



WHY PAIN CONTROL MATTERS IN A WORLD FULL OF KILLER DISEASES

Pain: A Silent Dimension of the Top Ten Diseases

Last year, the World Health Organization (WHO) released its latest statistics on the leading causes of death and disease burden worldwide. Although pain itself appears as a cause of neither global mortality (Table I) nor disease burden (Table II), pain researchers and clinicians know that pain can kill. Acute pain causes complications from immobility and often is the starting point for persistent pain. Cancer-related pain and chronic non-cancer pain increase suffering and diminish all aspects of quality of life. Pain is likewise an important detractor from healthy life years in high-burden conditions such as HIV/AIDS, depression, violence such as from war and landmines, stroke, diabetes mellitus, and so on. Health policy makers have at times overlooked the importance of pain as a disease per se. This issue of *Pain: Clinical Updates* traces the joint efforts of IASP and WHO to remedy this oversight as these efforts enter a new and exciting phase.

Prevalence of Chronic Pain

In *developed countries* chronic pain afflicts about 20% of the adult population, particularly women and the elderly, but even children can suffer from recurrent or persistent pain. In only 1-2% of adults with chronic pain, does the pain result from cancer. About 30-40% suffer pain from musculoskeletal and joint disorders. Neck and back pain accounts for another 30%. Headache and migraine account for less than 10% of cases of persistent pain. A worldwide study indicates that pain in primary care is at least as prevalent in developing countries as in developed ones.

Pain as a Disease

Acute pain after trauma or surgery signals actual or imminent tissue damage. Long-term pain from chronic disease such as degenerative arthritis remains a symptom that normally subsides after successful treatment, such as joint replacement. However, when pain persists long after its usefulness as an alarm signal has passed after damaged tissue has healed then it is no longer merely a symptom. In that case, chronic pain is no longer directly related to evolving injury. Instead, it reflects pathophysiological changes within the nociceptive system and psychosocial responses that perpetuate the chronic pain problem. These changes may transcend the specific disease condition that caused the acute pain (Table III).

Therefore, persistent pain and the many physical and psychosocial changes and complications associated with it constitute a major health care problem: "Chronic pain is a specific health care problem, a disease in its own right." Chronic pain as a disease in its own right should be diagnosed only when all signs of the original cause have disappeared or where curative treatment of the initial condition is not possible. Dysfunctional chronic pain has been termed "maldynia" in contrast to "eudynia," pain that appropriately warns of tissue injury.

Cancer Pain in the Developed Nations

About 80% of the 67 million patients dying of cancer annually suffer from pain, and most had far from optimal pain relief until representatives of the International Association for the Study of Pain (IASP) joined with WHO to influence medical practice and improve the availability of analgesic drugs. Pioneering members of IASP, John J. Bonica and Vittorio Ventafridda, met with Jan Stjernswärd from WHO and others in 1985 to develop the first guidelines on management of pain in patients with cancer. WHO published the landmark booklet *Cancer Pain Relief* in 1986. This publication began a major worldwide movement- a revolution- with tremendous impact on the evaluation and treatment of cancer pain.

Because it is a simple, strong message, the WHO three-step analgesic ladder has had immense pedagogic value. It uses the simple, cheap, widely available, and effective non-opioid analgesics acetaminophen (paracetamol) or aspirin (acetylsalicylic acid) for mild or moderate pain, adds a weak opioid such as codeine for more severe pain, and adds morphine when pain is still more severe. Morphine consumption increased after publication of the booklet's first edition, but only in Australia and some Western countries.

The booklet's second, 1996, edition also addressed opioid availability. This publication resulted in wider availability of morphine for cancer pain, progress emphasized in the WHO's national cancer control program recommendations of 1997 and 2002.

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WHO's 2000 publication on achieving balance in regulation of opioids and improving their availability for pain relief was a further major step forward. It overcame legal barriers in some of the many parts of world where legal restriction and misconceived regulations of morphine availability, intended to reduce illegal abuse, remained obstacles to cancer pain relief. WHO-sponsored workshops were organized by David Joranson, Kathleen Foley, and others in Latin America, India, and eastern and southern Europe. They used the WHO publication as a "how-to" manual to promote access to and availability of morphine and similar drugs for cancer pain relief. The resulting progress otherwise would have been much slower.

WHO's immense impact on health care policies and in changing the culture of pain relief has been demonstrated for cancer pain and symptom control. WHO and many IASP members have been directly and indirectly involved in this effort.

Nevertheless, in many parts of the world, even simple analgesics are not available for cancer pain, let alone morphine. In developing countries, available resources for health care understandably go mainly to the prevention and treatment of "killer" diseases. Most are accompanied by unrelieved pain that increases suffering, functional disabilities, and loss of quality of life. These conditions include HIV/AIDS, cancer, tuberculosis, malaria and other infectious diseases, and injuries caused by road traffic accidents, by acts of war, by childbirth and by violence.

Broadening IASP's Mission: The WHO Liaison

The first IASP-WHO liaison officer, Kathleen Foley, was a major contributor to the WHO's efforts to improve management of cancer pain. Subsequent IASP-WHO liaisons Troels S. Jensen and Harald Breivik, together with Jean-Marie Besson and Sir Michael Bond acting as IASP Presidents, have attempted to increase awareness at WHO of acute and chronic noncancer pain as a major health care problem.

It is less well known that acute pain from all causes, including trauma, accidents, acts of war, surgery, childbirth, cancer, and HIV/AIDS, is poorly managed, even in the well-developed parts of the world. Unrelieved acute pain after surgery and trauma increases the risk of postoperative and post-traumatic cardiac, respiratory, and gastrointestinal complications, greater morbidity, higher costs, and even mortality. Even more important regarding health care costs and patients' quality of life is the high risk of unrelieved acute pain triggering chronic pain.

Acute and chronic pain underlies much of the economic burden and loss of quality of life and functioning associated with the "killer" diseases, especially when nerve damage from surgery or trauma progresses to chronic neuropathic pain. These pain problems are frequently misunderstood and misdiagnosed, patients are stigmatized, and their pain condition is poorly managed. Their chronic pain has become a disease in its own right.

A Broad Policy Framework on Acute and Chronic Pain Control

Representing IASP, we have recently been working with WHO to increase global awareness of poorly relieved acute pain as a major factor contributing to delayed recovery of health and function after surgery and trauma and to highlight the immense burden of chronic pain unrelated to cancer. In meetings with WHO department directors and program leaders in October 2001, and at yearly meetings at WHO headquarters with nongovernmental organizations (NGOs) related to neurological disorders, pain as a major health care problem has been a focus of attention and discussion.

WHO considers acute and chronic pain control intergrated into the management of different relevant conditions such as cancer and HIV/AIDS. Clearly, this development is of major importance. WHO's influence on governments worldwide and on national health care programs and policies, will lay the groundwork for better management of acute and chronic pain and improved health-related quality of life in a number of major diseases and conditions that involve pain.

IASP's and EFIC's Global Day against Pain Co-sponsored by WHO

Our knowledge of the nature and management of pain has increased dramatically over the past 30 years. Facilities for the management of acute and chronic pain disorders have been developed, especially in developed countries. Even so, access to these facilities is patchy, and the quality of pain management varies.

In the developing countries, a lack of resources, poor medical education, opposition to the use of opioids, political intransigence, and other difficulties mean that there has been little or no consistent development of programs for the management of pain, with the exception of pain associated with cancer or at selected sites such as those served by NGOs such as Douleurs Sans Frontières (www.douleurs-sans-frontieres.org).

IASP and the European Federation of IASP Chapters (EFIC) have been concerned for some time about improving facilities for pain education, research, and management in Europe and other developed countries. IASP announced in 2002 its plans to address the problems faced by pain sufferers in developing countries. Most of those who would benefit from pain relief and palliative care live in developing countries, and the demand for such care will rise dramatically in the future.

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The need to involve those responsible for health care provision as well as the professions concerned with health care delivery led EFIC to establish a European Week against Pain in 2001 and for IASP to organize a pilot Global Day against Pain in 2003. The two organizations have combined their efforts to host a Global Day against Pain on Monday 11 October, 2004, subtitled "*Pain Relief should be a Human Right*". The Global Day against Pain as well as the fourth European Week against Pain (October 11th) will be launched in Geneva with a European press conference in the morning, designed to reach as many European journalists as possible with networking worldwide, followed in the afternoon by a global press conference in the form of a live Webcast. The timing of the conference will allow residents of five continents to watch the proceedings and participate in them through Internet-based discussions.

The objectives of the Global Day against Pain are to:

- Increase awareness of acute and chronic pain and its treatment.
- Publicize major developments in pain research and treatment.
- Emphasize the human right for the treatment of pain, as reported in the companion issue of Pain: *Clinical Updates*.
- Raise awareness of pain problems in developing countries, with the aim of improving their resources in this and other respects.

The Developing World and IASP's Future Strategy

In 2002, the President of IASP, Sir Michael Bond, committed his term of office to increasing IASP's support to developing countries in recognition of the imbalance in educational and clinical resources between "The West" and those countries. IASP already offered visiting lectureships and consultancies, an "Adopt-a-Member" program, and grants for translation and publication of IASP publications in various languages. IASP also distributes all its publications free to libraries in currency-restricted countries and provides grants to support travel to its World Congresses on Pain. To extend such support, IASP has formed a task force to assist an educational program in Kenya that will take place later this year, and is developing two educational projects, for release later in 2004. IASP has given financial support to WHO's Five African Countries Project, which focuses on HIV/AIDS and cancer pain relief and palliative care.

Conclusion

Although IASP's name focuses on the "study" of pain, since its inception its members have been energetically involved in pain education, in raising standards for pain care, and in improving access to such care. The IASP-WHO collaboration has met with success in the area of cancer pain control and is now seeking to broaden its scope to encompass other types of pain, particularly in less developed countries. The leadership of IASP is profoundly grateful to its hard-working members and national chapters, and invites their participation in all the activities described above.

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Table I
Worldwide causes of mortality

| Rank | Cause | Deaths (000) |
|-------------------|---------------------------------------|--------------|
| <i>Ages 15-59</i> | | |
| 1 | HIV/AIDS | 2279 |
| 2 | Ischemic heart disease | 1332 |
| 3 | Tuberculosis | 1036 |
| 4 | Road traffic injuries | 814 |
| 5 | Cerebrovascular disease | 783 |
| 6 | Self-inflicted injuries | 672 |
| 7 | Violence | 473 |
| 8 | Cirrhosis of the liver | 382 |
| 9 | Lower respiratory infections | 352 |
| 10 | Chronic obstructive pulmonary disease | 343 |
| <i>Ages 60+</i> | | |
| 1 | Ischemic heart disease | 5825 |
| 2 | Cerebrovascular disease | 4689 |
| 3 | Chronic obstructive pulmonary disease | 2399 |
| 4 | Lower respiratory infections | 1396 |
| 5 | Trachea, bronchus, lung cancers | 928 |
| 6 | Diabetes mellitus | 754 |
| 7 | Hypertensive heart disease | 735 |
| 8 | Stomach cancer | 605 |
| 9 | Tuberculosis | 495 |
| 10 | Colon and rectum cancers | 477 |

Source: WHO (with permission).

Table II
Disease burden worldwide

| Rank | Cause | DALYs* (000) |
|-------------------|---|--------------|
| <i>Ages 15-59</i> | | |
| 1 | HIV/AIDS | 68661 |
| 2 | Unipolar depressive disorders | 57843 |
| 3 | Tuberculosis | 28380 |
| 4 | Road traffic injuries | 27264 |
| 5 | Ischemic heart disease | 26155 |
| 6 | Alcohol use disorders | 19567 |
| 7 | Hearing loss, adult onset | 19486 |
| 8 | Violence | 18962 |
| 9 | Cerebrovascular disease | 18749 |
| 10 | Self-inflicted injuries | 18522 |
| <i>Ages 60+</i> | | |
| 1 | Ischemic heart disease | 31481 |
| 2 | Cerebrovascular disease | 29595 |
| 3 | Chronic obstructive pulmonary disease | 14380 |
| 4 | Alzheimer and other dementias | 8569 |
| 5 | Cataracts | 7384 |
| 6 | Lower respiratory infections | 6597 |
| 7 | Hearing loss, adult onset | 6548 |
| 8 | Trachea, bronchus, lung cancers | 5952 |
| 9 | Diabetes mellitus | 5882 |
| 10 | Vision disorders, age-related and other | 4766 |

Source: Adapted from WHO (with permission).

* Estimates are expressed as disability-adjusted life years (DALYs). A condition that produces 50% disability in one person for 1 year carries a burden of 0.5 DALYs.

Table III
Signs and symptoms of chronic pain once it has evolved into a disease per se.^{2,6}

1. Immobility and consequent wasting of muscle, joints, etc.
2. Depression of the immune system and increased susceptibility to disease
3. Disturbed sleep
4. Poor appetite and nutrition
5. Dependence on medication
6. Overdependence on family and other caregivers
7. Overuse and inappropriate use of health care providers and systems
8. Poor performance on the job, or disability
9. Isolation from society and family
10. Anxiety and fear
11. Bitterness, frustration, depression, and suicide

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