

The Centers for Disease Control and Prevention/World Health Organization Collaborating Center for Physical Activity and Health: A Condensed History

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Abstract: The Centers for Disease Control and Prevention (CDC)/World Health Organization (WHO) Collaborating Center for Physical Activity and Health (CDC/WHO CC) was founded in July 1998. In the 14 years of its existence as a center of excellence promoting physical activity, globally, the Center made lasting contributions to global health by building capacity; providing training; promoting partnerships; assisting with the establishment and maintenance of surveillance and evaluation systems; and developing and implementing policies, strategies, programs and guidelines to increase physical activity worldwide. The authors describe the history of the Center and highlight some of its most significant achievements.

Key words: International physical activity promotion, global public health policy, non-communicable disease prevention and control.

INTRODUCTION

In a 2009 commentary, Pratt and colleagues detailed the emergence of physical activity (PA) into the mainstream of public health with particular attention to the role of the Centers for Disease Control and Prevention (CDC). (1) One of the contributions mentioned is the 1998 designation of a World Health Organization Collaborating Center for Physical Activity and Health within the Physical Activity and Health Branch (PAHB), Division of Nutrition, Physical Activity and Obesity (DNPAO) at CDC. The purpose of this article is to describe the evolution of the CDC/WHO CC and to summarize the significant body of work that was achieved in the 14 years of its existence.

HISTORY

A small number of CDC PA staff had been involved with international PA consulting even before the PAHB was established in 1996. However, the creation of the Branch brought together a critical mass of professionals with expertise in epidemiology, behavioral science, evaluation, exercise physiology and program development which came to the attention of WHO as a center of excellence for addressing PA. At the same time, CDC recognized the potential value of partnering with WHO and its regional offices to promote PA, globally. Such collaboration could provide a linkage to Ministries of Health, lend scientific consensus to PA efforts, enhance visibility for PAHB, facilitate inclusion at the table on emerging international PA issues, and establish CDC as an important consulting partner for PA and public health to countries throughout the world. Thus the process of applying for designation as a WHO CC began, was approved through CDC's DNPAO and the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), and completed in July 1998. Three other Collaborating Centers focused primarily on sports medicine activities, but the CDC/WHO CC remained the only Center, globally, with a broader mission to promote physical activity in a public health context.

The process of becoming a WHO CC is usually initiated through the closest WHO Regional Office, in this case the Pan American Health Organization (PAHO) in Washington, DC. Mutually agreed upon "Terms of Reference" serve as objectives to guide the expected scope of collaborative work. Over time, these were updated to reflect the priority activities of the Center, as noted below:

1. Facilitate the development and implementation of culturally appropriate policies, strategies, programs and guidelines to increase knowledge of and participation in PA worldwide, and to apply lessons learned from these activities globally and in the US.
2. Support the implementation of strategies from WHO, its Regional Offices, and other key partners, for the prevention and control of non-communicable diseases.
3. Strengthen global capacity for community-based, inter-sectoral PA promotion and non-communicable disease prevention.
4. Train health, sport, education, recreation and professionals from other sectors in evidence-based public health approaches to promoting PA.
5. Promote the development of networks and partnerships involving governmental and nongovernmental organizations, professional associations, research institutions, the private sector and civil society.

6. Assist in the establishment and maintenance of surveillance and evaluation systems to monitor health status and behaviors, interventions, environments and policies related to PA.
7. Support research on evidence-based intervention strategies to promote PA and prevent sedentary behavior.

The Center's vision was "active people in an activity-friendly world", and its mission was "to understand and promote physical activity to prevent disease and enhance health and quality of life worldwide". Funding mechanisms were established via NCCDPHP Cooperative Agreements with both PAHO and WHO headquarters, initially, and later with the International Union for Health Promotion and Education (IUHPE) and the American College of Sports Medicine (ACSM).

ACCOMPLISHMENTS

In the first 6 years of the WHO CC's existence, major accomplishments included:

1. Collaboration with an international consulting group on the development of the International Physical Activity Questionnaire (IPAQ), and the Global Physical Activity Questionnaire (GPAQ), and establishing IPAQ and GPAQ as the standards for public health assessment of PA.
2. Collaboration with colleagues in the Americas and the Caribbean, as well as the Centro de Estudos do Laboratorio de Aptidao Fisica de Sao Caetano do Sul (CELAFISCS), PAHO, ACSM and IUHPE to development and support the Red de Actividad Fisica de las Americas (RAFA), the regional network for PA and health promotion in the Americas.
3. Development of a policy framework for national and regional PA promotion.
4. Establishment of international capacity for PA promotion through a series of targeted workshops and key publications on the themes of:
 - 1998—Surveillance
 - 1999—Economic Impact
 - 2000—Dose-Response Issues and Recommendations
 - 2001—Communication Strategies
 - 2002—Policy Framework/PA Consultation for the WHO Global Strategy on Diet, PA and Health
 - 2003—Evaluation
5. Assistance to WHO in developing their Global Strategy for Diet, PA and Health.
6. Establishment of a strong working relationship with PAHO in stimulating regional PA promotion efforts.

7. Establishment of collaborative relationships with multiple organizations such as ACSM, the InterAmerican Heart Foundation, the InterAmerican Development Bank, World Bank, Saint Louis Prevention Research Center, (CELAFISCS), and others.

In the subsequent eight years, the CDC/WHO CC played a major role in focusing global health policy on PA and building the evidence base for interventions and tools for surveillance and evaluation. In addition, capacity building through International Courses on PA and Public Health and the International Visitors Program expanded dramatically; a variety of important projects were supported through the 4 primary Cooperative Agreements as well as CDC Prevention Research Center Cooperative Agreements, and extensive technical consultation activities took place. Annual workshops continued on the themes of:

- 2004—Implementing the Global Strategy for Physical Activity
- 2005—Globalization, Urbanization and Physical Activity Promotion
- 2006—Global Advocacy for National Physical Activity Plans
- 2007—Developing and Disseminating Global Physical Activity Recommendations
- 2008—Building Evaluation Capacity for Urban Health Promotion in Latin America
- 2011—Global Partnering to Promote Physical Activity in the Larger Context of NCD Prevention and Health Promotion

In addition, the CDC/WHO CC was involved in helping prepare and implement significant plans and guidelines such as the WHO and PAHO Action Plans for NCD Prevention and Control, the WHO and Canadian Physical Activity Guidelines and the Kuwait National Physical Activity Plan. Most recently, the CDC/WHO CC focused on the importance of global PA promotion in the context of non-communicable disease prevention and control, particularly in low and middle income countries. A more detailed elaboration of selected accomplishments follows.

PHYSICAL ACTIVITY NETWORK FOR THE AMERICAS (RAFA/PANA)

The CDC/WHO CC, working with colleagues in the Americas and the Caribbean as well as partners such as CELAFISCS, PAHO, and ACSM, supported the establishment of RAFA in 2000. The IUHPE Cooperative Agreement later helped provide annual financial support for the RAFA Annual Meetings, the RAFA website (www.rafapana.org) in three languages for the Region, and the Secretariat for the Network. In addition, the WHO CC provided extensive in-kind support for the RAFA Executive Board activities, the work of other committees, and the daily functioning of the Network. As of July 2012, there were 117 active member institutions from 21 countries in the Americas and 9 National Networks for Physical Activity and Health situated in Colombia, Peru, Argentina, Chile, Costa Rica, Uruguay, El Salvador, Mexico, and Venezuela.

OTHER NETWORK SUPPORT

THE CDC/WHO CC has provided in-kind support to the work of other global PA networks such as Global Advocacy for Physical Activity (GAPA), the International Society for Physical Activity and Health (ISPAH), the Health Enhancing Physical Activity Network in Europe (HEPA), as well as the Asia-Pacific and African Networks. In regard to GAPA, this activity

evolved from two workshops that were organized and co-led by the CDC/ WHO CC in 2004 and 2005, and the subsequent development and important PA promotion activities of GAPA have received partial financial support through the IUHPE Cooperative Agreement.

INTERNATIONAL COURSE ON PHYSICAL ACTIVITY AND PUBLIC HEALTH

The CDC/WHO CC developed a four day training course for physical activity and public health. The Course is modeled on the physical activity researchers' and practitioners' courses that CDC and the University of South Carolina have held in the United States since 1995. Support has been provided through the Cooperative Agreements with WHO, PAHO and IUHPE. The first Course was held in July 2004 in Brazil in collaboration with CELAFISCS. Subsequently, 43 more Courses have been conducted resulting in more than 3000 health professionals from 49 countries being trained by a multi-national faculty. The Courses have played a key role in building capacity for the planning and implementation of PA promotion strategies among policy makers, establishment of National Networks and creation of a number of collaborative partnerships and projects.

INTERNATIONAL VISITING SCHOLARS PROGRAM

The CDC/WHO CC has hosted over 20 international fellows from multiple countries on 2 to 12 months fellowships. These scholars each worked with a mentor from PAHB, participated on at least one PAHB Team, and developed at least one project suitable for presentation at a major scientific conference and/ or publication in a scientific journal. Most visiting scholars have maintained collaboration with the CDC/WHO CC after returning to their home countries. The relationships developed during these fellowships have contributed to strengthening partnerships, identifying mutual priorities and building joint projects. In addition, these fellows have continued to contribute to the leadership and growth of the PA field in their home countries and around the world.

CICLOVIAS

A Ciclovía is a mutisectorial community-based program in which streets are temporarily closed to motorized transport, allowing exclusive access to individuals for recreational activities and physical activity. The CDC/ WHO CC was a founding member of the Ciclovías Network of the Americas (CRA) which was launched in 2005. Since then, the CDC/ WHO CC has provided technical assistance and annual funding via the PAHO Cooperative Agreement for Web Site development and maintenance (www.cicloviasrecreativas.org), Secretariat staff, annual meetings, projects such as the development of a Ciclovías Ranking System and Program Implementation Manual, technical assistance and training, and promotion of the concept around the world.

GUIA/GOL

Project GUIA (Guide for Useful Interventions for Activity in Brazil and Latin America, <http://www.projectguia.org/en/>) was initiated in October 2005 to examine and promote evidence-based strategies to increase physical activity in Brazil and Latin America. GUIA is a special

interest project coordinated by the Prevention Research Center in St. Louis and funded through a Prevention Research Centers Cooperative Agreement with CDC. The CDC/WHO CC has been involved in all aspects of this productive project which has yielded, for example, more than 30 peer-reviewed publications, more than 50 presentations and posters at national and international scientific congresses as well as translation of evidence to the general public and policy makers through the development of a policy brief that includes specific examples on adaptation of these programs in Latin America and the United States.

Project GOL (Guide to Obesity Prevention in Latin America and the US, <http://www.sdprc.net/research/other-projects/project-gol/>) was initiated to better understand, assess and develop evidence-based strategies and recommendations to effectively prevent and treat obesity in Latino populations. This project is a collaboration between the San Diego Prevention Research Center (SDPRC) and the Mexican National Institute of Public Health (Instituto Nacional de Salud Publica (INSP)). The CDC/WHO CC has been involved in all phases of the Project as it has progressed from reviewing the literature to developing recommendations based upon the literature review and designing, implementing, and evaluating community demonstration projects based on translation and adaptation of evidence-based strategies in Mexico and the U.S.

PARTNERSHIPS/TECHNICAL CONSULTATION

In addition to its longstanding Cooperative Agreement partners, the CDC/WHO CC has cultivated other partnerships with both traditional and non-traditional partners. These relationships have been variously characterized by informal dialogue, inclusion in workshops and symposia, and in-kind technical assistance and have included financial institutions, representatives of the private sector, trade associations and other groups. Specific examples are the International Olympic Committee (IOC), the World Soccer Association (FIFA), the World Federation of the Sporting Goods Industry, World Bank, the Inter-American Development Bank and the Inter-American Heart Foundation.

There were also multiple, in-kind, technical consultation efforts in Jordan, Thailand, India, Brazil, Colombia, Morocco, Mexico, Kuwait, Barbados and other countries. The case of Kuwait was particularly significant since the CDC/WHO CC's involvement there led to the first International Physical Activity and Public Health Course for the Middle East Region, the establishment of a National Committee for Physical Activity, and a National Physical Activity Plan which served as a model for other countries in the Region.

MEETINGS AND SYMPOSIA

1. Each year since the launch of its Cooperative Agreement with ACSM, the CDC/WHO CC has hosted a dedicated symposium at the ACSM Annual Meeting to highlight significant work in international physical activity research and promotion by the Center and global colleagues.
2. The CDC/WHO CC has participated in a number of international symposiums over the years. For example, at the 2010 International Congress on Physical Activity and Health,

the CC organized and presented in a symposium entitled “Powerful Partnering: Courting New Realms to Boost Global Physical Activity Promotion”.

3. In September 2011, the CDC/ WHO CC partnered with ACSM, PAHO, and the President’s Council, with ACSM taking the lead, in the planning and execution of a Physical Activity Side Event in conjunction with the historic UN High Level Meeting on Non-Communicable Diseases. This effort, intended to ensure visibility for physical activity promotion as an important component of NCD prevention and control, resulted in a successful event attended by more than 125 high-level public health and other professionals from around the world including 4 Ministers of Health and the U.S. Surgeon General. Critical follow up is ongoing through the work of multiple CDC/WHO CC partners such as ACSM as WHO Regions develop their Plans for NCD Prevention and Control and funding mechanisms are considered to support the challenging work ahead.

EXERCISE IS MEDICINE™ (EIM)

EIM is an ACSM program aimed at establishing PA assessment and counseling as a core paradigm of disease prevention and treatment and in the health care systems and electronic medical records in the U.S. and around the world. The CDC/WHO CC has provided technical assistance to ACSM around EIM international activities including supporting the establishment of a local EIM Task Force in over 30 countries, the creation of 5 Regional EIM Centers and delivery of EIM talks, symposia and training.

PUBLICATIONS AND PRESENTATIONS

The WHO CC has contributed significantly to advancing the science of PA and global health. CDC/ WHO CC staff have published more than 70 articles and delivered more than 200 oral and poster presentations focused on the CC’s work. The Selected Publications at the end of this article were chosen by the authors to illustrate the scope of work conducted by the CDC/ WHO CC during its history.

CONCLUSION

The creation of the CDC/WHO CC established CDC as a center of excellence for global PA promotion. In collaboration with multiple individuals and institutions, the Center played an important role in building capacity; providing training; promoting partnerships; assisting in the establishment and maintenance of surveillance and evaluation systems; and developing and implementing policies, strategies, programs and guidelines to increase PA worldwide. In addition, the CDC/WHO CC provided a framework for adapting PA promotion strategies from around the world for application in the U.S. What began as a fledgling effort to bring international attention to bear on PA as a public health issue, contributed, in a 14 year period, to an era in which physical inactivity is now a well-established risk factor for chronic disease with far-reaching health, economic, environmental and social consequences. In appreciation of the CDC/WHO CC’s achievements, two awards were presented at the 2012 ACSM Annual meeting. Since the closure of the CDC/WHO CC in August 2012, CDC is continuing to work with global

partners, to the extent possible, on international physical activity and public health knowledge exchange and capacity building, which are so critical to NCD prevention and control, globally.

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Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or other collaborating organizations cited in this text.

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