

IMPROVING AVAILABILITY OF ESSENTIAL PAIN MEDICINES FOR CANCER AND HIV/AIDS PAIN RELIEF

REPORT FOR 2005



**World Health Organization
Collaborating Center for Policy and
Communications in Cancer Care**

Sponsored by:

**The Pain & Policy Studies Group
University of Wisconsin Comprehensive Cancer Center
School of Medicine and Public Health
Madison, Wisconsin USA**

<http://www.medsch.wisc.edu/painpolicy>

<http://www.WHOcancerpain.wisc.edu>

August 2006

EXECUTIVE SUMMARY

This report summarizes the work during **2005** of the World Health Organization (WHO) Collaborating Center (the Center) for Policy and Communications in Cancer Care in Africa, Asia, Europe, and Latin America. The Center is sponsored by the Pain & Policy Studies Group, at the University of Wisconsin Comprehensive Cancer Center in the Medical School, Madison, Wisconsin, U.S.A.

In **2005**, the Center collaborated extensively with WHO Headquarters programs in Essential Drugs and Medicines, Cancer, and WHO Regional Offices in the Americas.

In April **2005**, the director of the Center traveled to Bucharest to attend an important program on the development of palliative care in Romania. He presented, to an audience that included drug regulators and health care practitioners, about the importance of this opportunity in Romania to make changes to a 30-year-old law that prevents many patients from receiving pain relief in their last days of life.

In August, **2005**, the director of the Center presented about opioid availability at the International Association for the Study of Pain in Sydney, Australia.

In September, **2005**, the director and a Center staff member attended a meeting in Miami, Florida with representatives from the National Hospice & Palliative Care Organization and the African Palliative Care Association to discuss plans to increase opioid availability in targeted countries in Africa over the next 3 years.

In December **2005**, Dr. Willem Scholten, a Medical Officer in the WHO-Geneva Department of Medicines Policy and Standards, visited the Center in Madison to discuss opportunities for collaboration between the Center and Dr. Scholten's department, specifically in regard to the global strategy and assistance mechanism referred to in Resolution 2005/25 of the U.N. Economic and Social Council.

The Center accomplishes its policy work through a program of research, development, demonstration, monitoring, evaluation, and communications. The Center develops methods, procedures and models that can be used to identify barriers to opioid availability, diagnose regulatory problems, identify the need for changes in national and state policy, and monitor outcomes.

The Center accomplishes its international communications work in several ways, including news alerts, two websites and through the publication of *Cancer Pain Release*, a quarterly WHO newsletter that provides health professionals, policy makers, and regulators throughout the world with updates on issues and developments in the field. *Cancer Pain Release* is disseminated to approximately 50,000 health-care professionals in 180 countries and is inserted in national and international pain and palliative medicine journals.

The Center participates in international and national conferences and strategy meetings for health professionals and government officials, and provides technical assistance to government and non-government organizations. The Center maintains policy and communications websites and promotes better understanding of the principle of balance that should guide national narcotics control policy to ensure availability of opioid pain medications under adequate control to prevent abuse and diversion.

THE CENTER AND ITS WHO TERMS OF REFERENCE

Name of Center: The World Health Organization Collaborating Center for Policy and Communications in Cancer Care

Address: Pain & Policy Studies Group
University of Wisconsin Comprehensive Cancer Center
406 Science Drive, Suite 202
Madison, Wisconsin, 53711-1068, USA
Telephone: 1 608 263 7662
Facsimile: 1 608 263 0259
Email: joranson@wisc.edu
Websites: <http://www.medsch.wisc.edu/painpolicy>
<http://www.WHOcancerpain.wisc.edu>

Director: David E. Joranson, MSSW, Senior Scientist, Pain & Policy Studies Group

Terms of Reference for the Collaborating Center:

1. Using the WHO Guidelines, assess the context of balance and barriers in national approaches to opioid analgesic regulations; cooperate with and provide related information, education and assistance to units of the WHO, national Governments, NGOs and individuals; develop methods to communicate with and train health professionals, regulators and policy makers about balanced drug control policy.
2. Develop methods including establishment of demonstration projects, to make opioids available under adequate control for the relief of cancer pain in community-based programs and hospitals, consistent with international drug control conventions and WHO Guidelines; spread the use of such methods nationally and internationally in developed and developing countries.
3. To develop methods to monitor and study national and international trends and policies related to the medical use of opioid analgesics.
4. To develop and maintain (1) a global communication network for the WHO Cancer Pain Relief and Palliative Care Program, including publication of "Cancer Pain Release", and (2) an international database of educational resources to facilitate access to professional education about pain control and palliative care worldwide.
5. To collaborate and give technical assistance to PCC initiatives or country projects regarding palliative care, especially those concerning advocacy for drug availability and policy development.
6. To support PAHO's efforts to negotiate policy changes for opioid availability through PAHO's project on non-communicable disease policy.

Madison, Wisconsin, USA
August 1, 2006

David E. Joranson
Director

CURRENT MEMBERS OF THE CENTER

David E. Joranson, MSSW, Director
Sophie M. Colleau, PhD, Editor, *Cancer Pain Release*
Aaron M. Gilson, PhD, Assistant Director & Researcher for Policy Studies
Janet F. Kline, MLS, Research Program Administrator
Karen M. Ryan, MA, Senior Policy Analyst
Martha A. Maurer, MSSW, Policy Analyst
Jody P. Garthwaite, BA, Policy Specialist & Communications Coordinator
Ruth Kraus, Program Assistant

Acknowledgments:

The Center wishes to acknowledge the cooperation of the following individuals: Professor M.R. Rajagopal, Chairman of Pallium, Thiruvananthapuram, India; Dr. Cecilia Sepulveda, Coordinator, WHO Cancer Control Program, Geneva, Switzerland; Dr. Willem Scholten, Medical Officer in the Quality Assurance and Safety of Medicines in the WHO Department of Medicines Policy and Standards, Geneva, Switzerland; the International Narcotics Control Board Secretariat, Vienna, Austria; Ms. Liliana DeLima, Executive Director, International Association of Hospice and Palliative Care, Texas, U.S.A; Dr. Daniela Mosoiu, Medical Director, Hospice Casa Sperantei, Brasov, Romania; Robert Ancuceanu, State Medicines Agency, Romania; Professor Florinel Badulescu, President of the National Society of Oncology, Romania; Dr. Bogdan Grigore, General Directorate for Pharmaceuticals at the Ministry of Health, Romania; and Professor Ostin Mungiu, Gr. T. Popa University of Medicine and Pharmacy and former President of the Romanian Association for the Study of Pain, Romania.

TABLE OF CONTENTS

I. Work Performed in Relation to the Terms of Reference

A. Overview of Methods.....	1
B. Collaborative Projects in India.....	2
C. National Policies, Opioid Availability and Educational Programs	
1. Eastern Europe	
Romania.....	4
2. Asia	
Japan.....	7
3. Africa.....	7
4. The Americas.....	8
D. Communications	
1. Pain Policy Website.....	8
2. Publication of <i>Cancer Pain Release</i>	9
3. Database of Professional and Patient Education Materials.....	11
4. Future Goals.....	11

II. Collaboration with WHO..... 12

III. Cooperation with the International Narcotics Control Board..... 12

IV. Funding Needs..... 13

V. Bibliography..... 14

I. WORK PERFORMED IN RELATION TO THE TERMS OF REFERENCE

A. Overview of Methods

The Center has developed methods and procedures in several areas to support implementation of its Terms of Reference. These areas include data bases, education, policy evaluation, communications, and collaboration.

1. Data bases:

The Center maintains and updates annually an internal international database to support its work with governmental and non-governmental organizations and individuals who are working to improve pain relief. The database consists of (1) statistics it receives from the International Narcotic Control Board (INCB) describing the medical consumption of morphine and other principal opioids for all countries that report to the Board; (2) population data, by country, from the United Nations Department of Economic and Social Affairs; and (3) human development index (HDI) data, a composite score of a country's life expectancy at birth, level of education, and standard of living, from the United Nations Development Programme. These data allow the Center to monitor opioid consumption trends, to identify progress and problems in improving pain relief, to examine correlations between opioid consumption and HDI, and to inform health-care professionals and government officials about their country's trends in use of opioids. The Center's analysis of these data has been reported in numerous publications, monographs,¹⁻³ conference presentations and posters.

2. Education:

During 2005, the Center helped to organize and participated in meetings and educational programs that brought together representatives from government, drug control, cancer, AIDS, palliative care, and medical education in several countries, including in Japan, Korea, and Romania. Such efforts, and continued networking of professionals representing government and medicine, will help to develop awareness about the policy and infrastructure changes necessary to ensure opioid availability for pain management and palliative care. The Center has developed specialized presentations that explain the principles of opioid availability, their origins in international narcotics control treaties, and how to implement them. These presentations can help medical and regulatory professionals to understand and apply the treaty-based drug control policy framework that has the capability of ensuring opioid availability.

2005 Presentations		
<u>Title of Presentation</u>	<u>Place</u>	<u>Date</u>
Achieving Balanced Opioid Control Policy	Edinburgh, Scotland	March 2005
Removing Regulatory Barriers in Romanian National Policy	Seoul, Korea	March 2005
Regulations for Prescribing Opioids in Europe and Romania	Aachen, Germany	April 2005
Opportunities for Improving Opioid Availability in Romania	Bucharest, Romania	April 2005
Governmental Opioid Policy is One Part of the Puzzle	Barcelona, Spain	May 2005
Cancer, Pain, and Opioids in Asia: Striking the Right Balance	Tokyo, Japan	June 2005
Practical Steps for Regulators to Ensure Availability of Opioids for Pain Relief	Tokyo, Japan	June 2005
WHO Guidelines for Achieving Balance in National Opioids Control Policies	Sydney, Australia	August 2005

The Center produced a number of monographs for distribution at national, regional and international meetings to provide participants with information about opioid analgesic consumption trends and how to access key informational resources.

2005 Monographs		
<u>Title of Monograph</u>	<u>Meeting</u>	<u>Date</u>
Selected Resources about Opioid Availability	Seoul, Korea	March 2005
Opioid Analgesics (Narcotics) in Asia: Trends, Resources, and Recommendations	Tokyo, Japan	June 2005

3. Policy Evaluation:

The Center has developed the capability to evaluate national opioids control policy. This work is based on a central principle of “balance,” that government policies to prevent misuse and diversion of controlled substances should not interfere with their use for the relief of pain.⁴⁻⁶ Using this central principle, the Center helped to prepare WHO self-assessment guidelines to encourage national governments to achieve better pain management by identifying and overcoming regulatory and other barriers to opioid availability.^{7,8} The WHO Guidelines can be used to develop balanced national drug control policies, and are intended for those who make national drug control policy, as well as those who implement it. The WHO Guidelines may also be used by health-care professionals and their organizations to evaluate national policy and potential barriers, and establish cooperation with governments and facilitate education about the rational use of pain medications. The Center has also developed a procedure to “diagnose” and “treat” barriers to pain management and opioid availability, applying a medical model to identify and address policy problems. During **2005**, the Center used the WHO Guidelines to evaluate national policy in Romania.

4. Communications:

The Center continues to expand dissemination of its work to a wide international audience of health-care practitioners and government officials through publications, conference participation, networking on the internet, access to websites, and periodic email contact with collaborators. In **2005**, we communicated periodically via email to more than 200 colleagues around the world. In March, the Center announced the availability of several materials that were prepared for the 2nd Global Summit for Hospice and Palliative Care Associations and the 6th Asia Pacific Hospice Conference held in Seoul, Korea, including morphine consumption graphs for more than 30 participating countries. In July, the Center announced the availability of 11 translations of the 2000 World Health Organization guidelines, “Achieving Balance in National Opioids Control Policy.”

An index list of all PPSG news alerts disseminated since November of 2001 is obtainable from the Center’s website and is continuously updated as new announcements are made. It can be accessed through the website’s homepage by clicking on “PPSG News Alerts.”

The Center publishes Cancer Pain Release, which is described more fully in Section D.

5. Collaboration:

The Center is committed to a collaborative process. For example, the Center has collaborated extensively with government and non-government organizations in Eastern Europe and India. The aim of collaboration is to develop the relationships between government and non-government organizations that are necessary to evaluate and improve policies governing opioid availability. Other examples of collaborative efforts appear throughout this report.

B. Collaborative Projects in India

Background:

This section reviews the Center’s ongoing activities in India with chief collaborator, Dr. M.R. Rajagopal, an Indian non-governmental organization, several agencies of the Central Government of India, and several state government Ministries of Health. An historical summary of these activities is presented first, followed by an update for **2005**. For a more detailed description of previous years activities, please refer to the Center’s report for 2004, “Improving Cancer Pain Relief in the World: Report for 2004.”⁹

Objective:

To overcome regulatory barriers and to improve availability and access to opioid analgesics for Indian patients with painful conditions such as cancer and, increasingly, HIV/AIDS.

Situation:

It is estimated that more than one million people a year in India suffer from pain due to cancer. Cancer is usually diagnosed when the disease is late-stage, which is when pain is severe and sometimes excruciating. Despite India's heavy cancer burden, the country uses little morphine -- an essential drug for cancer pain management.¹⁰ In addition, HIV/AIDS is a growing healthcare concern in India, which will require an increased commitment to pain management and palliative care.

After 1986, the consumption of morphine for medical purposes *decreased* by more than 90%, due in part to a plethora of state excise requirements and to a tough anti-narcotics law adopted in 1985. Ironically, this decrease occurred while there were increasing efforts to improve awareness of pain management and palliative care and to educate and train health-care professionals according to the WHO Three-Step Analgesic Ladder. Although these educational efforts have enhanced the willingness of physicians to use opioids for pain relief, the reality is that many hospitals and palliative care programs have great difficulty obtaining a continuous supply of these drugs.

Cooperation:

The Center collaborated with the Narcotics Commissioner of India, and through him with the Secretary of the Department of Revenue of the Government of India, as well as with the WHO Office-India and the South-East Asia Regional Office of WHO (SEARO). The Center also worked closely with the Indian Association for Palliative Care (IAPC), which appointed a panel of healthcare professionals called the "Committee on Morphine Availability and Control" to review and comment on our work.

The Center designated the Pain and Palliative Care Society (PPCS), Calicut, in the state of Kerala (see map, Figure 1) to be a WHODP for a source of national expertise and leadership in opioid availability, especially on the use and control of morphine. The PPCS was already a WHODP for providing cost-effective community-based home care for late-stage cancer patients. Until February 2003, the PPCS was directed by Dr. M.R. Rajagopal. He became Professor and Head of the Department of Anesthesiology and Palliative Care at the Amrita Institute of Medical Sciences and Research, Kochi, state of Kerala; he is now Chairman of Pallium India and remains the Center's chief collaborator.

Problem Identification:

In 1995 and 1996, members of the Center visited India several times to participate in meetings and workshops with government officials to study the policies that govern the availability and use of opioid analgesics as well as relevant systems for delivery of health-care and distribution of drugs. We gained a thorough understanding of the requirements for obtaining morphine by conducting an evaluation of the India Narcotic Drugs and Psychotropic Substances Act, including the regulations of each state. This review showed that the licensing of morphine for medical purposes was principally a state function rather than a central government function, that the states required as many as five licenses for each medical institution wanting morphine, and that these must often be obtained from more than one branch of state government. The period of validity for some licenses was so short that they would likely expire before all necessary licenses could be obtained.

Action Plan:

The Center prepared an action plan that included (1) development of guidelines for obtaining morphine, (2) preparation of a plan for simplifying regulation of morphine, and (3) sponsorship of workshops on morphine availability with state governments and healthcare professionals.

Workshops:

Use of specialized workshops brings together senior officials from the concerned government departments with healthcare professionals to facilitate changes in opioid policy and system administration. Practitioners gain valuable information about the morphine licensing and control system, which will enable them to work more effectively with government in the future. The government officials learn about palliative care and the need for opioids. Table 1 summarizes the status of rule simplification and morphine workshops in each state.

Activities and Progress in 2005

In **2005**, the Center engaged in several collaborative activities with Dr. Rajagopal and other colleagues aimed at continuing efforts to improve cancer patient access to opioid pain medications.

The Center assisted Dr. Rajagopal to apply for a grant from the US National Cancer Institute to pilot a project aimed at implementing the “WHO Triangle” in cancer care institutions in India. The three parts of the Triangle are policy, drug availability and education/training. The grant supported an effort to select three cancer treatment institutions with little or no palliative care who would agree to start palliative care, training two staff members and obtain morphine. A request for applications was sent to 130 cancer institutions. Twenty seven applications were submitted. The advisory committee of which the Center was part selected three institutions; there is a waiting list of at least 15 institutions that could start palliative care if funding was available for training. The three cancer centers that were selected are in Aizwal, state of Mizoram; Imphal, state of Manipur; and Lucknow in state of Uttar Pradesh. During 2005, first phase of training was accomplished for the first two Centers and palliative care was started.

On April 29, 2005, Dr. Rajagopal organized a meeting with Government of India officials to review progress and next steps in simplifying the state narcotics rules. In a related effort, Dr. Rajagopal prepared an updated listing of the Indian pharmaceutical firms which supply oral morphine.

The Center provided Dr. Rajagopal and several colleagues with suggestions as to the next steps in India, including expanding availability of opioids beyond oral morphine, ways to overcome the patchwork of differing state regulations, and how to address the failures to report opioid consumption to the International Narcotics Control Board.

The Center provided comments on guidelines being prepared by Dr. Rajagopal of Pallium India concerning Standard Operating Procedures for approval of palliative care centers as Recognized Medical Institutions under the simplified state morphine rules.

The Center wishes to point out that it lacks funding support for continuing work in India.

C. National Policies, Opioid Availability and Educational Programs

The Center is proactive in monitoring and participating in the global development of cancer pain relief and palliative care according to WHO’s three measures of national policy, opioid availability, and educational programs. The following section reports on these activities in several regions and countries.

1. Eastern Europe

A. Romania

An historical summary of the Center’s activities in Romania is presented first, followed by an update for **2005**. For a more detailed description of previous years activities, please refer to the Center’s report for 2004, “Improving Cancer Pain Relief in the World: Report for 2004.”⁹ Funding for the Center’s work in

Eastern Europe and Romania is provided by the Open Society Institute and the U.S. Cancer Pain Relief Committee.

In February 2002, the Center and the European Regional Office of the WHO sponsored a Workshop on Opioid Availability at the Central European University in Budapest, Hungary.¹¹ The purpose of this workshop was to address the need for opioid analgesics in Eastern Europe according to the WHO recommendations for pain relief in which opioids such as morphine are indispensable.¹⁰ The outcome of the workshop was initial country action plans for improving availability of opioid pain medications. Following the workshop, the Center maintained contact with the six countries to offer assistance in the implementation of the action plans. Several countries made progress, including Romania, which established a new Ministry of Health Commission of Specialists in Pain Therapy and Palliative Care.

In January 2003, the Center began a new initiative with Romania to assist with improving patient access to opioid analgesics. Romania was selected because of strong leadership and positive progress to develop palliative care, and its Ministry of Health had established a Commission of Specialists in Pain Therapy and Palliative Care, whose tasks included modifying national narcotics policies as needed. The Center's offer of technical cooperation was accepted by the leaders of the Romanian palliative care team and the Minister of Health.

In the first half of 2003, the Commission members reviewed a detailed Center analysis of the Romanian laws and regulations. In July 2003, several of the Center's staff members visited Romania to study the Romanian health and regulatory system for making opioid analgesics available for the relief of severe pain, and to work with various units of the national government to address this issue.

On 12 July 2003, the Ministry's Commission held a meeting in Braşov at which time the Center's analysis was reviewed, and based on the WHO Guidelines, the Commission reached consensus on 18 recommendations for changing the laws, regulation and administration, and for creating a certified training program for physicians who will become licensed to prescribe opioids (http://www.medsch.wisc.edu/painpolicy/internat/E.Europe/Romania/recs_roMOH.pdf). The report of the Commission was prepared immediately and handed over to Minister of Health, Dr. Mircea Beuran. The Minister of Health agreed with the principles contained in the Commission's report and announced that, in response to a request by the European Union related to Romania's possible accession, a new inter-ministerial commission will be appointed to revise the laws relating to cancer and opioids. He requested the Center's assistance to prepare the agenda for the commission and assist it in its work.

Following a change of the Minister in summer 2003, the MOH created a new Commission with the responsibility to continue the efforts to improve patient access to opioid analgesics.

In February 2004, the Director and Center staff traveled to Romania for one week to meet with the Ministry of Health (MOH) Pain & Palliative Care Commission and our collaborator, Dr. Daniela Mosoiu to continue the process of drafting a new law, based on the policy evaluation and recommendations that had been previously accomplished in 2003 by the Commission and the PPSG. The chair of the Commission expressed a desire to have the Center's continued feedback and assistance in drafting both the law and regulation.

In May, 2004, the Director traveled to Brasov, Romania to attend a meeting of the Palliative Care Commission which was going to review the most recent draft of the Romanian law. The Center staff reviewed the law in its entirety, and, prior to the trip, submitted recommendations for revisions. A number of the Center's suggestions had been included in the draft and several more were adopted during this commission meeting. The Commission was eager to have the Center's endorsement of the law, feeling that recognition by a WHO Collaborating Center would help in the journey through the Romanian legislative process.

The draft of the new law reached an important stage in late September 2004. The Center received an English translation of the latest draft, several staff performed an independent review, then, following a discussion, submitted comments to the MOH.

The next step in the process was to draft the regulations that would implement the new law. During the week of November 28 – December 4, 2004, the Center sponsored a study visit of the Romanian team to Madison to facilitate an efficient drafting process. A 5-member delegation, (comprised of two professors, two physicians, and one pharmacist) visited Madison. The study visit was successful, with the drafting of the new regulations according to the 2000 WHO guidelines, “Achieving Balance in National Opioids Control Policy.” The group completed those sections that are relevant to prescribing opioid analgesics for pain.

Activities and Progress in 2005

In April **2005**, the Director of the Center traveled to Bucharest to attend an important program on the development of palliative care in Romania. He presented, to an audience that included drug regulators and health care practitioners, about the importance of this opportunity in Romania to make changes to a 30-year-old law that prevents many patients from receiving pain relief in their last days of life. He also participated in a panel review of the draft of the law, and put the Romania situation in the context of the European experience in general. This trip coincided with the official opening of the Nicholas Edeleanu Palliative Care Resource Center in Bucharest.

The regulatory momentum continued; as the draft narcotics law moved through the Romanian legislative process, the Center maintained contact with Romanian colleagues to keep abreast of progress, amendments, and to consider any assistance that we could provide. In August **2005**, the draft bill was submitted to Parliament; and it formally passed both houses on 1 November **2005**. The Center continued to provide comments on drafts of the law when requested. The government must finalize the regulations by July 1, 2006.

Other activities:

The Director spoke about the Romanian project at the IASP meeting in Sydney in August **2005**, providing an update of progress. He also met with Romanians who were in Sydney, including Dr. Elena Copaciu, Professor Ostin Mungiu, Dr. Mihai Bundoi, and Professor Florinel Badulescu.

Upon the request of Dr. Elena Copaciu, Vice President of the Romanian Association for the Study of Pain (RASP), the Center provided a letter of support for the new legislation for the RASP national meeting held on 16-17 September **2005** in Bucharest. The following were in attendance: representatives from the Parliament, National Medicine Agency, Ministry of Health, Narcotics Bureau of the Romanian Police, and the National Oncology Institute.

The Center collaborated with Professor Ostin Mungiu to publicize the important issue of untreated pain in Romania. On behalf of the Romanian Algesiology Association, in July **2005**, Professor Mungiu published a call in a prominent medical newspaper (*The Medical Life*) regarding the long-term medical use of opioids. It included a translated letter from the Director about the call from the WHO and INCB for governments to remove provisions in their national policies that may impede pain management, the process of revising the Romanian law, its ultimate importance for patients, and how it could be a model for other European countries. There was also an appeal by the Romanian Algesiology Association to address pain by: (1) adopting the new law and regulations; (2) increasing focus on pain management in medical school curriculum and CME; (3) establishing a long-term national strategy for the use of opioids to treat pain; and (4) improving professional training.

2. Asia

Japan

The Japanese International Corporation for Welfare Services (JICWELS) seminar, sponsored annually by the Japanese government, provides information on drug control policy and administration for national drug regulators from Asian countries. As in the past, the WHO-Geneva Essential Drugs and Medicines Department sponsored the Director's attendance in Tokyo as a Temporary Advisor in June **2005**. In this capacity, he gave a presentation on the obligation of government, and the policy and methods for ensuring availability of opioids for medical and scientific purposes. The Center prepared a monograph of opioid consumption trends for Asia, highlighting the participating countries.² The countries in attendance were: Cambodia, Japan, Laos, Malaysia, Myanmar, the Philippines, Sri Lanka, Thailand, and Viet Nam.

3. Africa

An historical summary of the Center's activities in Africa is presented first, followed by an update for **2005**. For a more detailed description of previous years activities, please refer to the Center's report for 2003, "Improving Cancer Pain Relief in the World: Report for 2003."¹²

In 2001, the WHO began a cross-cluster initiative for palliative care in Africa between cancer (noncommunicable diseases) and HIV/AIDS (communicable diseases). The Chief of the WHO Programme on Cancer Control invited the Center to be a member of the Steering Committee for the initiative. By year-end 2001, the Center had become an active participant in the African palliative care initiative.

In July 2002, the Center assisted in planning and participated in a workshop in Gaborone, Botswana, titled, "A Community Health Approach to Palliative Care for HIV/AIDS and Cancer Patients in Africa." Each country developed an action plan for improving opioid availability, which became an integral part of their project proposal for developing and improving palliative care in their country.¹³

In February 2003, the Director was invited to attend and present at the White House Office of National AIDS Policy conference on Palliative Care and the HIV/AIDS Global Pandemic. The purpose of the meeting was to highlight the role of palliative care in global HIV/AIDS research, treatment, and prevention.

Also in 2003, the Center prepared a monograph of opioid consumption information pertaining to the African countries being targeted by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). This information provided an analysis of the opioid availability situation in each country, as well as, their adherence to the reporting requirements of the INCB.

Activities and Progress in 2005

In **2005**, the Center had the opportunity to increase its efforts to address opioid availability in Africa. The National Hospice and Palliative Care Organization (NHPCO) in the U.S. contracted with the Center to provide consultation on an initiative with the African Palliative Care Association (APCA). The overall purpose of the contract was two-fold, (1) to assist with the development of an African infrastructure for improving the availability of opioids for palliative care, and (2) to develop a distance educational course on opioid availability aimed at an international audience.

As a part of the contract, the Center proposed to: (1) Participate in strategic planning and NHPCO International Advisory Committee meetings, (2) Provide input on resources that can be used to assess needs and opioid requirements in African countries, (3) Assist in orienting NHPCO/APCA staff to opioid availability policy evaluation and the models for policy evaluation and change that have been used, (4) Assist NHPCO/APCA to train national experts/champions, including developing content, participating in

training and selection of national experts, and (5) Assist in planning and providing content for national and regional meetings, including content and participation of international organizations such as the INCB.

In September, **2005**, the director and a Center staff member attended a meeting with representatives from NHPCO and APCA in Miami, Florida to discuss plans to increase analgesic availability in targeted countries in Africa over the next 3 years. The primary objective of the meeting was to develop a work plan for implementation of the project. During the meeting, initial plans were made to conduct a regional opioid availability workshop in Africa in mid-2006, with a possible follow-up workshop early in 2007. A planning group was formed which held monthly conference calls in the months following the meeting in September.

Distance Educational Course

The purpose of this course is to develop a non-credit training opportunity to increase awareness, knowledge and comprehension of the body of knowledge and methods available to evaluate and improve national policies governing medical availability of essential pain medicines for cancer and HIV/AIDS patients. An internationally accessible course will contribute to accelerating the rate of change to improve access to pain relief throughout the world. The course will be aimed at an international audience of health care professionals, local and national policy analysts/advocates, government drug regulatory personnel, national health policy advisors, and medical scholars with an interest in this area.

4. The Americas

In September of **2005**, Dr. Cheryl Cox-MacPherson, Chair of the Bioethics Department at St George's University in Grenada, asked the Center to provide her with morphine consumption graphs and statistics on Caribbean countries for a journal article she was preparing. Her objective was to show that that Caribbean nations use below the global mean, and that they use way below amounts in the U.S. and Canada. The Center provided her with materials to use for her article, which included a graph of 2003 global milligrams per capita morphine consumption with the U.S., Canada, and several Caribbean countries highlighted as well as a table containing the same data.¹⁴

D. Communications

1. Pain Policy Website (see <http://www.medsch.wisc.edu/painpolicy> for homepage)

The Pain & Policy Studies Group established an international section of its website to provide worldwide public access to key resources and information about the WHO and its efforts to improve cancer pain, palliative care, and opioid availability.

The website describes the mission of the Pain & Policy Studies Group/WHO Collaborating Center and its work to address barriers to opioid availability in cooperation with national and international bodies.

Links are provided to many websites that contain information relevant to pain relief and palliative care.

The international section contains extensive information about the international availability and use of opioid analgesics, including: national consumption trends of opioid analgesics; monographs that review the opioid availability situation in various parts of the world; recommendations for how to identify and address regulatory barriers; annotated bibliographies; and the full-text and links to WHO and INCB publications.

Numerous updates have been made to many sections of the website in **2005**. Updated opioid consumption statistics and trends have been added, as well as new monographs and other resources. The Center has added 22 translations of the 2000 World Health Organization guidelines, "Achieving Balance

in National Opioids Control Policy,” available at <http://www.medsch.wisc.edu/painpolicy/publicat/00whoabi/00whoabi.htm>. A section was also added to the international component of the Center’s site which provides printer-friendly resources presented at international conferences by Center staff.

In addition, a United States section contains extensive information about pain policy, including: a model policy for the use of controlled substances for the treatment of pain; a bibliography of published literature; full-text of state statutes, regulations and guidelines; a matrix of State Continuing Medical Education Policies for Pain and Palliative Care; a criteria-based evaluation of federal and state pain-related policies; a resource guide to regulatory issues in pain management; and information about pain management as an alternative to assisted suicide. A domestic component was also added to the Center’s website which provides resources presented at national conferences by Center staff that are available for print or download.

Several published articles written by the Pain & Policy Studies Group have been uploaded to the website throughout **2005** and made available in Portable Document Format (PDF).

The Pain & Policy Studies Group has monitored website utilization statistics since July 1997 when the website was established (Figure 2 presents monthly data on all website “hits” and users through the year **2005**). The statistics show that there is a significant and increasing use of the website as a resource for learning about pain policy.

In **2005**, the website received over 1,400,000 “hits” by U.S. and international users, and was accessed by an average of 30 different countries per month, with the most frequent visitors coming from Canada, the United Kingdom, the United States, and Australia.

In the future, the Center would like to continue to serve as a pain policy resource for experts and various initiatives around the world aimed at improving the regulatory environment.

The Center is currently working on a fellowship program for champions and regulators to learn about opioid availability and strategies for making improvements in their own countries or regions and hopes to report positive results from that endeavor in next year’s report.

The Center hopes to enhance its website’s ability to be used as a training tool for international professionals, which would include the development of a Spanish section of our website and an international resource section containing opioid consumption data for all countries, important articles regarding opioid availability in multiple languages, and links to other relevant resources and organizations pertinent to specific countries. Finally, the Center could conduct in-depth analyses of opioid trends and patterns in the world and participate in INCB and WHO activities related to opioid availability.

2. Publication of *Cancer Pain Release*

The Center has a mission to improve access to professional education resources in pain control and palliative care on a global scale and to actively support the WHO’s Program on Cancer Control to promote pain relief and palliative care.

To accomplish this mission, the Center publishes *Cancer Pain Release* in print and on the Internet in an effort to:

- 1) inform a global audience about new developments and guidelines on cancer control and palliative care issued by WHO, and by key government and non-governmental organizations;
- 2) give visibility to programs with model and teaching value in all parts of the world;
- 3) recognize achievements of countries and programs according to WHO’s outcome measures;

- 4) provide access to recent research in cancer pain and palliative care.

2005 marks the 18th year of publication of *Cancer Pain Release*. Included in every issue are abstracts and commentaries from the literature on pain, symptom control and palliative care; information on the use of analgesic medications in pain relief and palliative care, as well as on training opportunities and professional education in cancer pain and palliative care. The publication discusses obstacles and solutions in pain relief practice and policy.

Volume 18, Nos. 1-2 of *Cancer Pain Release* (**2005**) reviewed the place of methadone as an analgesic for cancer pain management.

The issue featured an interview with Professor Eduardo Bruera, an expert in clinical oncology and palliative medicine at MD Anderson Cancer Center, Houston, Texas. In the article, Dr. Bruera reviews the clinical merits of methadone and the challenges of switching from other opioids to methadone.

The issue highlights recent research about the safety, efficacy and patterns of use of methadone and features online resources about prescribing methadone for cancer pain.

Volume 18, Nos. 3-4 of *Cancer Pain Release* (**2005**) focused on the role of clinical guidelines to put evidence about cancer pain into practice.

The issue summarizes clinical practice guidelines for the management of cancer pain developed in the last two decades by professional organizations, government and regulatory agencies, in response to new evidence from clinical trials and improvements in analgesic development.

This issue provides online links to over 50 cancer pain guidelines in the US and other countries and reviews current research on the impact of practice guidelines in reducing cancer pain.

The issue features Dr. James Cleary, Associate Professor of Oncology at the University of Wisconsin Comprehensive Cancer Center and Co-Chair of the American Pain Society Cancer Pain Management Guideline Panel, who provides his perspective on the role of guidelines as methodologies to evaluate the quality of pain management.

Distribution:

In **2005**, the printed edition of *Cancer Pain Release* was sent to approximately 50,000 health-care providers in 180 countries. Figures 3 through 8 show the *Cancer Pain Release* distribution points in each of the six WHO regions. This includes mailings to individuals, libraries and professional organizations.

In addition, during **2005**, special one-time mailings of *Cancer Pain Release* were made to members of the Hospice and Palliative Nurses Association (HPNA) as well as to members of the Oncology Nursing Society (ONS).

Cancer Pain Release was also disseminated at professional courses and meetings throughout the world.

A partial list includes:

- The annual meeting of the American Academy of Hospice and Palliative Care Physicians (AAHPM) (New Orleans, Louisiana, January **2005**)
- The 2nd Global Summit of National Hospice and Palliative Care Associations, organized by Help the Hospices (Seoul, Korea, March **2005**)
- The annual meeting of the American Association of Pain Management Nurses (Albuquerque, New Mexico, March **2005**)
- The 9th Congress of the European Association of Palliative Care (EAPC) (Aachen, Germany,

April 2005)

- The 16th Annual Meeting of the American Alliance of Cancer Pain Initiatives (St. Louis, Missouri, June 2005)
- The 11th World Congress on Pain (IASP) (Sydney, Australia, August 2005)
- Physicians in Central and Eastern Europe (Czech Republic, Romania, Slovenia, Croatia, September 2005)
- The 1st Annual Supportive Oncology Conference (Chicago, IL, October 2005)

In 2005, the Program reached out to health-care workers globally to alert colleagues who have email about the publication of new issues of *Cancer Pain Release*. In 2005, we sent out over 5,000 email messages to a worldwide audience of over 2,000 colleagues around the world to alert them about the availability of the electronic edition of *Cancer Pain Release*.

***Cancer Pain Release* website:**

The English edition of *Cancer Pain Release* is available in full-text on our website (<http://www.WHOcancerpain.wisc.edu>).

The Related Links page of the *Cancer Pain Release* website contains links to the World Health Organization, to 21 sites related to cancer, to 56 sites related to pain, and to 119 sites related to palliative care and was updated in 2005.

In 2005, the website received multiple requests for information about *Cancer Pain Release*, about WHO publications in pain, palliative care and symptom control, and other educational resources. Visitors from an average of 85 countries per month accessed the WHOcancerpain website in 2005, with a total of 850,000 hits for the year. Figure 9 presents data on website “hits” and users for 2005.

The top 30 countries accessing the WHOcancerpain website in 2005 were:

United States, United Kingdom, Canada, Japan, Australia, Italy, Argentina, Germany, Portugal, Switzerland, Netherlands, New Zealand, Brazil, Belgium, Czech Republic, Taiwan, Thailand, Spain, Mexico, Philippines, Singapore, Norway, Sweden, France, Greece, Romania, Poland, Israel, Indonesia and Saudi Arabia.

3. Database of Professional and Patient Education Materials

The Program continues to develop an Internet-accessible annotated database of resource materials for patient and professional education by collecting, categorizing, and summarizing patient and professional education resources and research results. Although the Program does not have funds earmarked specifically for this initiative, all issues of *Cancer Pain Release* include a "Resources" page that lists educational materials relevant to the topic discussed in that issue.

4. Future Goals

The Center's goals are to expand its capabilities to reach out to health-care workers electronically by issuing email alerts, to send regular updates of the educational resources database, to expand the section of new resources in *Cancer Pain Release*, place this information on the *Cancer Pain Release* website (<http://www.WHOcancerpain.wisc.edu>) and improve its capability to provide relevant information to pain and palliative care conferences and workshops worldwide.

II. COLLABORATION WITH WHO

In December **2005**, Dr. Willem Scholten, a Medical Officer in the Quality Assurance and Safety of Medicines of the WHO Department of Medicines Policy and Standards, visited the Center in Madison to discuss opportunities for collaboration between the Center and Dr. Scholten's department, specifically in regard to the global strategy and assistance mechanism referred to in Resolution 2005/25 of the U.N. Economic and Social Council.¹⁵ In previous years, the Center worked closely with the Department of Medicines Policy and Standards (formerly called Department of Essential Medicines). The visit with Dr. Scholten was welcomed by the Center as an opportunity to re-establish the productive and collegial working relationship with this department at WHO Headquarters.

III. COOPERATION WITH THE INTERNATIONAL NARCOTICS CONTROL BOARD

The INCB plays a critically important role in pain management and palliative care throughout the world because it administers the international system that controls the availability of opioid analgesics including the pain medications recommended by WHO as essential for cancer pain relief. Governments look to the Board for guidance in implementing the international narcotic control treaties. Many governments have reported to the INCB that they have excessively restrictive policies. The INCB can assist governments to take a more balanced approach. The Board and its Secretariat have long collaborated with WHO, recognizing that pain is inadequately managed, that opioids are insufficiently available, and that there are barriers which often involve irrational fears of opioids among governments, the public and health-care professionals. For example, in 1995, the Board asked the Center for assistance in surveying all national governments about opioid availability and their efforts, if any, to identify and remove regulatory barriers. The Board used the survey data provided by the Center to conclude that the problem was serious and that few governments had acted to improve the situation. The Board issued a report in which it made a number of recommendations to governments, the United Nations International Drug Control Program, the WHO and other groups such as the International Association for the Study of Pain; these recommendations were aimed squarely at the problems that had been identified by the survey, and urged further collaboration with WHO and governments.

The Secretariat also provides data on the consumption of opioids by each country, which is valuable for monitoring progress and identifying issues. During **2005**, the Center received consumption data on morphine and other opioids and used it to study and report on global and national trends according to its terms of reference.

In **2005**, the INCB commented on the United Nations Economic and Social Council resolution 2005/25:

“In the past, the Board has brought to the attention of the international community the fact that the levels of consumption of opioid analgesics for the treatment of moderate to severe pain were low in several countries. The Board welcomes Economic and Social Council resolution 2005/25 of 22 July 2005, entitled “Treatment of pain using opioid analgesics,” in which the Council called upon Member States to remove barriers to the medical use of such analgesics, taking fully into account the need to prevent their diversion for illicit use. The Board also appreciates that WHO is currently developing a global cancer control strategy, which is to have as one of its priorities the promotion of pain relief and palliative care. The Board requests all Governments to promote the rational use of narcotic drugs for medical treatment, including the use of opioid analgesics, in accordance with the pertinent recommendations of WHO.” (p. 17)¹⁶

Also related to the resolution, the INCB recommended that WHO explore the possibility of an assistance mechanism and acknowledged its support of such a mechanism:

“Pursuant to Economic and Social Council resolution 2005/25 and the World Health Assembly resolution WHA 58.22, the Board calls upon WHO to examine the feasibility of a possible assistance mechanism that would facilitate the adequate treatment of pain using opioid analgesics. The Board stands ready to support WHO in responding to this request.” (p.97)¹⁶

In **2005**, the Board encouraged Governments to assess their actual medical needs for opioids and barriers to adequate availability:

“The Board also urges the Governments concerned to assess their real needs for controlled drugs, as well as constraints that contribute to those drugs not being available for medical purposes in sufficient quantities. The outcome of such an assessment could be beneficial in addressing the non-availability of those drugs for medical purposes. WHO and international and bilateral donors would then be in a better position to assist African countries in implementing their strategies for the rational use of controlled drugs.” (p. 93)¹⁶

In **2005**, the Board encouraged all Governments to promote the use of controlled substances by including material on their rational use in all relevant professional curricula:

“To ensure appropriate medical use and availability of controlled substances, the Board requests all Governments to promote the rational use of narcotic drugs and psychotropic substances for medical treatment, including the use of opioids for the treatment of pain, in accordance with the pertinent recommendations of WHO. The Governments should include the topic of rational use of narcotic drugs and psychotropic substances, including substance misuse and abuse, in the curricula of the relevant faculties of health-care professions, such as doctors, pharmacists and nurses, and, as appropriate, in the curricula of the faculties of law and social and behavioral sciences.” (p. 93)¹⁶

In **2005**, the INCB called upon WHO to explore the low consumption of opioids:

“In several countries, the levels of consumption of opioid analgesics are low. The Board requests UNODC to facilitate the preparation by WHO of a technical study to assess the medical needs of populations for opioids.... in order to facilitate the identification by Governments of appropriate quantities of opioids required for medical purposes.” (p. 96)¹⁶

IV. FUNDING NEEDS

The Pain & Policy Studies Group supports the Center in its entirety. The Pain & Policy Studies Group receives no regular financial support from WHO, and relies on a variety of grants and contracts to support the Center’s activities, including staff salaries, projects and travel. The Center would welcome additional support for its global policy and communications program.

V. BIBLIOGRAPHY

1. Pain & Policy Studies Group. *Selected Resources about Opioid Availability*. University of Wisconsin Pain & Policy Studies Group/WHO Collaborating Center for Policy and Communications in Cancer Care; Madison, Wisconsin, USA. Prepared for the 2nd Global Summit of National Hospice and Palliative Care Associations; Seoul, Korea; 15-16 March 2005 (Monograph). (Available at: <http://www.medsch.wisc.edu/painpolicy/publicat/monograp/seoul2005.pdf>)
2. Pain & Policy Studies Group. *Opioid Analgesics (Narcotics) in Asia: Trends, Resources, and Recommendations*. University of Wisconsin Pain & Policy Studies Group/WHO Collaborating Center for Policy and Communications in Cancer Care; Madison, Wisconsin, USA. Prepared for the Study Programme on Drug Abuse and Narcotics Control; Tokyo, Japan; June 2005 (Monograph). (Available at: <http://www.medsch.wisc.edu/painpolicy/publicat/monograp/JICWELS05.pdf>)
3. Pain & Policy Studies Group. *Opioid Availability: Eastern Europe and Central Eurasia*. University of Wisconsin Pain & Policy Studies Group/WHO Collaborating Center for Policy and Communications in Cancer Care; Madison, Wisconsin, USA. Prepared for Palliative Care in Cancer; Budapest, Hungary; 4-7 September 2005 (Monograph). (Available at: <http://www.medsch.wisc.edu/painpolicy/publicat/monograp/hungary05.pdf>)
4. Joranson DE, Gilson AM, Ryan KM, Maurer MA, Nischik JA, Nelson JM. *Achieving balance in federal and state pain policy: A guide to evaluation*. Madison, WI: Pain & Policy Studies Group, University of Wisconsin Comprehensive Cancer Center, 2000. (Available at <http://www.medsch.wisc.edu/painpolicy/eguide2000/index.html>).
5. Pain & Policy Studies Group. *Achieving balance in federal and state pain policy: A guide to evaluation, second edition*. Madison, WI: University of Wisconsin Comprehensive Cancer Center, 2003. (Available at http://www.medsch.wisc.edu/painpolicy/2003_balance/).
6. Joranson DE, Gilson AM. *Controlled substances, medical practice, and the law*. In: Schwartz HI, ed. *Psychiatric Practice Under Fire: the Influence of Government, the Media, and Special Interests on Somatic Therapies*. 1st ed. Washington DC: American Psychiatric Press, Inc., 1994:173-194. (Available at <http://www.medsch.wisc.edu/painpolicy/publicat/94appcs.htm>).
7. World Health Organization. *Achieving balance in national opioids control policy: Guidelines for assessment*. Geneva, Switzerland: World Health Organization, 2000. (Available at <http://www.medsch.wisc.edu/painpolicy/publicat/00whoabi/00whoabi.htm>).
8. Editorial. The persistent problem with pain. *Lancet* 2001;357:1217.
9. Pain & Policy Studies Group. *Improving cancer pain relief in the world: Report for 2004*. Madison, Wisconsin, USA: University of Wisconsin Pain & Policy Studies Group/WHO Collaborating Center for Policy and Communications in Cancer Care, 2005. (Available at <http://www.medsch.wisc.edu/painpolicy/publicat/04report/04report.pdf>).
10. World Health Organization. *Cancer pain relief: with a guide to opioid availability*. Second ed. Geneva, Switzerland: World Health Organization, 1996. (Available at <http://whqlibdoc.who.int/publications/9241544821.pdf>).
11. World Health Organization Regional Office for Europe. *Assuring availability of opioid analgesics for palliative care*. World Health Organization Regional Office for Europe; Copenhagen, Denmark. Meeting report of opioid availability workshop held in Budapest, Hungary; 25-27 February 2002. (Available at <http://www.euro.who.int/document/e76503.pdf>).
12. Pain & Policy Studies Group. *Improving cancer pain relief in the world: Report for 2003*. Madison, Wisconsin, USA: University of Wisconsin Pain & Policy Studies Group/WHO Collaborating Center for

- Policy and Communications in Cancer Care, 2004. (Available at <http://www.medsch.wisc.edu/painpolicy/publicat/03report/03report.pdf>).
13. World Health Organization. *A community health approach to palliative care for HIV/AIDS and cancer patients in sub-Saharan Africa*. Geneva, Switzerland: World Health Organization, 2004. (Available at <http://whqlibdoc.who.int/publications/2004/9241591498.pdf>).
 14. Cox MacPherson C. Qualitative Research Elucidates Needs for Palliative Care. *Turkiye Klinikleri Journal of Medical Ethics* 2006;14:16-22.
 15. United Nations Economic and Social Council. *Treatment of pain using opioid analgesics*; Resolution 2005-25. Report on the forty-eighth session of the Commission on Narcotic Drugs E/2005/28; 19 March 2004 and 7-11 March 2005; issued 22 July 2005. (Available at <http://www.un.org/docs/ecosoc/documents/2005/resolutions/Resolution%202005-25.pdf>).
 16. International Narcotics Control Board. *Report of the International Narcotics Control Board for 2005*. New York, NY: United Nations, 2006. (Available at http://www.incb.org/incb/en/annual_report_2005.html).

Table 1. Indian morphine availability state workshops and adopted simplified rule

State	Population (% of total)	Held workshop	Adopted simplified rule
Andhra Pradesh	75,727,541 (7.37%)	September 2000; March 2004; April 2006	
Arunachal Pradesh	1,091,117 (0.11%)		Since 2003
Assam	26,638,407 (2.59%)	September 2001	
Bihar	82,878,796 (8.07%)		
Goa	1,343,998 (0.13%)		Since 2003
Gujarat	50,473,122 (4.93%)	February 2000	
Haryana	21,082,989 (2.05%)		July 2000
Himachal Pradesh	6,077,248 (0.59%)		
Jammu & Kashmir	10,069,917 (0.98%)		Since 2003
Karnataka	52,733,958 (5.14%)	February 1999	October 2001
Kerala	31,838,619 (3.10%)	June 1998	November 1999
Madhya Pradesh	60,385,118 (5.88%)	February 2000; September 2000	May 1999
Maharashtra	96,752,247 (9.42%)	October 1999	
Manipur	2,388,634 (0.23%)	April 2006	
Meghalaya	2,306,069 (0.22%)		
Mizoram	891,058 (0.09%)		
Nagaland	1,988,636 (0.19%)		
Orissa	36,706,920 (3.57%)	October 1999	June 1999
Punjab	24,289,296 (2.37%)		
Rajasthan	56,473,122 (5.50%)	February 2002	
Sikkim	540,493 (0.05%)		December 1998
Tamil Nadu	62,110,839 (6.05%)	April 2000; March 2005	December 2000
Tripura	3,191,168 (0.31%)		December 1999
Uttar Pradesh	166,052,859 (16.17%)		Since 2003
West Bengal	80,221,171 (7.81%)	February 1999	
Union Territory	Population (% of total)	Held Workshop	Adopted Simplified Rule
Andaman & Nicobar Islands	356,265 (0.03%)		
Chandigarh	900,914 (0.09%)		
Dadra & Nagar Haveli	220,451 (0.02%)		Since 2003
Daman & Diu	158,059 (0.02%)		
Delhi	13,782,976 (1.34%)	February 2001; June 2002	January 2003
Lakshadweep	60,595 (0.01%)		
Pondicherry	973,829 (0.09%)		

FIGURE 1

KERALA



**Pain & Palliative Care
Society
*Link Centres***

FIGURE 2
PPSG Website Statistics
July 1997 – December 2005

■ Hits ■ Users

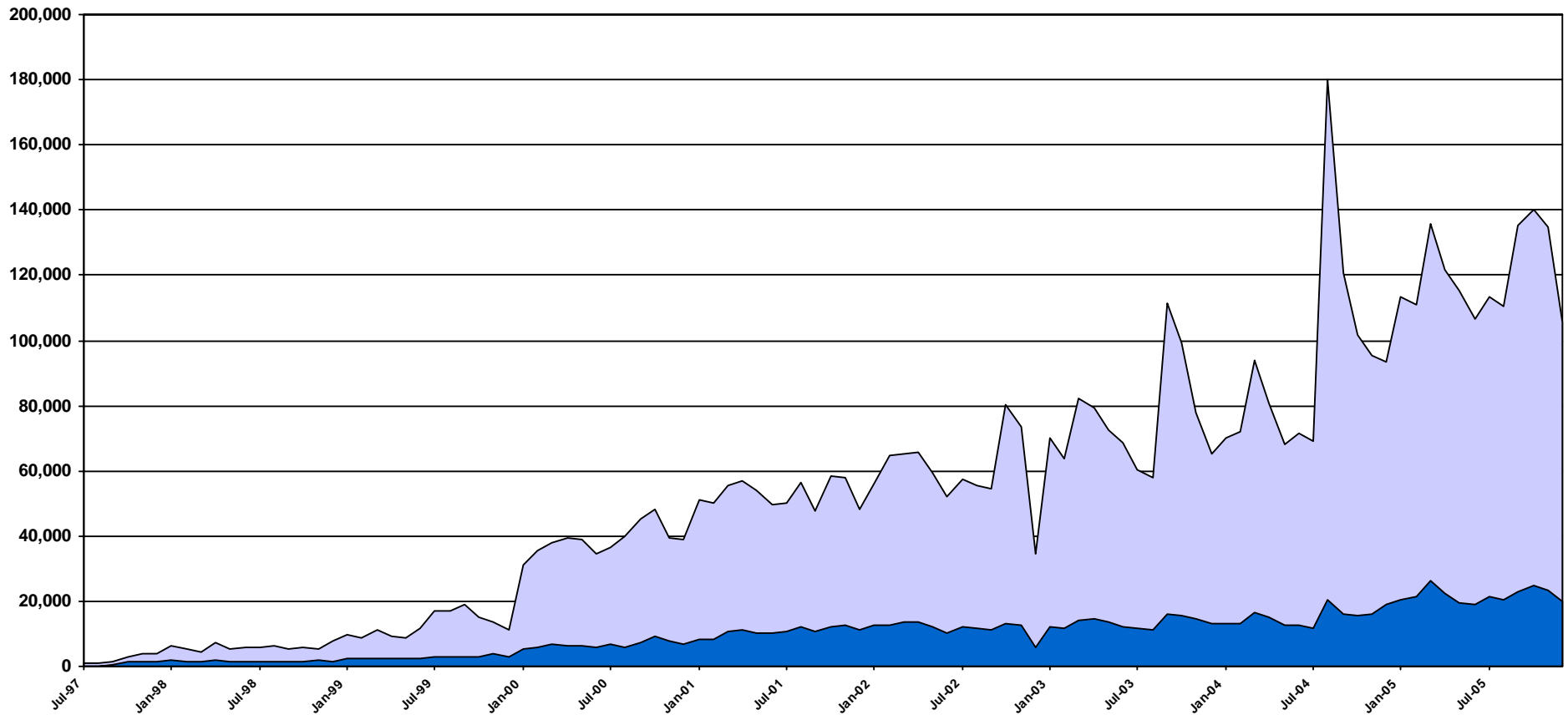
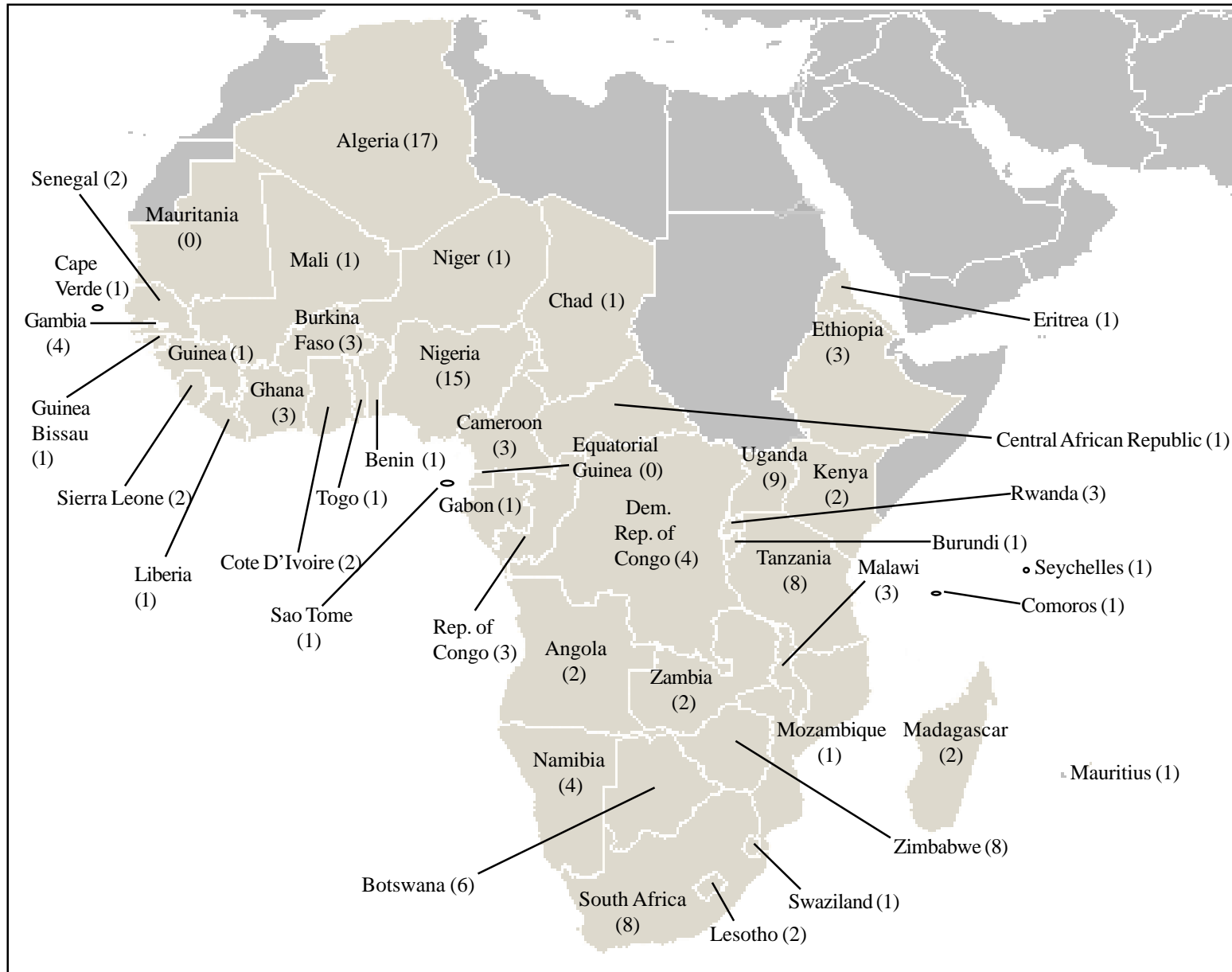


FIGURE 3

WHO Pain & Palliative Care Communication Network in AFRO Region

Cancer Pain Release Distribution Points



Cancer Pain Release is the publication of the WHO global communication program for pain control and palliative care. WHO Collaborating Center for Policy & Communication in Cancer Care, 2006

FIGURE 4

WHO Pain & Palliative Care Communication Network in EURO Region

Cancer Pain Release Distribution Points



Cancer Pain Release is the publication of the WHO global communication program for pain control and palliative care.
 WHO Collaborating Center for Policy & Communication in Cancer Care, 2006

FIGURE 5

WHO Pain & Palliative Care Communication Network in EMRO Region

Cancer Pain Release Distribution Points

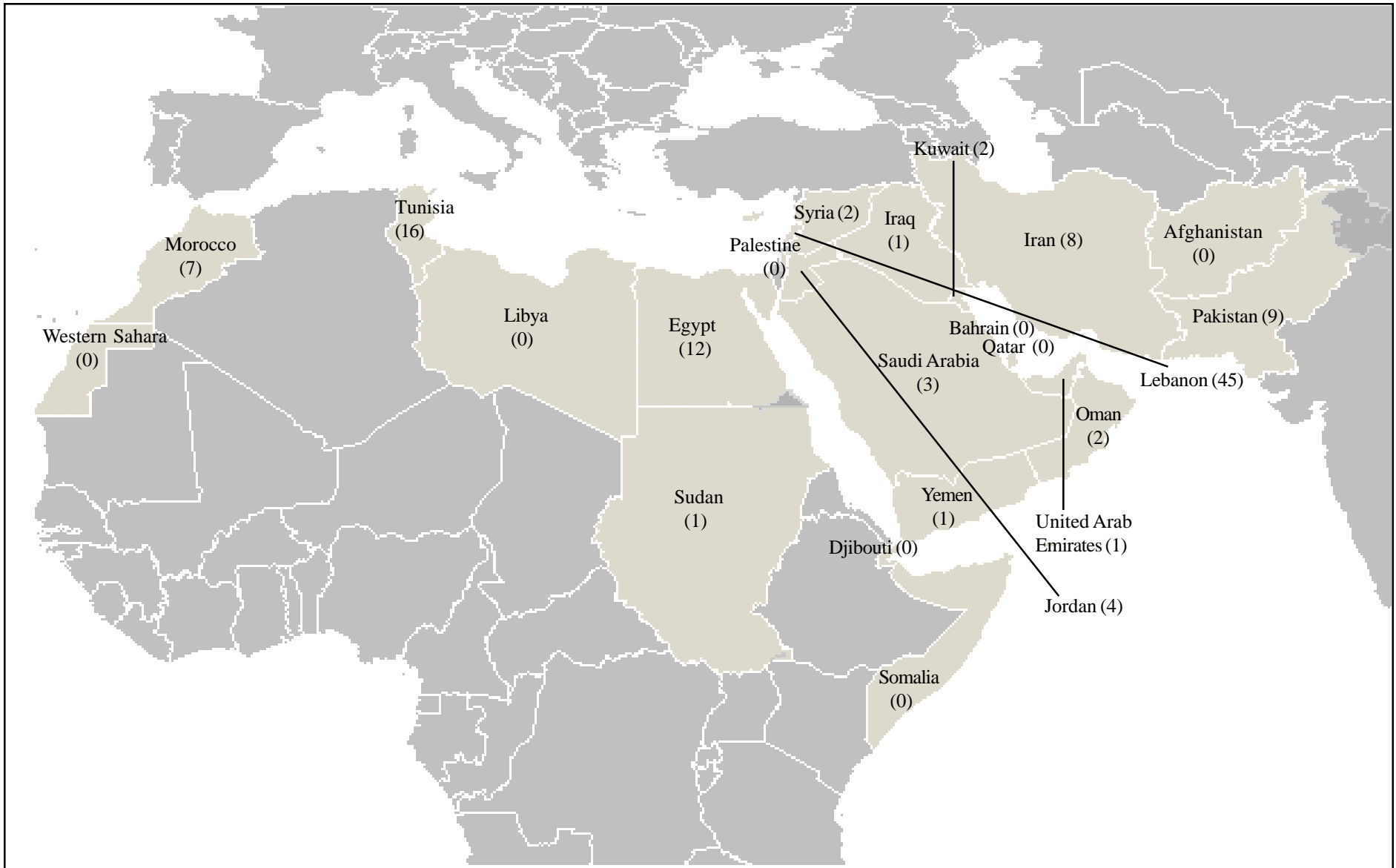


FIGURE 7

WHO Pain & Palliative Care Communication Network in SEARO region

Cancer Pain Release Distribution Points

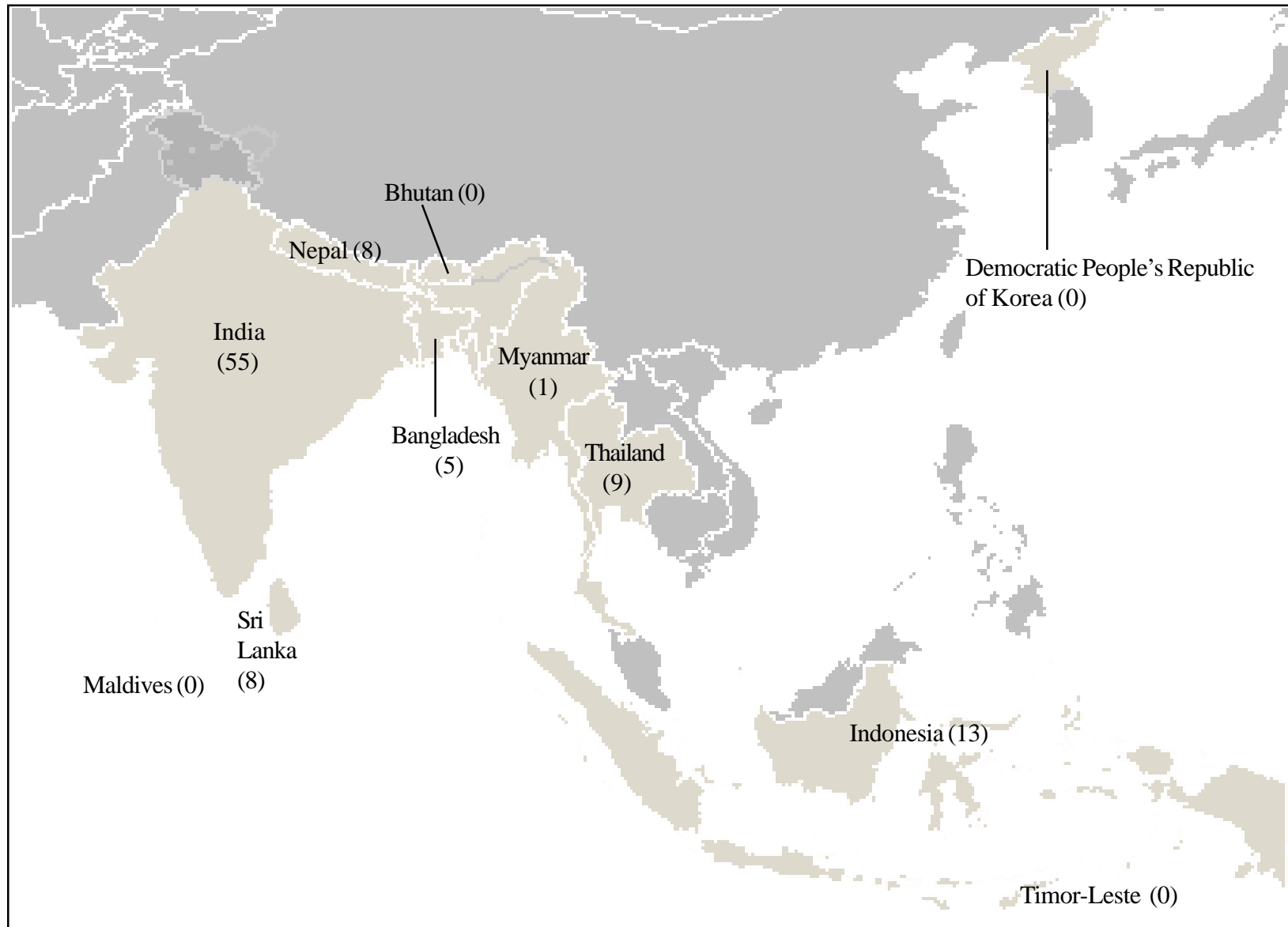


FIGURE 8

WHO Pain & Palliative Care Communication Network in WPRO Region

Cancer Pain Release Distribution Points

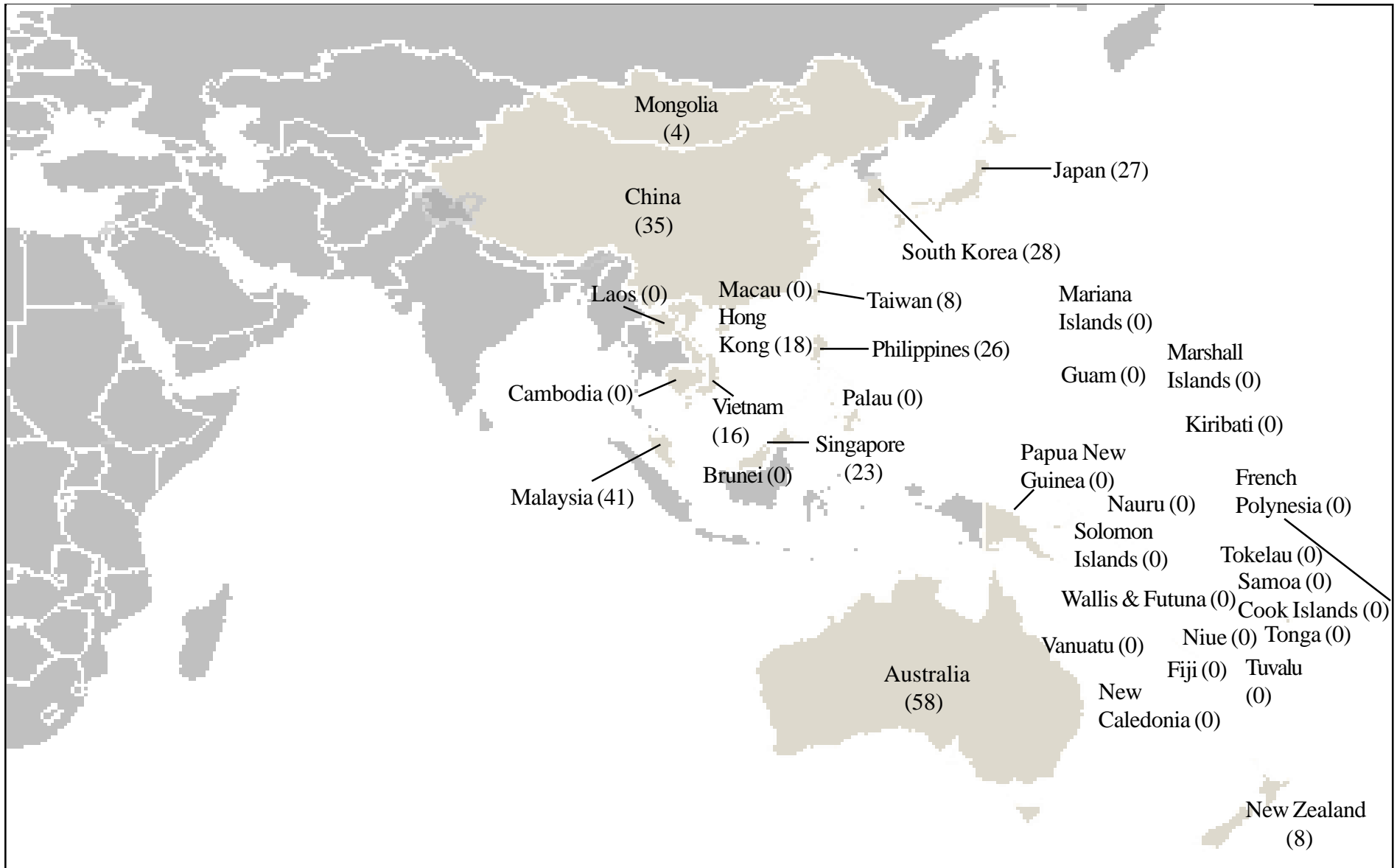


FIGURE 9. *Cancer Pain Release Website Users, 2005*

