

# A TWO-WEEK WORKSHOP TO PROMOTE CARDIOVASCULAR DISEASE PREVENTION PROGRAMS IN COUNTRIES WITH LIMITED RESOURCES

Training is a crucial tool for building the capacity necessary for prevention and control of cardiovascular diseases (CVDs) in developing countries. This paper summarizes some features of a 2-week workshop aimed at enabling local health professionals to initiate a comprehensive CVD prevention and control program in a context of limited resources. The workshops have been organized in the regions where CVD prevention programs are being contemplated, in cooperation with health authorities of the concerned regions. The workshop's content includes a broad variety of issues related to CVD prevention and control, and to program development. Strong emphasis is placed on "learning by doing," and groups of 5–6 participants conduct a small-scale epidemiological study during the first week; during the second week, they draft a virtual program of CVD prevention and control adapted to the local situation. This practice-oriented workshop focuses on building expertise among anticipated key players, strengthening networks among relevant health professionals, and advocating the urgent need to tackle the emerging CVD epidemic in developing countries. (*Ethn Dis.* 2003;13[suppl2]:S2-31–S2-34)

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## STRENGTHENING THE CONTROL OF CARDIOVASCULAR DISEASE IN DEVELOPING COUNTRIES

There is a considerable increase in interest in, and necessity for, the development of strategies aimed at controlling cardiovascular diseases (CVDs) in developing countries, an area of major concern and opportunity for public health interventions in the coming decades.<sup>1–2</sup> Various institutions and committees have emphasized a wide range of issues in developing countries, including the central need for capacity building through training of health workers as a long-term investment in future implementation of programs and policies for CVD control.<sup>3–5</sup>

## ADVANTAGES TO LOCALIZED CVD TRAINING PROGRAMS

There are several advantages to localized training programs organized at the site of anticipated CVD prevention and control programs:

- Training involves participants from the same affected region, which promotes team work and networking;
- The content of training can be adapted to meet the needs of the participants (both content and format);
- Interaction between participants from the same region can greatly enrich the substance, scope, and relevance of the training;
- Practice work permits the collection and analysis of data with potentially important local relevance;
- The process of organizing a train-

ing program can be a powerful tool for advocating the need for CVD prevention programs, fostering political commitment, and accelerating program development; and

- The costs of training can be reduced substantially, particularly by avoiding long distance transportation for participants.

## CONTENT FOR A BASIC TRAINING PROGRAM ON CVD PREVENTION AND CONTROL

Since the expertise in CVD prevention and control is often limited in many low-income countries, and in view of the urgency to initiate prevention and control programs, it is important that some training workshops provide potential local key players with basic, but broad, knowledge and skills. The workshop reviews several areas with great relevance for CVD prevention and program development:

- CVDs are multifactorial, relating to 'medical' physiological factors (eg, high blood pressure, diabetes, blood lipid disorders) and 'non-medical' lifestyle-related factors (eg, diet, exercise, tobacco), which depend on behavioral, environmental, social, and other factors. The concept of health transition is also important for conceptualizing strategies and programs to tackle CVDs;
- From a strategic perspective, it is useful to distinguish interventions targeting an entire population (eg, measures to reduce risk factor levels in the entire population) from interventions specifically targeting high-risk persons (ie, detection and treatment of persons

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with risk factors, such as hypertensive or diabetic patients);

- From a programmatic perspective, participants should become acquainted with some notions of planning and project management to help frame projects in concrete steps along priority, time, and budget lines. This requires some knowledge of social marketing, advocacy, and communication also included in the program;

- From an evaluation perspective, participants are expected to learn to assess the epidemiological situation in a particular setting (including having a notion of surveillance of risk factors). Some acquaintance with outcome and process indicators related to programs is also needed.

## TWO-WEEK WORKSHOP ON INITIATING A CVD PREVENTION PROGRAM WITH LIMITED RESOURCES

The University Institute of Social and Preventive Medicine in Lausanne, Switzerland, a WHO Collaborating Center for Population-based Cardiovascular Research and Prevention in Populations in Health Transition, has designed a 2-week workshop designed to familiarize health professionals from low-income countries with selected key aspects of CVD prevention and control. A description of the workshop appears at the website <http://www.hospvd.ch/iump/info/gct/index.htm>. The workshop is accredited by the 'tropEd' network of 27 European Universities that provide a Master in International Health (<http://www.troped.org>), and corresponds to 3 ECTS (European Credit Transfer System) toward the recognition of a Master in International Health.<sup>6</sup>

The objectives of the workshop are:

- To raise awareness of the participants on the emerging epidemic of CVD in low- and middle-income countries;

- To enable the participants to identify and analyze the current CVD situation in their respective countries;

- To equip the participants with the knowledge and skills needed to initiate a prevention and control program of CVD; and

- To build a network of health professionals in low- and middle-income countries in the field of prevention and control of CVD.

Key organizational features of the workshop can be summarized as follows:

- The training program is organized in low-income countries (or regions) in which implementation of a CVD prevention and control program is foreseen;

- The workshop is organized in cooperation with a relevant local health authority;

- The workshop is limited to 15–20 participants to allow fruitful interaction during plenary sessions, and productive practical work in small groups;

- Participants are expected to be primarily health professionals of the region/country where the workshop takes place, who are key figures in CVD program development;

- Facilitators of the workshop come from the University of Lausanne, but 1–2 facilitators from the organizing country can join the faculty staff;

- The venue for the workshop is located in a remote and secluded place to enable full participation of the participants during the entire duration of the workshop;

- Teaching material and visual aids can be brought along by the facilitators. A room able to accommodate 30 persons is a prerequisite in terms of the equipment at the workshop's venue;

- Participants are requested to complete practical assignments during the workshop, using computers (no previous computer literacy is requested, and at least one computer is made available for each working group of 5–6 participants);

- Interaction between the workshop

organization and local health or public health authorities is encouraged, and contributes to keep the workshop objectives and outcomes in focus;

- Evaluation of the workshop is performed on a daily basis;

- Financing of the workshop has derived from a variety of sources, generally with some participation by the organizing party.

The teaching methods include dividing the seminar almost equally between lectures (mainly in plenary sessions) and practice (mainly in group work):

Lectures aim at reviewing basic knowledge on CVD determinants, main prevention strategies, and principles of project management and planning. Participants are expected to glean at least the minimal knowledge necessary for developing a CVD prevention and control program, in terms of relevance, advocacy, strategic planning, actual organization, and evaluation. All lectures are completed with handouts and 'check lists' for participants' future reference. An individual assessment is performed at the end of the workshop as an indication of knowledge integration.

Practice aims at developing skills with respect to the main steps involved in program development: situation analysis, identification of resources, prioritization of program components, program write-up, and evaluation. The main principles of the training sessions rely on 'learning by doing' and adult learning theory.<sup>7</sup> The practice, and, particularly, the problem-centered approaches, also draw on facilitators' previous experiences in several developing countries.<sup>8–9</sup>

An epidemiological assessment is conducted by each group of 5–6 participants during the first week. This exercise includes the identification of a question of local interest in the area of CVDs, study design, sampling, questionnaire preparation, data collection (eg, among approximately 50–150 inhabitants, during a half-day), data entry,

data analysis, and writing a short report. The topics for the 3 groups are chosen to address different issues related to CVDs. All steps along these "small-scale studies" are discussed in plenary sessions, which occur daily and provide guidance to the groups, as well as exposing participants to a variety of issues related to CVDs. These discussions also anticipate issues to be addressed in the comprehensive CVD prevention and control program to be prepared during the second week.

During the second week, the groups of 5–6 participants prepare a proposal of a hypothetical, comprehensive CVD prevention and control program, conditional to a given hypothetical funding. Each program is expected to be presented along a matrix summarizing objectives, strategies, priorities, main activities, timelines, and budget. Because all programs are expected to be designed for the same region, only limited interaction occurs between the groups (under guidance from the facilitators) to engender a creative competitive spirit. On the last day of the workshop, each group presents its program proposal. While one group presents, members of the other groups, and the facilitators, play the roles of a reviewing scientific board, an administrative authority, and a funding agency, in order to stimulate a concrete and useful discussion on the presented proposals. The participation of local health or administrative authorities is welcomed, as it provides additional insight in the review and evaluation of the proposals.

## OUTCOMES OF THE WORKSHOPS

- Experience has demonstrated that the workshops have elicited very active participation, with peaks of productive effervescence during the days just preceding the presentations of the 'small-scale studies,' and the 'proposals for a comprehensive CVD prevention pro-

gram.' Evaluation forms indicate that the participants have largely appreciated the emphasis placed on practical work.

- Despite the mixed backgrounds and positions of the participants (eg, clinicians, public health specialists, nurses, program managers, directors in health management or hospital services, etc), most participants agreed that this diversity was instrumental in broadening views, and building teamwork.

- In all editions of the workshops, the participants presented the "epidemiological assessments," and the "proposals of a comprehensive prevention and control CVD program," to selected local health and/or administrative authorities, thereby enriching the debate, in addition to powerfully advocating the need for local CVD prevention.

- In one instance (the workshop in the Republic of Maldives), workshop participants also presented the results of the situational analysis to the local population during an official ceremony, which was attended by local authorities, scholars, and hundreds of inhabitants.

Although limited in scale due to time constraints, conducting epidemiological assessments during the first week of the workshop has several advantages, one of the most important of which is the rapid and active immersion of the participants in the substance of the workshop. Importantly, these small-scale studies have obtained epidemiological data of local relevance, often in cases where such information was completely lacking. For example, these studies provided local data (and reports) on the use of tobacco products among adults, the prevalence of high blood pressure, gender difference in utilization of health services, the household consumption patterns of various types of oils, the perceived role of witchcraft in the occurrence of stroke, the prevalence of overweight and associated factors among school children, etc. In some instances, participants subsequently reported results to national public health conferences, and in medical journals.

Relevant expertise is a key component of any strategy aimed at building, or strengthening, local capacity to address the emerging CVD epidemic in developing countries. However, such expertise is often limited in low-income countries, due to a variety of factors. Few health professionals aspire to a public health career in low-income countries, especially not in the field of non-communicable diseases. This choice relates partly to the perceived lower prestige of public health, compared to clinical medicine, the lower priority assigned to noncommunicable diseases, compared to communicable diseases, the lower salaries paid in the public health sector, compared to clinical fields (with the latter having an opportunity for parallel private positions), difficulties in sustaining a public health career, due to frequent changes in staff allocation within health ministries, etc. The scarcity of public health specialists in low-income countries also relates to limited opportunities to get formal public health training locally (due to the limited number of public health schools), and the high costs related to training abroad.

This situation emphasizes the need for new and innovative training programs aimed at enhancing the capacity for CVD prevention and control in low-income countries. A remarkable example of such a program is the World Heart Federation 10-Day CVD Epidemiology and Prevention Seminar, designed to develop capacity in cardiovascular epidemiological research, therefore targeting young scholars and scientists, in particular.<sup>10</sup> The program described in this paper, on the other hand, focuses more on program development, therefore primarily targeting public health workers and program managers. This is a practice-oriented workshop, designed to build skills among anticipated key players in program development, to strengthen networks among relevant health professionals, and to advocate urgent action for tackling the emerging CVD epidemic in developing countries.

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