,000 members in 133 countries, 90 national chapters, and 20 Special Interest Groups.

Plan to join your colleagues at the [17th World Congress on Pain](#), September 12-16, 2018, in Boston, Massachusetts, USA.

**As part of the Global Year for Excellence in Pain Education, IASP offers a series of nine Fact Sheets that cover specific topics related to pain education. These documents have been translated into multiple languages and are available for free download. Visit [www.iasp-pain.org/globalyear](http://www.iasp-pain.org/globalyear) for more information.**



© Copyright 2018 International Association for the Study of Pain. All rights reserved.

**IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.**