

PAIN MANAGEMENT IN

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Inadequate treatment of acute and chronic pain is an enormous problem the world over, but especially so in resource-poor countries. An estimated 20 percent of the world's population is affected, including more than 5 million patients with terminal cancer pain and millions of patients who suffer from persistent pain following surgery. Something needs to be done urgently for the 80 percent of the world's population who lack adequate access to pain treatments.

The obstacles are many and complex but not insurmountable. The lack of material and human resources is clearly one problem. Surprisingly, inadequate resources are not simply due to poor finances. Morphine, an inexpensive first-line treatment for cancer pain recommended by the International Association for the Study of Pain (IASP) and the World Health Organization (WHO) since 1986, is still not available in more than 150 countries. Lack of access to opioids is due to strict national and state regulations and complicated licensing systems as well as negative cultural attitudes toward treating pain with opioids. Even in developed countries, many physicians believe that using opioids will result in addiction and an earlier death in terminally ill patients. Inadequate education and experience for health care workers in the use of opioids for pain contributes to a lack of advocacy for increased availability. For this reason, 87 percent of the world's morphine is consumed by 10 major industrial countries, and 85 percent of the world's population shares the remaining 13 percent. In addition, pain management often takes a low priority compared with infectious diseases in developing countries and may be one

reason why so few pain clinics and hospices exist. Other barriers include patient and family attitudes about reporting pain and a lack of knowledge about treatment options.

As anesthesiologists, we recognize that it is better to prevent pain than to treat it, and improved acute pain management in the perioperative period provides an opportunity to achieve this goal. The availability of surgery for traumatic injuries, pregnancy-related complications, cardiovascular disease and malignancies is rising in developing countries. The risk of chronic pain due to inadequate perioperative analgesia is increasing as well. In many developing countries, accidents, especially from road traffic, account for one-third of the disease burden in adult males between 15 and 44 years of age.

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DEVELOPING COUNTRIES



Dr. Daniel Vo, an anesthesia resident at the University of Pennsylvania, teaches ultrasound regional anesthesia in Vietnam after receiving a SEA-HVO Traveling Fellowship. He taught at the Hospital for Traumatology and Orthopedics in Ho Chi Minh City, where commonly 1,000 patients with orthopedic injuries are seen daily (photo courtesy of Dr. Vo).

Disability due to chronic pain is a significant problem for those who survive, especially since they are traditionally the primary wage earners for their families. Analgesia for postoperative acute pain is almost nonexistent in low-income countries as is analgesia for labor and delivery. A survey of anesthetic officers in Uganda showed that only 45 percent always had opioids available for postoperative pain and that 21 percent never had these drugs available. Until the difficulty in obtaining opioids is resolved, other pain treatment modalities must be taught and encouraged. They might include the use of NSAIDs, ketamine and regional anesthesia whenever possible. Peripheral nerve blocks, in particular, have many advantages in operating rooms where electricity, oxygen delivery, ventilators, monitoring, anesthetic staffing and recovery room care are often inadequate or unavailable.

Solutions to the problems of inadequate pain management in developing countries should be realistic, patient-oriented and culturally appropriate. Existing resources such as physician extenders, primary health care centers, non-governmental organizations (NGOs) and even families must be used in creative ways to reach solutions. Government, social and health care agencies must be organized to collaborate with NGOs and educationally-oriented organizations to make better use of existing resources and work toward an improved future.

As members of the ASA, how can we help the worldwide pain epidemic? Become involved, volunteer your time or provide financial support to the following organizations or others of which you may be aware.

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The IASP offers visiting lectureships and consultancies, an "Adopt-a-Member" program, translation and publication of IASP publications into various languages, and grants to support travel to its World Congresses.

Since its establishment in 1993, the World Institute of Pain (WIP) has helped educate, train and provide a global forum for pain physicians around the world, since advances in pain management have been available only to about a quarter of the world's population.

In 2010, the WIP established the WIP Foundation, the mission of which is to enhance world population health and function through education and research in the field of pain medicine. It endeavors to do so by facilitating the teaching of pain medicine techniques throughout the world, with special emphasis on developing and emerging countries. This includes the creation of more local training, examination-based certification programs for pain physicians, an international scholarship fund to attend its meetings, and grants for eligible candidates to visit and learn at pain centers of excellence throughout the world.

In 2010, the African Society of Regional Anesthesia was founded to promote education and practice in regional anesthesia on that continent. The World Federation of Societies of Anaesthesiologists has published guidelines pertaining to the management of acute pain in developing countries and has provided educational materials in these areas. Health Volunteers Overseas (HVO) includes pain management in its anesthesia curriculum in many of the countries to which it sends its volunteers.

References and Resources

- World Institute of Pain Foundation. <http://www.wipfoundation.org/>. Accessed April 5, 2012.
- International Association for the Study of Pain. <http://www.iasp-pain.org/>. Accessed April 5, 2012.
- World Federation of Societies of Anaesthesiologists. <http://www.anaesthesiologists.org/>. Accessed April 5, 2012.
- Health Volunteers Overseas. <http://www.hvovusa.org/>. Accessed April 5, 2012.
- Bond M, Breivik H. Why pain control matters in a world full of killer diseases. *Pain: Clin Updates*. 2004;12(4):1-4.
- Lamas D, Rosenbaum L. Painful inequities--palliative care in developing countries. *N Engl J Med*. 2012;366(3):199-201.
- Mathers CD, Lopez AD, Murray CJL. The burden of disease and mortality by condition: data, methods, and results for 2001. In: Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJL, eds. *Global Burden of Disease and Risk Factors*. New York: Oxford University Press and The World Bank; 2006:45-180.
- Pain & Policy Studies Group. *Availability of Opioid Analgesics in Asia: Consumption Trends, Resources, Recommendations*. Madison, WI: University of Wisconsin Pain and Policy Studies Group/WHO Collaborating Center for Policy and Communications in Cancer Care; 2002.
- Hodges SC, Mijumbi C, Okello M, McCormick BA, Walker IA, Wilson IH. Anaesthesia services in developing countries: defining the problems. *Anaesthesia*. 2007;62(1):4-11.
- Size M, Soyannwo OA, Justins DM. Pain management in developing countries. *Anaesthesia*. 2007;62(suppl 1):38-43.
- Vijayan R. Managing acute pain in the developing world. *Pain: Clin Updates*. 2011;19(3):1-7.

2012 ASA NICHOLAS GREENE, M.D. AWARD FOR OUTSTANDING HUMANITARIAN CONTRIBUTION

Consistent with the catastrophic anesthesia crisis in low-income countries and the need for anesthesiologists to respond to disasters, provide care in humanitarian settings and educate/train those who would otherwise have no access to such expertise, the ASA membership has been reaching out to the world in these capacities for decades.

The ASA and the Committee on Global Humanitarian Outreach recognize the humanitarian contributions of an ASA member annually for Outstanding Volunteer Service and Humanitarian Contribution. A nomination application is available on the ASA GHO website at www.asahq.org/gho. All applications are due Tuesday, July 31, 2012 to be reviewed at the GHO Committee meeting. The award will be presented at ANESTHESIOLOGY 2012 in October in Washington, D.C.