
HR Series

45

STRENGTHENING THE CAPACITY OF THE PUBLIC HEALTH WORKFORCE IN SUPPORT OF THE ESSENTIAL PUBLIC HEALTH FUNCTIONS AND THE MILLENNIUM DEVELOPMENT GOALS

CONSULTATION WITH EXPERTS

SAN JOSÉ, COSTA RICA, 16-18 AUGUST 2005

Washington, D.C.
December 2006

HUMAN RESOURCES FOR HEALTH UNIT
HEALTH SYSTEMS STRENGTHENING AREA



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Table of Contents

Acknowledgements	1
1. INTRODUCTION	3
2. RATIONALE.....	5
3. OBJECTIVE AND OUTCOMES.....	7
4. CHALLENGES FOR THE PUBLIC HEALTH WORKFORCE.....	9
4.1. Perspective of the international organizations.....	9
4.2. Selected National Experiences.....	13
4.2.1. Costa Rica.....	13
4.2.2. Chile.....	16
4.2.3. Cuba.....	17
5. CHARACTERIZATION OF THE PUBLIC HEALTH WORKFORCE	21
5.1. Selected National Experiences.....	21
5.1.1. United States	21
5.1.2. Brazil.....	23
5.1.3. Mexico	24
6. DEVELOPMENT OF PUBLIC HEALTH WORKFORCE	25
6.1. Primary Strategies: Selected National Experiences.....	25
6.1.1. Brazil.....	25
6.1.2. Canada.....	27
6.1.3. Mexico	27
6.2. Role of the Competencies: Selected National Experiences.....	28
6.2.1. United States	28
6.2.2. Canada.....	29
6.2.3. Costa Rica.....	32
6.2.4. Cuba.....	33
7. ELEMENTS FOR PREPARATION OF A JOINT WORK AGENDA FOR PUBLIC HEALTH ASSOCIATIONS, SCHOOLS OF PUBLIC HEALTH, AND MINISTRIES OF HEALTH	35
7.1. Selected National Perspectives.....	35
7.1.1. Jamaica.....	35
7.1.2. United States	35
7.1.3. Chile.....	36
7.2. Perspective of the International Organizations.....	36
7.2.1. World Federation of Public Health Associations (WFPHA).....	36
7.2.2. Latin American and Caribbean Association of Public Health Education (ALAESPE).....	37
7.2.3. Pan American Health Organization (PAHO/WHO).....	37

8. ELEMENTS FOR PREPARATION OF A REGIONAL STRATEGIC ACTION PLAN FOR THE DECADE OF HUMAN RESOURCES.....	39
8.1. Political Perspective.....	39
8.2. Technical Elements of the Action Plan.....	39
8.2.1. Public health functions.....	40
8.2.2. Definition of core competencies of the public health workforce.....	40
8.3. Methodologies and Instruments.....	40
9. FINAL CONSIDERATIONS.....	43
9.1. Public Health and Public Health Workforce.....	43
9.2. Educational Institutions and Core Competencies of the Public Health Workforce.....	44
9.3. Training Institutions and the Challenges in Fulfilling the Millennium Development Goals.....	45
9.4. Public Policy on Human Resources and Challenges for Development of the Public Health Workforce.....	46
APPENDIX.....	49
DECLARATION ON THE URGENT NEED TO STRENGTHEN THE PUBLIC HEALTH WORKFORCE TO SUPPORT THE ESSENTIAL PUBLIC HEALTH FUNCTIONS AND THE MILLENNIUM DEVELOPMENT GOALS.....	49

ACKNOWLEDGEMENTS

We wish to thank the following experts for their important contributions.

Rómulo Maciel Filho (Associação Brasileira de Saúde Coletiva - ABRASCO, Brasil), Antonio Ivo de Carvalho (Escola Nacional de Saúde Pública/FIOCRUZ, Brasil), Francisco Eduardo de Campos (Ministério da Saúde, Brasil), Elinor Wilson (Canadian Public Health Association - CPHA), Chris Rosene (Canadian Public Health Association - CPHA), Susan Hicks (Health Canadá), Helen McElroy (Health Canadá), Claire Betker (Public Health Agency of Canadá), Federico Paredes (Asociación Costarricense de Salud Pública - ACOSAP), Geovanna Mora (Asociación Costarricense de Salud Pública - ACOSAP), Alcira Castillo (Escuela de Salud Pública, UCR, Costa Rica); William Brenes (Escuela de Salud Pública, UCR, Costa Rica), Carmen Vásquez (Ministerio de Salud, Costa Rica), Adolfo Alvarez (Sociedad Cubana de Salud Pública), Manuel Ipinza (Sociedad Chilena de Salubridad), Giorgio Solimano (Asociación Latinoamericana y del Caribe de Educación en Salud Pública – ALAESP, ESP/ Universidad de Chile), Lorenzo Agar (Ministerio de Salud, Chile) Satnarine Maharaj (Department of Community Health and Psychiatry, UWI, Jamaica), Lilia Macedo de la Concha (Sociedad Mexicana de Salud Pública, A.C.), Noé Alfaro Alfaro (Asociación Mexicana de Educación en Salud Pública - AMESP), Gustavo Nigenda (Instituto Nacional de Salud Pública, México), José Sánchez Gaona (Secretario de Salud, México), Amy Hagopian (American Public Health Association - APHA), Kristine M. Gebbie, (Center for Health Policy and Doctoral Studies, University of Columbia, USA), Charles Godue (Human Resources for Health Unit, PAHO/WHO, USA), Luis Ruiz (Human Resources for Health Unit, PAHO/WHO, USA), Rosa Maria Borrel (Human Resources for Health Unit, PAHO/WHO, Costa Rica), José Paranaguá Santana, (Human Resources Policies, PAHO/WHO, Brazil)

Special thanks to Alcira Castillo and Federico Paredes for their valuable collaboration in the documentation and local arrangements of this meeting.

1. INTRODUCTION

This Consultation on policy guidelines and strategic orientations for strengthening the capacities of the public health workforce (PHWF) in support of the essential public health functions (EPHF) and the Millennium Development Goals (MDG) was held in San José, Costa Rica, from 16-18 August 2005. Public officials from ministries of health, academics from schools of public health, and activists from public health associations of Brazil, Canada, Costa Rica, Cuba, Chile, Jamaica, Mexico, and the United States—eight key countries chosen for the characteristics of their health systems and public health workforce—attended this Consultation. Its purpose was to promote strategic cooperation between associations and schools of public health in the drafting of a joint work agenda for the Decade of Human Resources in Health, which PAHO/WHO will intensely promote as an international policy priority in 2006. The Consultation was held with the technical support of PAHO.

This activity had its beginning in the 10th International Congress on Public Health of the World Federation of Public Health Associations, held in Brighton, England, in April 2004, which discussed the crisis of human resources in health and its implications for the achievement of the MDGs. This event was followed by the signature of the Declaration of Joint Work between Schools and Associations of Public Health (Geneva 2004). Later that same year, at the 58th Congress of the Mexican Society of Public Health (Mazatlan 2004,) the human health resources crisis in public health was amply discussed during the international session of schools and associations of public health. It was agreed that in view of the current unfavorable climate for the adequate development and performance of the PHWF, it was imperative to create alliances to jointly face this challenge. In response to the question “What can we do about this situation?” the participants agreed to take up the theme of human resources in health as a common issue to be addressed consistently by the schools and associations of public health in close collaboration with each other.

The strategic partnership between these public health actors and agents clearly calls for the intense participation of the ministries of health and other organizations, institutions and networks in the study of the critical situation arising from the economic and sectoral reforms related to human resources in health over the past two decades, and in the study of outlook for the development of the PHWF involved in the management and delivery of public health services.

Ensuring fulfillment of the EPHF and, thus, contributing to the achievement of the MDGs by 2015 requires work that must make optimum use of the capabilities of the health workers. The MDGs proposed by the United Nations to its member countries is a challenge and a goal that the world cannot achieve without active participation by the health workforce in contributing to the attainment of good health, which is critical to the achievement of the MDGs.

The report of this Consultation uses the cross-cutting themes that characterize the PHFW and its development. It also describes the problems and strategies faced in improving their performance and empowering them. For this purpose, a Regional Action Plan was drafted that provides orientation for this policy and for the WHO Mandate on the Decade of Human Resources in Health.

The presentations, analyses, group discussions and plenary sessions have sought to highlight the outstanding aspects of country experiences in terms of their strengths and characteristics, as well as to provide models for the development of capabilities and the role of work competencies in the public health workforce. Based on this input, some political, ideological, technical, and operational proposals were defined for achieving the objectives and expected results of this line of work.

The task of strengthening the capabilities of the PHWF is essential and cannot be delayed. It demands the development of appropriate and effective processes. Therefore, it is hoped that the discussions and conclusions of this Consultation will broaden the scope of viewpoints for devising strategies and priorities in fulfillment of this task.

There is a special need to ensure that these reflections and strategies are also developed by other entities and actors, so that, with similar purposes, regional and international public health events can serve as starting points for reflection and actions that will translate into an overall strengthening of the PHWF.

2. RATIONALE

The limited visibility of human resources in the health systems is noteworthy despite the fact that they are the main protagonists in performing the tasks required to promote and protect health, prevent disease, and manage services. Moreover, in most countries this workforce is undervalued, and there is an inadequate distribution of health workers to provide more equitable care for all social groups. This prevents the health systems from achieving optimal performance in health production and the reduction of inequalities.

The issue of human resources has not been given enough attention at a time when we are faced with rapidly changing economies that affect health services. This makes it necessary to seek strategic and innovative solutions to strengthen this workforce. For example, Argentina and Bolivia, with new epidemiological situations characterized by emerging and reemerging diseases, have opted for partnerships between academia, the government sector, public health associations, and nongovernmental organizations. This alliance translates into a tool that ensures that public health problems are given the priority they deserve at regional and subregional levels.

Human health resources are the basis for building our countries' health systems, and we are all responsible for their development. Innovative and strategic elements should be proposed in order to strengthen this workforce and that is the main goal of this Consultation. For this purpose, regional organizations and institutions are encouraged to commit to this initiative, linking experience and knowledge in a public health praxis that serves as an exponential foundation for the achievement of the MDGs.

This Consultation is the first opportunity for the different actors associated with the development of human health resources to meet after the Mazatlán congress of 2004. It is therefore an opportunity to analyze the current situation in our countries in terms of progress, opportunities, threats, weaknesses, and strengths. For example, ALAESP has initiatives under way to improve and strengthen human resources education, but faces limitations in meeting such complex challenges alone. It is through the concerted action of different actors with the interest and potential for research/action in public health that the challenges facing the strengthening of the public health workforce to improve social welfare and development can be met.

3. OBJECTIVE AND OUTCOMES

The main objective of this Consultation is to generate social recognition for the improvement and protection of human resources and the development of the health systems and well being of the populations of the Region of the Americas. There is no clear guiding principle in the conceptualization of human resources in health, or about its relationship to the PHWF. Human resources in health are currently facing a serious crisis, and public health should play a leading role in strengthening the capacities of this key resource in the Region. The causes and the magnitude of the problem are reflected in the lack of certain categories of personnel, the inequitable distribution of resources within countries, and institutional planning, management and education of these resources that are de-contextualized and focused on technical aspects. These considerations call for this presentation of the objectives of the Consultation to be accompanied by a recognition that learning to work together is not easy, but that this is precisely what is needed, i.e. the creation of strong partnerships, and the fact that public health work should be conceived in terms of cooperation in this area.

Clarity is needed in order to develop human health resources with an approach that is integrated with the MDGs, in which the development of health systems is compatible with performance of EPHF. Development of public human health resources is an agenda under construction. Therefore, the declaration that the decade beginning next year shall be the Decade of Human Resources in Health represents a strategic challenge for all organizations involved in health.

The general objective of the Consultation was to determine how public health associations and schools of public health in the Region of the Americas can effectively contribute to the general goal of strengthening the capacity of the human health resources during the 10-year period 2006-2015, thus helping achieve the MDGs.

With regard to outcomes, the Consultation was expected to achieve the following:

- Increase the knowledge of the participants about the nature and extent of the public human health resources crisis in the Americas, and its implications for the achievement of the MDGs.
- Achieve greater clarity as regards to the nature of the collaboration of the public health associations and schools of public health with governments, multilateral institutions, and other interested parties, in working for the achievement of the MDGs and the improvement of public health in the Region of the Americas.
- Design a strategic plan for joint action by the World Federation of Public Health Associations (WFPHA) and the Latin American and Caribbean Association of Public Health Education (ALAEESP) to strengthen the capacity of public human health resources, including the following components:
 - Participation in the “expansion” of human health resources during the Decade of Human Resources in Health (2006-2015);
 - Participation in the characterization of the PHWF by country in the Region.
 - Recommendations on sharing methods and tools for analysis of the core competencies of the public health workforce, including the use of PAHO’s Virtual Campus of Public Health;
 - Recommendations for additional joint activities that take into account regional and international public health events already programmed.

4. CHALLENGES FOR THE PUBLIC HEALTH WORKFORCE

4.1. PERSPECTIVE OF THE INTERNATIONAL ORGANIZATIONS

In order to contribute to the discussion and analysis of the challenges for the health workforce, the three international agencies PAHO/WHO, WFPHA and ALAESP presented their views on the matter.

- PAHO/WHO

From the perspective of PAHO/WHO, and in the context of the current crisis in human resources in health, it is evident that major challenges are present in the achievement of the MDGs related to health. A comprehensive approach to the 18 targets included in the 8 MDGs and the fulfillment of the EPHF are milestones promoted by PAHO.

Emphasis is placed on the fact that, beyond the specific objectives of health conditions, of the strengthening of the capacity of PHWF and the development of human resources, one of the aspects in the comprehensive view of the 8 MDGs is building the capacities of the health systems. In this context, human resources are a central element in the achievement of the MDGs by 2015.

The problems associated with the PHWF are critical, and new ideas should be developed to promote achievement of the health objectives. This must not be delayed, if the unprecedented commitment of the 189 countries of the United Nations system for the period 2000-2015 is to be fulfilled. This is a commitment made by the Region of the Americas at the levels of civil society, organization of municipalities, communities, and organized groups. The challenge is to have the MDGs goals permeate and mobilize a wide range of alliances, activating the health agenda of our countries in terms of government decision-making.

Although there are technical dimensions in the achievement of the MDGs, the challenge is merely a political one. It concerns placing the issue of health at the center of the development agendas on the grounds that health is not only an objective of investment, but that it also generates development. It is an effort to reposition the issue of health in a broader context of public and developmental policies that are evident in the 8 goals, 18 targets, and the monitoring of the 48 indicators. This indicates the specific character of each one of the goals and makes them real in regard to the commitment towards their achievement. It should be pointed out that the first four targets are related to traditional health determinants, another four are directly related to health problems, three to environmental health determinants, and the final seven targets refer to the new global determinants or macro-determinants of health.

When the MDGs are considered from a health perspective, it is evident that there is a relationship between new global determinants of health— such as financial systems, market integration, the mobility of goods, services and people, the problems related to debt and the joining together of countries, and the relationship between government, civil society and access to work—and the social production of health in our countries and societies.

Latin America and the Caribbean is a region with some of the most significant social inequities in the world as regards achievement of the MDGs. This Region is inhabited by nearly 500 million people, 27% of which do not have regular access to health services;

46% do not have social protection of health (i.e. public or private health insurance); 685,000 children are not vaccinated; 152 million do not have access to drinking water and sanitary conditions; 107 million do not have access to health services for geographical reasons and 120 million do not have access for economic reasons. Even in the United States, 44 million people lack insurance that provides health protection. Furthermore, in the environmental context, there is a serious lag in access to basic sanitary conditions in terms of drinking water, vaccination coverage, etc. There is social exclusion due to geographical and/or economic access. Moreover, this is specially compounded for minority groups such as indigenous populations, which suffer from persistent discrimination. In this context, human resources are a critical factor for the elimination of barriers to access of services, and the persistence of discrimination.

Within the strategic framework of PAHO and the governments of the Region, the three main focuses regarding mobilization of the MDGs are the technical, political ("policy advocacy"), and social mobilization. Furthermore, programs are approached with regard to specific problems contained in the MDGs. Four pillars are recognized for generating health for all and exercising the right to health. These are knowledge and information management, partly responsible for the success of the renewed version of primary health care; the capacity of the ministries of health to influence EPHF performance; the notion of "social protection in health" to find new mechanisms to protect the population from the risks and consequences of disease, and, particularly, for the development of human resources.

The subject of human health resources caused quite a "stir" in the political agenda of the 21st century. The related problems and those of the field itself are very complex and not readily apparent. The need to learn more about the nature and extent of the crisis has been increasingly recognized. Moreover, there are implications in terms of human resources capacities, knowledge and skills that result from the lack of action in this field since the health sector reforms. This may be the "lost decade" for human resources due to the negligence and lack of visibility implied. Ideological disputes between health professions, the focus on practice by programs, and attention to disease with no broader visions of development of systems and institutions, the lack of recognition of personnel, the crisis and scarcity of human resources that, in addition, seek to migrate to other countries. In short, all of the problems associated with this situation.

Prompt and timely action is needed. The reform processes implemented during the decade of 1990 in most Latin American countries include, to a greater or lesser extent, decentralization, redefinition of the role of the State and, in some cases, privatization which entails a series of key consequences for human resources at different levels. In this regard the human resources observatories help monitor the reform processes. Some international statements, for example, report that in the English-speaking Caribbean islands, there is active recruitment of nurses to work in the United States, promoted by the private sector in this country. This is due to the fact that there is a lack of nursing personnel in the United States and Canada. It is done without consideration to the adverse consequences for the Caribbean islands, and generates a serious distortion in the relations between and within the countries involved.

The PAHO initiative of 1999 when the Observatories of Human Resources in Health were organized, seeks to work on the idea of a decade of human resources for the interim years prior to the attainment of the Millennium Development Goals (2006-2015). The previous situations highlight the need to generate a movement in terms of public policy in this area, promote the achievement of universal access to services, and strengthen capacities with regard to public health.

At the annual meetings of the Observatories of Human Resources in Health of Latin America, the central theme in the current context has been the creation by consensus of a regional platform that is sustainable for 10 years of work on this issue. The idea is to generate a strategic human resources platform in public health with five main themes for the Toronto Plan that will be presented to the Ministers of Health in October 2005. The themes are as follows: formulate a medium-term and long-term vision for the development of public human health resources; increase advocacy as a social movement; expand and improve current achievements; mobilize financial resources and institutionalize the observatories of human resources in health, increase horizontal cooperation, and strengthen education and research in this field. These actions seek to favor and explore the policies being developed, the required capacities, and the indicators that facilitate the monitoring of a process for this platform in the Region. At the upcoming meeting in Toronto, the countries will present information from their own observatories. This meeting is strategic since development agencies, ministers of health, development banks, and regional associations, as well as others, have been invited. The aim is to empower critical actors, guide objectives, negotiate with unions, identify financial resources, review the cooperation agenda, and place emphasis on horizontal cooperation among countries, based on common dynamics in the processes of integration related to shared interests and problems.

In short, it has been proposed that the major challenge for the public health community is the task of human resources development and the commitment to it. Where do we want to be in 2015? On what strategies and conceptual and methodological developments should action be based?

The WFPHA and ALAESP have also analyzed the challenges in strengthening the PHWF at an institutional level.

- ALAESP

The actions and progresses of ALAESP have been directed to (and for) graduate level programs and schools of public health, with the aim to implement best practices in strengthening the capacities of professionals during training and achieve the academic strengthening of these institutions.

Given the perception of the questionable capacity of educational institutions that make offers, conduct marketing, and offer enticing fantasies, there have been significant achievements in terms of recovering lost ground. It has been pointed out that in the majority of our countries regulation is not possible, as accreditation and certification mechanisms are lacking. ALAESP has limited resources and capacities in terms of changing the internal situation of educational institutions. Therefore, greater integration of universities, governments, civil society (scientific societies and unions), and nongovernmental organizations (NGOs) is needed.

It is important that professionals recognize the contribution made by social agencies and the community. Professionals from the field of public health education should accept shared responsibility with regard to the quality and social relevance of the current education of human resources. In the action planned with PAHO, there are two joint strategic objectives. The first one is focused on improving the quality of postgraduate studies through the initiative to conduct quality management of public health education. This subject has been considered in the most recent ALAESP meetings and communications, which report on this line of work that seeks to strengthen the capacities of professionals in this field. The second one is related to the improvement of research on human resources for health, particularly in light of the inadequate supply and demand for human resources. The urgency of joint work based on the current principles of public health, in response to the challenges identified in human resources development, should contribute to the achievement of the MDGs.

Furthermore, ALAESP participates and collaborates in the promotion of the strategic plan of the Joint Learning Initiative on Human Resources for Health (JLI), financed by the

Rockefeller Foundation, a consortium of over 100 health leaders with networking at the worldwide level, concerned about the situation and the critical panorama of human health resources. They are currently analyzing the world situation through study groups, and conducting actions in order to identify strategies to strengthen this workforce through a proposal that aims to mobilize and strengthen it in order to overcome the current crisis. This is also related to health conditions in some countries in the world, particularly in the poorest, and to the construction of sustainable health systems.

ALAESp agrees with the analyses that highlight the lack of health workers, poor geographical distribution leading to inequities and poor working environments with limited stimulation, lack of resources and inadequate foundations in terms of knowledge and practices. Furthermore, the workforce is threatened by HIV/AIDS, new problems related to migration of professionals, and few and inadequate investments in this field. The human resources crisis is a problem for all. It needs to be shared with joint responsibility and by conducting actions together.

The JLI, therefore, plans a series of strategic partnerships in order to strengthen the power of health workers, who have demonstrated that their commitment and determination go beyond simply fulfilling their duty. This means that these actors in the health systems should be compensated and trained in a more integral manner.

The MDGs for 2015 represent an opportunity to act while these global objectives are mobilizing international cooperation, particularly around the building of good health, since this is a central theme in the achievement of the goals. Furthermore, it considers the drama of transnational flows of work, knowledge and financing, which calls for intelligent management of national policies and strategies. These, in turn, depend on international support provided by external cooperation. As regards the subject of global responsibility in the development of the health workforce, this gains force and validity as a result of the influence of international actors and policies. On the national level, it involves not only technical processes, but also political processes that commit the health sector as well as the financial, educational, work, and other related sectors. This involves more leaders from academic fields, professional associations, unions, and nongovernmental organizations.

ALAESp also adopts the three main objectives sought by the JLI as regards health workforce performance, i.e., achieving adequate coverage to serve the most vulnerable populations; increasing motivation by offering better wages, appropriate working conditions and resources, as well as opportunities for advancement on the job. Moreover, it is necessary to identify the core competencies necessary for improving performance in terms of attitudes, abilities, skills and diligence—as regards ongoing learning—in order to promote leadership, creativity and innovation in the work in health. ALAESp joins in and states its commitment to these objectives.

- WFPHA

The WFPHA supports the analyses of the current challenges in the development of the public health workforce. The importance of the political government factor has been pointed out, since several countries in the Region are involved in electoral processes with changes of government in the upcoming years. Within the next nine months, elections will be held in Costa Rica, as well as in other countries. This entails gaining time in designing state policies in the field of human health resources so that they will be sustainable and viable. There is a great deal of uncertainty when the political party that will be in power is not known. Synergistic action by national and international actors will clearly be the determining factor in support of new initiatives that reconsider the PHWF, and for their attainment in the short and medium term.

The plenary session of the Consultation agreed about the complexity of the situations encountered in the development of the PHWF and the challenges to be faced. Therefore, emphasis is being placed on the need to develop strategies that seek technical, economic, and administrative sustainability, as well as on the feasibility of implementing policies that strengthen the PHWF. All these, given the reality of the health field in countries where jobs in health institutions are lacking, with no evidence of new jobs being created. Rather, underemployment is increasing. There is a persistent gap between the human resources education available and the possibility for employment of this health workforce, which, moreover, demands decent working conditions.

4.2. SELECTED NATIONAL EXPERIENCES

The results of the performance measurement of the 11 EPHF as a whole in the Region, between the years 2001 and 2002 and, in particular, that of the EPHF #8 "Development of Human Health Resources," triggered a significant controversy that revealed the reality of this structural human component in the health systems. It is another challenge to be considered in strengthening the PHWF.

The measurement of the EPHF promoted by PAHO is the first effort made to determine the status and situation of human resources in each country and the Region. Analysis and reflection on public human health resources has already led to actions and policies. These are insufficient, but political and union decision-making capacity is being mobilized for prompt and timely action. This will clearly require the integration of all actors involved in the challenges identified, civil and educational organizations, ministries of health, and others.

The experiences in some countries confirm and support the weaknesses that lead to challenges in the development of PHWF. They reveal the reality of the results of performance measurement of the EPHF conducted in three countries with different health systems: Costa Rica, Chile, and Cuba.

The specific observations point out to very different situations in terms of the development of this function, and in defining public policies and approaches to resolving or changing critical panoramas in production, distribution, and management of human resources.

4.2.1. *Costa Rica*

The results of the measurement of EPHF #8 in this country took place within the framework of significant changes and of a historical-political background that explains the current characteristics of the system and of the health sector, based on State and sectoral reforms, particularly in the Social Security Administration of Costa Rica (CCSS) since 1994. The fragmentation of institutional health care practices, the ideological and operational impact of distribution and operation, as well as new practices by health workers, occurred when primary health care for the people and communities, and disease prevention and health promotion, were transferred from the Ministry of Health to the CCSS. These changes led to other new organizational and institutional management challenges in terms of the implementation of the steering role and regulatory functions of the Ministry of Health, as well as in CCSS health services. This has occurred without further development of the institutional capacity of the PHWF as regards knowledge and practices in these areas. Moreover, in addition to this reality, there is the complexity of the context due to changes in the world, actions associated with globalization, and the socioeconomic situation of the country.

In this situational panorama of weakness and lack of leadership, the Ministry and other institutions adopted the EPHF as a tool to salvage public health. Furthermore, this also occurs in light of the constant and persistent undervaluing of this field over an extended

period, and of the health sector reform policies that seek to focus on institutional modernization, reduced health expenditures and medical and health care financing.

It is recognized that the multi-institutional analysis conducted jointly by many actors—as a result of the EPHF measurement process—contributed to added value, extensive circulation, and highlighted key public health functions. Nevertheless, in light of the general task of public health the reductionist nature of the EPHF is noteworthy, since it does not reveal political as well as other elements that are related to these practices.

Rating of the EPHF as a whole indicates that six of the functions are below 50% in terms of performance and achievement. The overall average rating for the country is higher than that of the different health regions in the country, although the same pattern of response is maintained in each of the EPHF. In this regard, it reveals the inequalities in public health work in which the PHWF probably plays a central role. The results indicate poor ratings for EPHF #8 and #10, particularly EPHF # 8 “Human Resources Development and Training in Public Health,” the function with the third lowest rating (36%), along with EPHF#10 “Research, Development and Implementation of Innovative Public Health Solutions,” as shown in the following charts.

EVALUATION OF EPHF

#	Essential Function	% of fulfillment
1	Monitoring and Evaluation: HSA	59
2	Health Surveillance	64
3	Health Promotion	39
4	Social Participation	52
5	Development of Policies and Planning	44
6	Regulation and Enforcement	32
7	Evaluation of Access to Health Services	75
8	Human Resources Development and Training in Public Health	36
9	Ensuring Quality and Improvement	37
10	Research	26
11	Emergencies and Disasters	72

When each of the indicators that are components of EPHF #8 are broken down, the measurement results show that the indicators “description of workforce” and “human resources trained in sociocultural characteristics of the population” achieve barely 17% fulfillment. This behavior can be explained in part by the lack of diagnosis of personnel requirements for public health work, according to the differentiated health needs of social groups. The absence of cultural diversity, gender, ethnic group and generational components in the educational programs, also play a role. On the contrary, they focus on technical specialization and disciplinary aspects. Unless changed, these explanations will make it difficult to contribute qualities to the PHWF in order to realistically seek achievement of the MDGs. In terms of low level of fulfillment, it is followed by the indicator “improving the quality of the workforce” with 25%. This is partly due to the lack of systematization or absence of worker performance evaluation, a situation similar to that of incentives.

The other indicators obtained a better score. The second best score was for “Continuing education and graduate training in public health,” with 40%. The fact that the School of Public Health of the University of Costa Rica (UCR) contributes to this work in conjunction with the CCSS, which sponsors educational programs on local health management and

integral health care throughout the country, is noteworthy. This is a responsibility coordinated by the Center for Strategic Development and Information on Health and Social Security (CENDEISS), of the UCR, for personnel providing primary care services. Moreover, the School of Public Health has offered a graduate program since 1989, which has had a significant influence on the training of personnel in health system management. The professional associations, in turn, also offer their certification programs in order to promote continuing education. Finally, the best indicator with the highest rating, "Technical assistance and support at sub-national levels," recorded 80%. This figure influences the average rating of EPHF #8. A possible explanation for this high score is related to the definition of planning, organization, and supervisory actions, and systematic institutional support for the process of decentralization of the health care model by the CCSS, which clearly reflects its institutional culture.

MEASUREMENT OF FUNCTION #8

#8	Essential Function Human Resources Development and Training in Public Health	% fulfillment
1	Characterization of workforce	17
2	Quality of workforce	25
3	Continuing education and graduate training	40
4	Socio-cultural characteristics of population	17
5	Technical assistance and support at subnational levels	80

As a result of this analysis of the EPHF, several initiatives and strategies have been implemented by the Ministry of Health, particularly the decree creating the Sectoral Health Commission to define public policies for human resources, and the Technical Commission for the Development of Human Resources in Health, which supports this task. In both cases, work plans are oriented towards agreeing on interests and reasoning associated with the different actors in the field of health, such as professional schools, unions, managers, and others.

The Ministry of Health conducted a more in-depth analysis of the human resources situation with the existing data, which is documented in the 2002 publication on "Sectoral Analysis of Health." The objective of this study was to describe the current situation and observe trends in training, management, the market, and conflicts of the PHWF, as well as current regulations in this field.

Based on the problems identified, the Ministry of Health undertook different strategies in order to seek partnerships and consensus on definition of policies in the health sector. One of the most important of these was the inclusion of the issue of human resources development in the Health Care Agenda and creation of the aforementioned Commission on 2 February 2005, through Decree No. 32209-S. This includes the following representatives from health institutions: Social Security Administration of Costa Rica (CCSS), Ministry of National Planning (MIDEPLAN), Water Supply and Sewerage Systems (A y A), Ministry of Health, University of Costa Rica (UCR), and the Federation of Professional Associations. Nevertheless, the work done by the Commission, prior to formalization and legalization, was geared to the consolidation of a work plan that highlighted activities related to the organization of a National Human Resources Information System (supported by funds loaned by the Inter-American Development Bank). As a result, it was hoped that basic information on human health resources provided by different public and private institutions, employers and/or educators, would be available within 12 months. The Ministry will manage the system with the support of the Technical Commission. This will be the basis for strengthening the Observatory of Human Resources in Health. Moreover, another important activity is the preparation of specific public policies in the field of human

health resources. All of the above fuels the expectation of improvements in the decision-making process in this area, with significant contributions to the improvement and strengthening of the national health system.

4.2.2. Chile

If human resources development is analyzed from the results of the measurement of the EPHF# 8, it is clear that in spite of significant advances in the field of health, the situation in terms of human resources faces major challenges. The reality of health conditions during the demographic transition of the country and their evolution, as well as the demographic changes from 1950 to 2015, indicate an expansion of the population pyramid. This has had an impact on the health situation and, therefore, on the supply of human resources. The pronounced decrease in some indicators reflects significant improvement in maternal and child mortality between 1960 and 2000. This contributes to the achievement of the MDGs. The following table shows the current trend in narrowing the gap towards the expected goals of 2010.

CHILE: INDICATORS MILLENNIUM/OBJECTIVES

Indicators, Millennium Goals and Health Objectives	1990	2000	2002	2015 Millennium Goal	2010 Health Objective Goal
Mortality rate 1-4 years (per thousand age group)	0.79	0.31	0.39	0.26	Not planned
Infant mortality rate (per thousand live births)	16.0	8.9	7.8	5.3	7.5
Maternal mortality rate (per 10,000 live births)	4.0	1.9	1.7	1.0	1.2
AIDS mortality (per 100,000 inhabitants)	0.57	1.7	2.62	1.0	1.7
Live births to mothers under 19 years (%)	13.8	16.2	15.0	8.9	11.3

The degree of progress is acceptable. Nevertheless, important and difficult challenges are evident, given the changes in the epidemiological profile and the prevalence of chronic diseases such as cardiovascular disease and diabetes, as well as the prevalence of risk factors such as tobacco and alcohol consumption. It is considered that the reform underway should provide resources to guarantee certain interventions that, in turn, will contribute to the achievement of health system goals. The public health plan and the new health authority represent opportunities for achievement of these goals depending on these complex cultural changes. Furthermore, noteworthy social inequalities associated with the health conditions of some groups, particularly those related to sex and age, were also reported in the 2003 National Health Survey, even though the principles of the Reform explicitly indicate the right to health, equity and solidarity, among other rights.

The policy of monitoring and managing guarantees initiated in 2005 reveals the formulation of public policies with a public-private focus. It shows a national development model based on integration, free competition, and the capacity of private enterprise in a modern and democratic State that focuses its policies on social spending on the poor. This actually reduced poverty from 40% in 1987 to 18% in 2004. Furthermore, strategies have been devised for education in public health and in the management of health services, with the training of managers for complex hospitals and health care services networks managers. Besides the training of professionals in public health, internships are available to Ministry of Health personnel with a view to strengthening primary health care (PHC). All of these actions were implemented between 2000 and 2005.

In regard to the score of EPHF #8, there is clearly a deficiency in the development of human resources. This function obtained the lowest score of all EPHF (13%). Continuing education indicators and consultancy and technical support at subnational levels report 0%, as shown

in the following table. Similarly, EPHF #10, essential research on public health, obtained a final score of 39%. In light of this reality, the country introduced major strategies to change this situation and adopted interdisciplinarity in the field of personnel development, while also seeking public-private financing.

CHILE: ESSENTIAL PUBLIC HEALTH FUNCTION #8

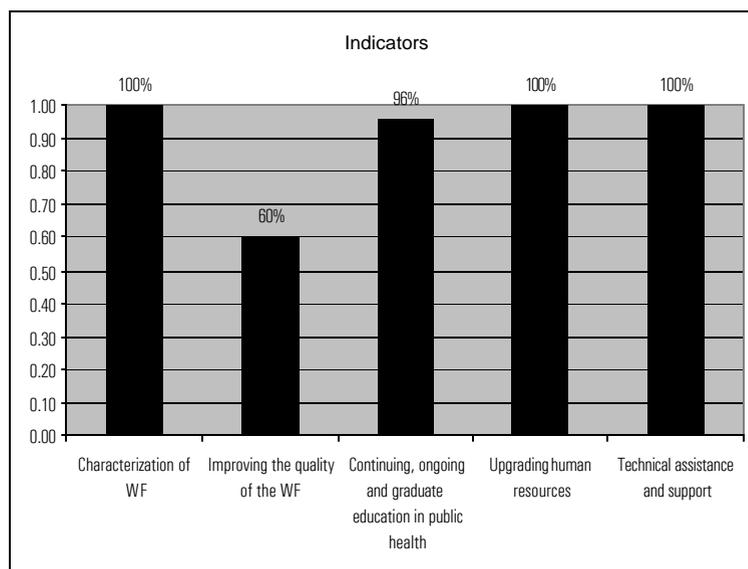
EPHF #8 RRHH Development and Training in Public Health	% fulfillment
Final score	0.13
Characterization of workforce	0.28
Improving the quality of the workforce	0.19
Continuing education	0.00
Upgrading human resources	0.17
Technical assistance and support	0.00

4.2.3. Cuba

The country considers the evaluation of the health systems performance within the reform programs and the improvement of institutional capacity of key importance in this field. With this approach, the results for performance measurement of the 11 functions recorded a national average of over 90%. This was particularly the case for EPHF #8, with 91%. However, it was noted that the regional and subregional averages for this function barely reach 40%.

Analysis of the scores recorded in the component indicators for Function #8 show low percentages for improving the quality of the workforce (60%) and continuing education (96%). These scores are not very good, as the other indicators recorded a 100% score. This is illustrated clearly by the following table.

INDICATORS EPHF #8: HUMAN RESOURCES DEVELOPMENT AND TRAINING IN PUBLIC HEALTH



ADVANCES

- The National Register of Professionals is strengthened.
- Information is available on the continuing education process.

The strategies for reporting good indicators and for further overcoming the situation include the design of policies related to the organization of a continuing education information system and a national registry of professionals.

In Cuban public health policy, the State and society are the main strategic pillars. In this regard, the relationship between work, education and health is a steering role conducted by the Ministry of Public Health (MINSAP), which includes human resources policy as part of the national health policy. Human resources policy and planning include universal medical education with municipal university centers and polyclinics, as well as the regulation of educational institutions by the health sector. These and other elements, such as the relevance of the care model and the characteristics of undergraduate and graduate education at the national and international level, are the keys to education. In this regard, the strategy of integrating education-research-service, and implementing a professional and technical improvement system during graduate studies, guarantees the quality of care. The latter include master's degrees and doctorates in several fields of health.

It is very important to point out that the EPHF are an intrinsic part of each competency-base curriculum design for human health resources education.

The National Health System (SNS) aspires to excellence in its institutions by providing quality services and achieving satisfaction among the population. The main focus is primary health care provided by family physicians and nurses. Human resources are the strength of the SNS. The priority objectives of the SNS are achieving life expectancy over 80 years (currently 77 years) and progressively reducing the infant mortality of 5.8 per 1000 live births.

With regard to personnel education, changes have been introduced in undergraduate education, admission, and decentralization to the polyclinic. Changes have also occurred in graduate education, with its transition from a system of technical and professional improvement to a program to upgrade all workers based on offering new services, introducing new technologies, large-scale training and program flexibility. It is based on the health problems of the population and integrated in the health areas. Training is designed for workers as well as those who hold doctorate degrees. Master's degrees and specialties are offered at the National School of Public Health (ENSAP), where managers are educated in a semi-presential system, and theses are prepared at the workplace. International master's degree programs, diploma programs and courses for Latin American and Caribbean social programs are also offered.

Positive human resources indicators by population and the health worker improvement system for institutional excellence are priorities that seek to ensure increased quality of services and satisfaction of the population. There is a large workforce that includes several different technical and professional categories. It is especially noteworthy that, according to the current public health model and health care policies, family physicians are a priority.

The statements associated with this challenge are complex and varied. One of the main statements is the lack of clarity with regard to specific concepts that define the health workforce, and the workforce in the field of public health. In this aspect, many confounding factors are involved. The conceptual overlap between these fields is one of the main difficulties in measuring this function. However, there is agreement on the potential of the indicator to reflect the weakness of this category in the health systems, as well as internal inequalities within and between countries. Therefore, this challenge as regards the PHWF has been established and granted priority in the Region of the Americas.

Almost without exception EPHF #8 and Health Research record the second lowest scores in the countries. This reality places priority on concern on this level of evaluation and the criteria or parameters monitored (i.e., description of PHWF, quality of the workforce, continuing education and graduate education, development of appropriate human resources for the sociocultural characteristics of the population, and the notion of support at decentralized levels). These are clearly the minimum elements in order to have a critical mass that can collaborate in the social construction of health of groups and populations.

As a final thought on the challenges of the public health workforce, the experiences of the countries reveal the differences in the situational analysis based on measurement of EPHF #8. It seems to be incongruous that some countries with good development of their health systems are deficient in terms of human resources development. Cuba is an exception in this regard.

The efforts undertaken in all countries to overcome this crisis—one that has developed due to lack of State public policies and institutional actions that assign special importance to PHWF developments—are recognized. Nevertheless, the fundamental question is how the PHWF profile should be defined so that it strengthens public health and brings us closer to the achievement of the MDGs. To this end, the need for a sectoral approach is considered to be important in order to analyse the characteristics of human resources with a futuristic vision, taking into account the educational process, the epidemiological and demographic context of populations, and the implications for the achievement of goals, since the curative approach of the biologist persists in education and health practices to the detriment of disease prevention, health promotion, and social protection of health.

Moreover, it has been suggested that the MDGs will not be mobilized as easily based on health progress, as this position would reflect a reductionist view. There are problems in the achievement of the MDGs associated with health events caused by factors such as poverty and lack of development, as well as alcoholism, drug addiction, domestic violence and even corruption, the latter not particularly related to human resources, as this is a hypothesis pending confirmation. There is clearly a need to increase the actions that improve human resources conditions and characteristics. Nevertheless, there is also an urgent need to develop other strategies for health systems and social actors seeking to identify initiatives and new actions of solidarity, as well as those that provide assistance and care to special populations or vulnerable groups.

5. CHARACTERIZATION OF THE PUBLIC HEALTH WORKFORCE

5.1. SELECTED NATIONAL EXPERIENCES

The results of studies and analyses conducted in the United States have been included here to illustrate the challenges in this area. In addition, other aspects that influence the description and assessment of the workforce in countries like Brazil and Mexico are also included to further enrich the discussions.

5.1.1. United States

The experience of the United States illustrates the limitations identified and the knowledge acquired in the research on the characterization of the PHWF in this country. The critical situation as a whole, which makes it difficult to obtain data and information, is one of the most complex aspects of the health system infrastructure for performance of these studies. This is needed in order to ensure education and training of PHWF, as well as the relationships between health systems.

The availability of specific information on the PHWF must provide responses to the question of who is included in this workforce, how the competencies of these workers are evaluated, and what should be done in order to strengthen workers' abilities and capacities to perform the EPHF.

The main problems arise with operational definitions of the PHWF. The main questions that need to be posed refer to whether the PHWF refers to the people responsible for delivery and performance of the functions where they do their work, or whether professionals in this category or people related to this discipline are those used to improve the health of the population.

Those definitions would imply that the PHWF includes all public health agency personnel, including epidemiologists, nurses, dentists, statisticians, etc. However, it could also include personnel from government agencies such as the institutions that deal with environmental or occupational safety, personnel from the private sector who perform actions related to control of hospital infections, or volunteers associated with community associations who care for specific health problems such as cancer, lung conditions, violence, etc.

Therefore, the major challenge and key issue to be discussed refers to the fact that not all public health graduates are included, whereas many who are not public health professionals are included. Moreover, other individuals who work part-time in public health work are also considered.

Furthermore, another challenge related to determining the size of the PHWF is how the questions are defined when research is conducted. This is done in order to eliminate and control under-registration. In 2000 in the United States, only 448,254 salaried workers were recorded in the census of public health departments and schools of public health at the state and local level. However, this figure does not include other types of government workers. The data on environmental health and NGO personnel is also insufficient.

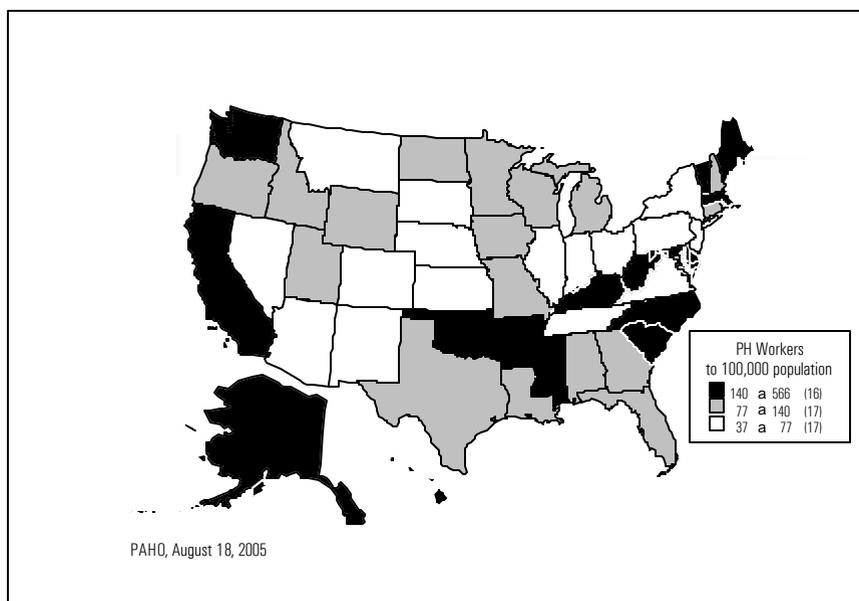
Posing clear questions and achieving consistent responses also requires consideration, for example, of who is a graduate. How can information be obtained on this? How is the person identified? As a clinician?...or as a health services manager? What post does the

person hold? How can information be obtained from the employer? How does this person spend his time (e.g. full-time, part-time)...doing what?

The research on the PHWF performed by the School of Nursing and School of Public Health at Columbia University in 2000, shows in the national summary that, as regards the types of personnel surveyed, 25% do not report the personnel category, 14% are technical personnel, 44% are professionals, 4% are administrative workers, and 13% provide logistical support. This information clearly indicates the challenge of determining who all the people who make up the PHWF are.

Other study results show that public health workers in the United States are not distributed evenly throughout the country. The density of public health workers per inhabitant ranges from 140 to 586 per 100,000 inhabitants in some states, and from 37 to 77 per thousand inhabitants in other states, as shown in the following figure; 34% at local level, 33% state, 19% federal and 14% others. For example, there are more public health nursing personnel at the local rather than the state or federal levels: 13% are community and public health workers. The definition of this personnel category includes only workers who conduct health practices in target populations, home care, and outpatient care. It also includes another group of people who work in central and regional health agencies and regulatory agencies.

PUBLIC HEALTH WORKERS DENSITY: SO WHAT?



In short, the challenge involved in collecting PHWF data is the required census of public health personnel. To this end, there is a need for standardized operational definitions for PHWF classification, organization of data capture routines with verification procedures and, finally, adequate data processing in order to obtain information. Moreover, improvement of database use skills is particularly important.

Teaching public health is another critical challenge in the description of the PHWF. In general, the schools of public health and universities do not educate professionals in performance of good public health practices. One of the characteristics in this country is that the base profession of most professionals admitted to these schools is nursing.

With regard to public health, the subjects emphasized the most are environmental health, which will increase and become more important due to global warming and global health. In teaching public health, the major interest focuses on the subject of bioterrorism.

In public health services, it is difficult to find well-trained public health workers. There are few professionals with master's degrees in this field. The PHWF is an older population. Some categories, such as dentists, are limited to serving disadvantaged populations. In the latter, it is known that 14% are technicians. It has been calculated that there is an average of 1 worker for every 600 inhabitants. There are over 55 different positions or categories of local public health workers.

There are difficulties in conducting PHWF performance evaluation, since there are no systematic methodologies and procedures that consider the complexity of the field, the task, the large scale, and diversity of this workforce.

A significant issue in public health care is vulnerable populations. For example, the exclusion of populations in correctional facilities without public health care, in which cases of tuberculosis, among other infectious diseases, are now often reported.

Other information obtained from PHWF studies in the United States refer to the following issues: people who work in public health should be public servants, public health workers are in a good position to have political influence, local health services lack technology, and public health care has the capacity to employ the people who have lost their jobs in the private sector. On the other hand, public health professionals also conduct similar tasks in the private sector, except that the populations served are those with less access. In the United States, one-third of the population uses public health services.

There is increasing consideration of the need to establish partnerships between the local levels and schools of public health that provide community services.

Public health research should conduct interventions, establish working relationships with the community, be interested in and describe social problems. Personnel must improve their capacity to learn and stay up-to-date. Intercultural problems (migration and intergenerational) should be addressed. Public health concepts should be included in all subjects and forms of health-related care. Research is also needed in order to identify social gaps, so that needs are related to and considered in conjunction with PHWF policies and recruitment.

As regards the individual abilities and skills of the PHWF, it has been suggested, in general, that political and technical elements be included to ensure that personnel are educated and trained, and to verify that all health care programs are related to public health. Continuing education that promotes individual improvement and institutional capacity should also be increased. Furthermore, there is a need to improve personnel management, provide a description of the workforce (where, how, what they do), and attempt to ensure that the PHWF is highly motivated and more committed to its work than other professions.

The public system is considered to be in crisis. The insurance systems are very poor and most of the population does not have health insurance. Therefore, people must make out-of-pocket expenditures and use private services.

5.1.2. Brazil

As regards description of the PHWF, first of all, health should be considered the primary and most important human component. From this perspective, one can observe the reality and the harsh and inadequate conditions in some poor countries of the Region, and the difficulties they will have in achieving the MDGs. The statements by international civil servants and experts reflect the fact that this is a true and palpable situation, which clearly places these countries at a disadvantage. In these circumstances, there is a technical and

political commitment that calls for a clear concept of public health, as well as operational knowledge of its tasks and basic coverage. Therefore, there is a need to define health and decide whether it is a social product and a human right inherent to the quality of life of people.

Secondly, it should be mentioned that there is no single or comprehensive model for evaluation of the PHWF. One promising approach is to design and implement a process for evaluation and follow-up of professionals who are public health graduates. The educational institutions should be responsible for this activity. Public health must be established as a social organization with the participation of schools, health services, and communities as well as union, professional and academic associations. This means that all institutions should be responsible for the evaluation of its functional aspects. Furthermore, evaluation models must be expanded so that they can be applied in performance evaluation not only of the PHWF, but also of institutions.

5.1.3. Mexico

In the observations on PHWF evaluation, the main problems include macro-social problems. In this regard, the trend of exporting public health workers from the public sector to northern countries is emphasized. Furthermore, it has been pointed out that there are private schools that train nurses to work in the United States. There is no control of this exodus because the country does not have any regulations on this subject. At present, there are no policies that provide for strengthening the PHWF needed by the country in view of the health needs of the population and the requirements of the health services. Therefore, redefinition of this subject is urgent. On the other hand, there must be specific models for PHWF evaluation for the different health institutions, public as well as private.

6. DEVELOPMENT OF PUBLIC HEALTH WORKFORCE

6.1. PRIMARY STRATEGIES: SELECTED NATIONAL EXPERIENCES

The experiences of a particular country such as Brazil contribute to this aspect, particularly as regards its focus on prioritized strategies to promote development of human health resources. These contributions are complemented by the strategic proposals for development of the public health workforce in Canada and Mexico.

6.1.1. Brazil

The experience in the Secretariat of Work and Health Education Management under the Ministry of Health of this country gives priority to the historical proposals of strategies for development of the PHWF under the authority of the Unified Health System (SUS), which was created in 1988 and is linked to the academic public health sector. There are three major strategies focusing on public health education, scientific output in public health, and the management of in-service training. These developments have been occurring at different levels of intensity since 1900.

The Oswaldo Cruz Foundation, which initiated public health research and education, is responsible for leadership in this field. Personnel training courses have been offered in Brazil since 1922. In 1957, the National School of Public Health (ENSP) was founded. In 1969, the departments of preventive medicine were established and medical and health residencies were organized. From the 1970s through the 1980s, master's degree programs in social medicine and public health were organized and redefined in light of the new approaches to public health. Strategic courses in the field of public health and related subjects that support development of the SUS have gained strength since 1986. In the 1990s, in light of the burgeoning neoliberal reforms, strategies were designed to address the influence of commercial relations on health. These training sessions closely linked academia and the SUS, which became partners in the joint development of the system, within the framework of solidarity and a common ideology that seeks to attain the health objectives.

The basic pillars of the SUS are universality, equity, and comprehensiveness. Its primary characteristics are based on the care provided by 23,000 teams in the central program of the health system, called family health. The SUS also comprises other levels of complexity of care. For example, Brazil is second in the world in organ transplants.

The magnitude of the field of public health is very broad. It includes 50,000 professionals who work in management and administration of the SUS, with institutions distributed inequitably in the different regions of the country. Therefore, 47% are in the southeast, nearly 22% in the northeast, and 20% in the south, while barely 3.8% and 6.4% of these institutions are located in the north and midwest.

The foregoing reflects the complexity of the system and the challenges for the PHWF in a decentralized system with three autonomous levels of federal entities: management, federal and regulatory agencies.

With regard to strategies for development of the PHWF, in the panorama of the SUS and its human resources policies, one of the main themes is particularly noteworthy: health

education and public health education. There are more than 1,000 health schools (undergraduate and graduate schools of medicine, nursing, dentistry, and technical personnel, as well as graduate schools of public health).

The distribution of courses in public health or collective health (*lato sensu*) by regions of the country is very significant in terms of quantity. However, there is evidence of the same inequality as that in the distribution of institutions. A total of 51% and 21% of the courses are given in the southeastern and northeastern regions, respectively, in contrast to the rest of the country. However, it is the public sector and not the private sector that offers the most training for the PHWF. There are more courses offered by the former, although there is also unequal distribution throughout the regions. Personnel development strategies such as CADRHU, and other organized strategic courses, represent comprehensive and encompassing actions.

Undergraduate and graduate education is part of human resources policies. As regards undergraduate education, there is an increase in schools and programs in medicine as well as nursing. The latter has grown the most, particularly in the southern, southeastern and northeastern regions. *Stricto sensu* graduate programs have also increased significantly, with an emphasis on master's degree and doctoral programs. This is not the case in the professional master's degrees programs in health recently promoted in the country.

Another of the strategies linked to the academic world of health research is related to scientific production in the biomedical, clinical and public health fields. In 2001, Brazil was in the eighteenth place in the world in ISI publications. In the medical field, including public health, it also contributes 0.9% of the world production. This places it in the 23rd position in circumstances in which, on the world level, scientific production on public health hardly represents 1.3% of ISI publications. Within the country, there is noteworthy leadership in production and publication of articles on public health. In comparison to six Latin American countries with the highest percentages from 1973 to 1992, Brazil ranks first in terms of authorship, with 60.7%.

These strategies reflect the work in this category of human resources policies. Nevertheless, several reflections and criticisms point to issues that still need to be faced. These include, for example, determining the specific characteristics of the field of collective health and the need to define criteria that values not only scientific production type "articles," but also production related to health interventions. Moreover, education of generalist public health professionals with political vision is also encouraged.

Among the abovementioned strategic aspects, emphasis is placed on the need to consider and establish alternatives in the development of new strategies such as the organization of multidisciplinary residencies in health; the provision of incentives for significant changes in undergraduate education, particularly in terms of the subjects studied; the designing of graduate careers in health management and public health; and the promotion of professional master's degree programs that include the field of human health resources. Strategies for the organization of advanced national courses in human resources such as CADRHU and international courses such as CLARUS need to be reconsidered. Furthermore, there is a need to seek ways to contend with the impact of the MBA in the field of health and the expansion of the private sector in personnel training.

Currently, the Secretariat of Work and Health Education Management has proposed that priority be granted to strategies that establish links with the Brazilian Association for Collective Health (ABRASCO) and its associates, the strengthening of research and *stricto sensu* graduate work by introducing topics of interest from the SUS; the reestablishment of the cooperation between SUS managers and academia; and the resistance to fragmentation associated to commercial interests. These strategies should be translated into a proposal for institutional support and specific plans for the directors of the network of government

health schools. Finally, it has been proposed that bridges should be built in order to decrease the distance between academia and the real management of SUS. It is also very important to seek strategies that decrease the regional differences in the country.

6.1.2. Canada

The strategies for development of the PHWF indicate that the Canadian and Brazilian health systems are similar, in that both are decentralized systems. Moreover, public health is not always considered to be one of the key bases of the health systems, although it could be critical in diminishing the number of people in need of the formal health services system. This achievement requires social movements. It has been emphasized that public health is perceived as—and associated more strongly with—the work conducted by organizations such as the Centers for Disease Control (CDC), when in fact public health is not only inclusive of this specialized work but also extends beyond it.

The challenge of attaining the MDGs is basic and strategic and countries should be able to reach them. At present, growing inequities and socioeconomic gaps between people are also a responsibility of public health. Partnerships between public health and primary health care (PHC) need to be established and strengthened in order to contribute significantly to these objectives.

In the global health budget for Canada some aspects of human resources education are considered and invested in. The budget also considers aspects related to human resources planning, with the objective of ensuring appropriate health care for Canadians.

Designing and maintaining suitable strategies for recruitment of health workers is considered to be extremely important, in order to mobilize their participation in the field of health. At the same time, better working conditions need to be considered in order to retain them. In view of this, operational definitions of the public health workforce and planning for its development are urgently needed. There is also a need to train human resources with a long-term vision. Universities should be concerned about the relevance of their teaching and collaborate with one another instead of competing to attract more students.

In Canada there are 15 graduate programs in public health. There are also several centers, referred to as “Public Health Teaching Units,” that support training of workers in all categories. Establishing relations that promote cooperation among academia, public health associations, and government authorities in order to develop comprehensive strategies is considered to be of great strategic importance.

6.1.3. Mexico

In this country, the development of the PHWF is closely related to public health policies, and policies on human resources in health education processes. This is exemplified by recent public policies, as well as by the progress and difficulties associated with the Public Insurance (Seguro Popular), for which a parallel service was created in the Secretariat of Health. The personnel development strategies of this service are not clear.

As regards undergraduate and graduate education of health professionals, the fragmentation of the offer is recognized, despite its regulation by the Secretariat. Graduate programs with low output of degrees are being eliminated, given the current certification requirements applied in the country.

The most important strategies for the development of health workers focus on the fact that all health schools go through an accreditation process, with instruments of validation and evaluation of their educational processes. There are also formal and informal mechanisms that ensure that circumstantial changes associated with political movements are surmounted. There is a tradition of consulting in civil assemblies as well as public health

research institutes and health organization networks. In all of these areas, the Secretariat is supported by lobbying on the actions taken.

It is suggested that there is a need for clear strategies for the development of the PHWF, partly because it should be recognized that the gap in terms of inequalities and inequities have expanded in the past 30 years. Attention should be paid to undergraduate education for the health professions as well as to graduate education, as long as education continues to use a curative approach. The question remains: When will the biomedical model of health be replaced? There is a trend among some students to underrate public health, even suggesting that it should be eliminated from the curriculum. There are others, however, that believe this situation is being overcome, that there is a shift from a paternalistic model of health towards a model that is more autonomous, with greater participation by actors.

Finally, it is considered important to gather more evidence and conduct further analysis of the situation in the countries. Other remaining questions refer to how EPHF #8 influences the other EPHF, or whether this function is a conclusive one with regard to the policy of strengthening human health resources. The health sector, and not only those who generate health services, should develop a vision of human resources. On the other hand, the political definition of fair and appropriate distribution, the organization and composition of the PHWF in order to achieve the MDGs, and how to improve the attitudes and motivation of health workers are still pending. Furthermore, how can the countries come closer to a realistic and encompassing definition of the PHWF? What are the implications of the social determinants of health? Are they more important for achievement of the MDGs than the PHWF? What are the implications of fulfillment of the MDGs for the performance of health workers and for education and training?

6.2. ROLE OF THE COMPETENCIES: SELECTED NATIONAL EXPERIENCES

The experiences of some countries with regard to this critical issue, which is the key to development of the public health workforce, are presented below. The use of the approach that defines competencies in the pertinent fields of work has proven to be strategic for defining actions that become linchpins for development of the PHWF. In this regard the experiences of the United States, Canada, Costa Rica, and Cuba are extremely valuable.

6.2.1. *United States*

The experience of this country represents another challenge for educational institutions, as defining PHWF public health competencies is considered to be a key problem. Rather than the numerical question of what the categories are or how many are there, what should be considered is what the PHWF does and what training it receives. The major issue is whether workers have suitable knowledge and skills to perform the tasks and achieve the objectives of their work. This is a current requirement in light of the demands of the 21st century, with the progress and setbacks of globalization, advances in science and medical technology, as well as demographic changes in population.

Defining PHWF competencies has become one of the crucial challenges for improved performance of public health workers. Work has been done on this subject since the early part of the decade of 1990. Recently, the Institute of Medicine of the National Academy of Sciences has identified eight new content areas: *culture, communication, community-based research and action, global health, health policies and legislation, ethics, informatics, and the human genome.*

Competencies are classified into basic, intermediate and advanced based on worker entry level in terms of public health knowledge, skills, and experience.

Furthermore, the instructional competencies approach has several applications, for updating and reviewing job descriptions, in-service training or continuing education, worker self-evaluation, public health teaching and curriculum development.

The importance of establishing partnerships for PHWF development is emphasized. This includes employment agencies as well as schools and associations, which obtain substantial positive benefits from their specific competencies. For example, New Jersey Public Health Training Center partners include state and local public health entities, three schools, and several community health associations. Some of the products that have practical applications for this Center are the methodologies used to evaluate training needs, the ability to design on-line training sessions with basic public health contents, as well as development of cultural competencies. These types of experiences clearly contribute greatly to distinguishing and analyzing other challenges in which changes entail decisions and political actions by the health sector and by governments in order to determine the what, how much, where, and how... of the PHWF.

6.2.2. Canada

The role of competencies, the importance of defining the competencies of the PHWF to provide orientation for personnel development processes, as well as their role in the capacities developed by institutions to conduct human resources management and have a positive influence in improving the health of the populations, are conducted within the context of the principles, organization, and current operation of the Canadian health system, and the historic and political events that led to its origins.

Chronologically, recent processes and facts that have affected public health in this country are the *Report of the Auditor General* (1999); the *Walkerton Report* (2000) on *E. coli* disease, which revealed serious problems in public health administration; the report on the questionable capacity of public health in 2001; and one of the most important reports in the history of public health in Canada, known as the *Romanow Report*, which analyzed the real situation of public health in 2002, highlighting the need to emphasize and expand public health in order to improve the health of people and populations, and taking into account the critical situation in terms of health rights and sustainability of the system. As a result of these analyses, health became the linchpin of Canadian social development. Furthermore, the *Senate Report* in 2002 emphasized health sector reform and, finally, the impact and lessons learned, especially with regard to the SARS epidemic and West Nile Virus disease.

As regards current public health priorities, the four most important are: strengthen and stabilize the PHWF, emphasize the work on the frontlines of the public health system, develop a competent public health workforce, and develop national leadership in this field. Some political achievements in the national response to improvement of public health in the country are the creation of the post of Minister of Public Health and the Public Health Agency of Canada in 2003; significant increases in the public health budget in 2004 introduced by the Chief Public Health Officer, in order to support the national strategy of immunization; strengthen the infrastructure of services, especially with technology; and support improved human resources capacities at all levels of government. This upheld the commitment and partnership with public health objectives.

In turn, the responses of the Ministry of Health were significant: Identification of public health as the top priority on the health agenda; recognition that in public health, the areas of health promotion and prevention of disease, injuries and harm are critical to achieve improved health results and reduce the pressure on health care services; and the commitment to promote and increase efforts to improve public health throughout the country. Moreover, there were changes in the political organization of the health system, which consists of two different levels of government with separate powers: health at the

level of the Canadian national government, and at the level of provincial and territorial governments.

The 2004 10-year plan for the improvement of health was defined. In this plan, the ministers from both levels of government stated their commitment to share the agenda of health renewal. Moreover, they agreed to develop an action plan that focuses on the training, recruitment and retention of health professionals to be achieved by 2005. The philosophical and political contents, substantive health actions and objectives of the "Pan-Canadian Human Resources in Health Strategy" are highlighted. These guidelines include human resources planning in order to ensure suitable access to health services for the population, professional education to achieve a practice that focuses on customer collaboration, learning how to foster collaborative attitudes among health care providers and, finally, recruitment and retention of human resources in order to promote interest in health care by more workers and create better conditions for maintaining these resources.

In Canada, two Advisory Committees have issued mandates that seek to introduce public health initiatives at all levels of government. One of these is the Human Resources Advisory Committee, which is in charge of planning, organization, and the provision of health services, including human resources. The other one is the Population-Based Health and Occupational Health Advisory Committee, which establishes the consensus and collaboration of the population on subjects of national importance. In the planning, two frames of reference were introduced to guide the work, the Canadian Plan for Human Resources Planning and the project referred to as "Building the Public Health Workforce for the 21st Century."

In this regard, the operational definition of the PHWF considers that the functions of this field of work are as follows: describe the health of the population; promote health; prevent disease, injuries, and harm; protect health and health surveillance.

On the other hand, the mission and vision of the Public Health Agency of Canada with headquarters in Ottawa and Winnipeg and its six regional offices, is primarily to provide public health leadership at the federal level and to promote collaboration within and between jurisdictions. The agency also encourages and promotes national and international public health. To this end, priority strategies have been defined for 2005-2006. One of the four most important programs in this regard includes development of the workforce.

One of the functions of the "working groups" is to report to the Conference of Ministers of Health and provide leadership from the Advisory Committees. Their mandate is planning, research, education, and long-term training of human resources.

In summary, the goals of this Agency seek to achieve increased capacities in all jurisdictions, develop the professional workforce, and fulfill the EPHF. Moreover, they seek to increase customer-centered service models and encourage greater commitment in all jurisdictions to improve recruitment and retain health providers, striving to ensure stability and a healthy work environment. These, in turn, represent challenges.

The human resources plan also considers the collaborative approach to be important for the working groups. This is shown by the emphasis on the intersectoral approach, comprehensiveness, definition of roles and responsibilities, and other elements for the development of human resources.

In Canada the core competencies of the PHWF have been defined as follows:

"Knowledge, skills, and abilities demonstrated by members of the organization and the system, which are critical for effective and efficient operation of an organization or system" (Council on Linkages).

These definitions of core competencies in public health have been useful because they imply the importance of relationships or partnerships in the specific disciplines within public health. They reflect common knowledge and the skills and abilities of all professionals who work in this field. It is emphasized that these competencies are separate from the programs. Therefore, they can reflect the public health approach to health subjects, and be described by the depth of their contents, the close relationship with organizational processes, direct relationship with the target population (customers, organization or community), and refer exclusively to public health, including general as well as specific aspects.

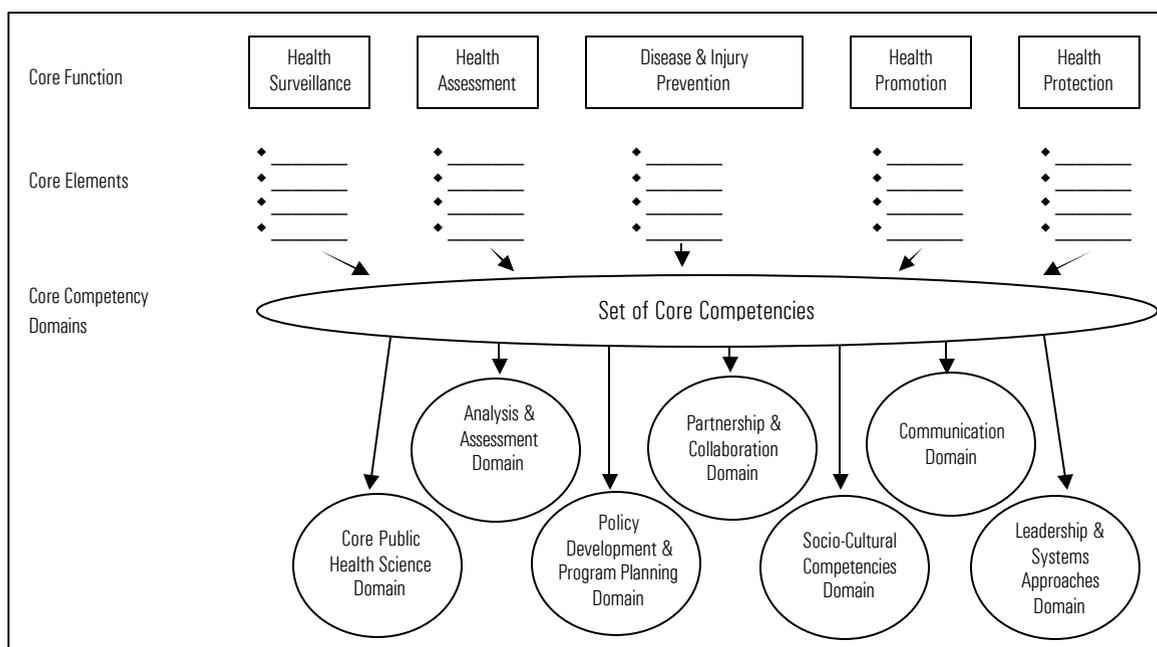
Furthermore, it is clear that the development of *core competencies* contributes to areas such as helping detect needs and defining personnel training, developing curricula, defining incentives and tools to be included in practice as well as the principles that guide their development. This is illustrated by the following example.

Essential function: health promotion

Essential element: allow persons to increase control and improve their health.

Competence: The public health professional is able to support the government and the community partners in their efforts to improve the quality of life of the community.

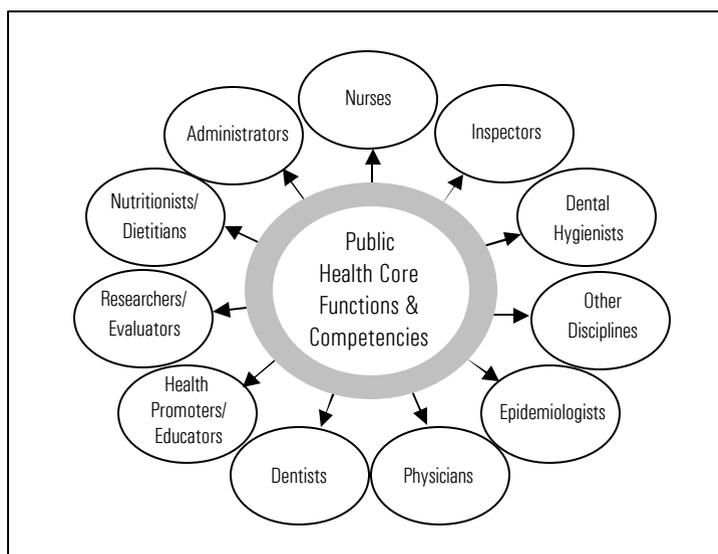
The participatory process in the definition of the *core competencies* is based on identification of the essential public health functions: health surveillance, health assessment, disease and injury prevention, health promotion and health protection. These are divided into the main components (breakdown of every function) which, in turn, lead to the seven *domains* that are the essential aspects of the core competencies: public health sciences, health analysis and assessment, policy development and program planning, partnership and collaboration, socio-cultural competencies, communication, and leadership and systems approaches. The following diagram illustrates the process.



In Canada, the categories of professionals included in the field of public health are primarily nurses, health inspectors, dental hygienists, epidemiologists, physicians, dentists, health promoters, researchers and evaluators, nutritionists, dietitians and administrators, as shown in the following diagram.

Finally, it has been recognized and emphasized that the development of the public health workforce implies defining public policies and strategies, especially identifying the set of core competencies in order to facilitate consolidation of the capacities needed to have an effect on improved performance of the PHWF and fulfillment of the EPHF, while also promoting achievement of the MDGs.

PUBLIC HEALTH DISCIPLINES : WHO IS A PUBLIC HEALTH PROFESSIONAL ?



6.2.3. Costa Rica

The School of Public Health is actively contributing to the development of public human health resources through the planning, organization and implementation of in-service training for primary care workers and professionals throughout the national health system. Three major courses are offered based on educational materials designed as set of modules in the fields of local health management and comprehensive health care. These courses are designed by academics based on the definition of pertinent work competencies for these fields of work. Professionals, department heads, as well as the educators who offer the training participate in this process. These education projects continue to be successful because of their relevance to the development of the capacities required at the primary level of the health care model. The experience has been in existence for over eight years. It is conducted with the sponsorship of, and in coordination with, the Center of Strategic Development and Information on Health and Social Security (CENDEISS) of the Social Security Administration of Costa Rica.

Another experience is the current process of curriculum review in the graduate Public Health Program, which has been conducted based on the definition of special core competencies for the general program. In this experience competencies such as "know how to do," "know how to be," and "know how to feel", for professionals specializing in public health, are conceptualized as knowledge. From the academic point of view, this has been a

participatory process of professors, students, and public health professionals. Five core competencies have been identified that include values and attitudes as cross-cutting themes for the entire educational curriculum. There are eight specific competencies that reflect the capacities to be developed to consolidate knowledge and practices in public health. This academic work approach has been a very enriching experience for educators. It is complex for the teaching administration since it entails pedagogical and methodological changes in teaching practices and teaching-learning processes, and also because of its comprehensive nature and the inclusion of interdisciplinary approaches required by the role of the competencies in curriculum design.

6.2.4. Cuba

In this country experience has demonstrated that definition of public health competencies serves as a basis for development of the PHWF. This is the main theme of undergraduate and graduate education. The aim is for human resources to be able to contend with and establish solutions for the needs of workers. This has led to good performance of the EPHF in light of the significant changes experienced, and inclusion of new strategies in the field of health for the 21st century. Other approaches are also used in personnel development, focusing on transforming knowledge into action through work-study. Once again, it is pointed out that the primary experience is that all Cuban public health curriculums are based on the premise that what is learned should be relevant, and that the people and working teams should have the capacity to apply the knowledge to reality, and advance towards excellence in medicine. It is reiterated that the political will of the government is needed to reach the MDG and not just the fulfillment of the capacities of the PHWF.

There is extensive agreement on the advantages of the approaches used by Canada, Costa Rica and Cuba. However, there is emphasis on the domains to be considered in defining the competencies that support development of cultural capacities, particularly as regards gender, ethnicity, and generational issues, since these are elements that have contributed to discrimination and inequities in public health care. Therefore, the PHWF must be highly sensitive and knowledgeable in order to deal with and intervene in the unjust and unnecessary inequalities in society and health from an equitable perspective.

In light of the demand for the new capacities required for satisfactory performance of the EPHF, and to apply these to the achievement of the MDGs, other elements are also emphasized in the definition of the competencies (i.e., development of the political capabilities of the PHWF, as now there is greater involvement and relationship between personnel and the new actors; recognition of public health as an intersectoral and international field, which implies development of social mobilization capacities in order to promote better living conditions and health rights; and public-private mediation in public health actions).

The academic world should reflect on the field of public health and on the new pedagogical and methodological orientations associated with the new approaches to public health, organization of the educational curriculum, and relevant in-depth training that focuses on development of current and future capabilities of public health professionals. There is also a need to establish and consolidate relationships among academia and between academia and services, and to bring academia closer to the population by establishing links among them and developing their networking capacity so that they can contribute to policy-making, as well as other aspects.

Finally, the role of the Canadian government in facing the serious health care problems of previous years is recognized as positive. Its capacity to respond with participation by members of civil society is also a lesson to be learned with regard to the building, preparation, and implementation of actions with democratic participation. It is noteworthy that many of our countries have lost this capacity and that the role of government has been reduced.

7. ELEMENTS FOR PREPARATION OF A JOINT WORK AGENDA FOR PUBLIC HEALTH ASSOCIATIONS, SCHOOLS OF PUBLIC HEALTH, AND MINISTRIES OF HEALTH

In an effort to implement a joint work agenda shared by the public health associations, schools of public health, and the ministries of health, with the support of the governments and participation by multilateral agencies, the main elements proposed with regard to potential collaboration in improvement of the PHWF are stated below. This fulfills the guideline to promote achievement of the MDGs in the field of health.

7.1. SELECTED NATIONAL PERSPECTIVES

7.1.1. Jamaica

An important premise is the need to work hard so that developed countries support improvement of the public health situation in the Caribbean. To this end, development of public health surveillance in the health systems is considered to be important.

Since 1995 work has been conducted in this country based on the core competencies approach in curricula and health careers. However, there are many limitations to optimal development of this approach. Training as well as improved definitions of the key core competencies are needed for development of the PHWF. Better health education equipment is required, since modern technology is not available, and the traditional forms of work are no longer feasible.

The potential of joint work and relationships between public health associations and schools of public health has been emphasized.

7.1.2. United States

The university schools state that they fulfill the three academic pillars (research, education and support), but their agendas are not established with the aim of serving the health of the population. Therefore, it is difficult for them to communicate and address their actions to the people in whom health needs have been identified. They also have limited resources, particularly in the public sector, although there are prospects for change.

In general, teaching includes programs on international health and population leadership. At the University of Washington, for example, these programs are in the Department of Global Health, where intermediate-level professionals study for one to two years. There are also programs that encourage students to work with disadvantaged populations (rural and migrant, with drug addiction problems, and indigent populations). This promotes sensitivity toward social issues and a culture of comradeship. This is important in terms of priorities, since there is a need to develop skills such as these, as well as other skills acquired with community work (e.g., educating the population, organizing actions, directing meetings, and identifying resources). This also encourages increased leadership in the communities

and has a positive influence on politicians. In the programs and curriculum, learning is centered on problem solving. This is also part of the policies and evaluation.

As regards research, faculty members are expected not only to research, but to conduct operational and relevant research. They must write about emerging gaps and social problems associated with health, and be concerned about ethics. Furthermore, they must develop the skills needed to draft letters to the editor, prepare popular health literature which provides good foundations for health promotion, focusing not only on research but also on practice, as well as the other aspects mentioned above. Promotions have expanded to consider Faculty efforts that go beyond reaching the communities.

Networking between universities should be promoted. This encourages increased advocacy on public health, considering its low visibility, promoting morale, and supporting political initiatives. It is considered to be crucial that public health associations pressure the universities to respond effectively.

7.1.3. Chile

There are studies and research on the number of physicians and hours per week of medical work (in Chile, especially in 1995, 1999 and 2003), as well as on the need for and availability of PHC physicians.

In the current context, the number of medical personnel and their distribution is an important problem, as most of them work in the private sector. These professionals usually practice in the public PHC services for about two years in order to acquire experience, after which they leave to set up private practices

The question of why planning should be conducted needs to be posed. Should the market be responsible for the distribution of human resources?

A partnership has been established between the national Ministry of Health and academic associations of public health, with PAHO/WHO and civic organizations. Mobilization of professionals from universities to the ministries is a good strategy for updating and providing feedback on joint action.

It is emphasized that there is a great potential for collaboration between the schools of public health and public health associations in the improvement of the PHWF to promote and reach the MDGs.

7.2. PERSPECTIVE OF THE INTERNATIONAL ORGANIZATIONS

7.2.1. World Federation of Public Health Associations (WFPHA)

In the considerations on creating and innovating in order to build a joint agenda—shared by actors with joint responsibility for generating better health with well- developed PHWF capacities and contributing to fulfillment of the MDGs—the position of the scientific associations is noteworthy. Unity of thought and action between schools, governments, and scientific and union associations, including NGOs, is essential.

Many countries have public health associations, which is an asset. The current Presidency of the WFPHA would like to create a network of associations. This subject was considered in Mazatlan in 2004. Presently Costa Rica is the WFPHA representative in the Region. In Brighton and Geneva (2004), declarations referring to the strategic importance of the PHWF, and human health resources in general, were approved, and the achievement of the MDGs was promoted.

There is a need to reflect on how joint collaboration by universities, societies and ministries can be achieved with the support of PAHO. A possible strategy for joint work is that which has already been announced by the Joint Learning Initiative, referred to as "Human Resources for Health: Overcoming the Crisis." A book, book summaries, and a Web site will also be prepared.

On the other hand, the 11th Congress of the World Federation of Public Health Associations to be held in Rio de Janeiro, Brazil in August 2006 after the 8th Brazilian Congress on Collective Health will be an appropriate time for follow-up on the work undertaken. Finally, the action by WHO (Geneva, April 2005), which approved a resolution against direct recruitment of public health professionals by northern countries, is considered to be important.

7.2.2. Latin American and Caribbean Association of Public Health Education (ALAESp)

Twenty-five years after its creation, ALAESp currently has a membership of 65 institutions in Latin America and the Caribbean. Its bylaws were redrawn in 2003, and the official joint working relationship it has had with PAHO since 1985 was renewed for another four years in July 2005 at the Executive Council meeting in Buenos Aires. In light of the strength and the potential of this organization, the challenge of forging partnerships between the most developed schools of public health, and other national and international institutions with geographical and cultural affinities, is pointed out. The ALAESp Assembly and Conference will also be held in August 2006, before the 11th WFPHA Congress.

This organization has made a serious participatory effort to work in development of the PHWF. To this end, associations have joined with educational institutions, even though there are few resources for this work, since it entails expenditures and financing that are often not available. A large variety of graduate-level programs have advanced significantly in this area.

Another worthwhile strategy is the initiative by Lancet, which agreed to create a health research forum, the "Action Learning Network," with emphasis on developing countries. A meeting will be held in November to coordinate efforts for development of human resources.

7.2.3. Pan American Health Organization (PAHO/WHO)

From the standpoint of the Organization, which was founded in 1902 prior to WHO (1948), the MDGs are extremely important to its guidelines of cooperation in the Region of the Americas because of the continued existence of social exclusion in health and in the environment.

Among other things, current imbalances such as those observed when comparing the human resources capacity of countries such as Haiti, the Dominican Republic, Paraguay and Nicaragua with those of Cuba, must be resolved.

Some strategies developed by PAHO in conjunction with other actors are important, such as the issue of virtual training as a modern training method that replaces or complements traditional forms of learning. In this regard, the example of a hospital in El Salvador that provides hospital management training, with a participatory tutorial approach that uses technological resources, was mentioned. Similar activities have been introduced in Mexico that focus on the production of virtual network courses.

There is a need to reflect on the aspects of human resources management in which distribution and retention of the PHWF as well as motivation continue to be important problems. Furthermore, there is a need to consider greater linkage between education and practice of public health. In this line of work, the regional platform for development of the PHWF is noteworthy. Another strategy that is especially successful is the Training Program in International Health, which has been conducted by PAHO for 20 years. The design of this program is currently being reviewed in order to strengthen it.

The need to achieve productive participation at the Human Resources Observatories Meeting to be held in Toronto, Canada in October 2005, and the opportunities that this offers, are emphasized.

The critical challenges to be faced by the Decade of Human Resources in Health are highlighted. For example, the case of Africa and the crisis it faces with HIV/AIDS and other acute communicable diseases, migration of its professionals and other skilled personnel, the low level of investment in health, with practically no investment in human resources and the fragility of its economic and health systems.

In short, there is a need to construct an agenda for the development of human health resources, with the participation of all actors involved.

8. ELEMENTS FOR PREPARATION OF A REGIONAL STRATEGIC ACTION PLAN FOR THE DECADE OF HUMAN RESOURCES

It has been agreed that the plan should include key aspects that support PHWF planning (e.g., quantitative and qualitative elements of the PHWF, definition of core competencies; aspects related to public health education such as curriculum and school leadership; aspects related to management and administration, particularly as regards recruitment and retention of the PHWF).

The three most important technical guidelines agreed on to provide the basis for the plan are in three areas: the political perspective; methodology and instruments used to describe the workforce; and definition of competencies.

8.1. POLITICAL PERSPECTIVE

As regards this subject, some of the approaches proposed to establish the frame of reference for what a political action plan should be were discussed. It is agreed that it should be stated in a declaration on education and development of the PHWF. This declaration should reflect the feeling, commitment and political directives of public health associations and schools of public health.

Some of the elements considered in this statement include the situation and crisis as regards human resources and the crisis, as well as the concept of public health in the Region. Although it is not limited to these elements, they are fundamental aspects of the health systems in order to produce greater social welfare and promote the MDGs. Furthermore, the role of public health and professional competencies in social and sanitary development was mentioned. Emphasis was placed on the optimum properties and qualities of the workforce and of public health academia, who have a central responsibility in the development of the PHWF; on monitoring acquisition of appropriate technology to guarantee public health with quality and equity; and public health within the framework of human rights and the right to health as substantive elements of the national constitutions and ethics in social development of health.

In addition, the need to create a social movement for public health in the Region, to monitor and assess this sector, to guarantee the sustainability of its financing, principles, and practices, must be stated categorically. Finally, permanent budgets must be guaranteed in order to fulfill the mission of this Declaration.

8.2. TECHNICAL ELEMENTS OF THE ACTION PLAN

The challenges pointed out and identified for development of the PHWF imply the urgent need to begin defining some technical elements, in order to introduce or continue to act with assertiveness in this task.

8.2.1. Public health functions

This Consultation identifies the 11 Essential Public Health Functions proposed by PAHO and agrees on these functions. Nevertheless, other functions are added as essential functions in order to expand their spectrum, particularly as regards the political aspect of health work and the response to the MDGs.

8.2.2. Definition of core competencies of the public health workforce

Although all characteristics of the domains and competencies have not been defined, substantive elements are identified and proposed in order to emphasize a new concept of public health. Based on this starting point, development of workforce capacities must be promoted, as described below.

Ideological elements

The gender issue is considered to be transversal to all competencies, including cultural competencies and social determinants of health that imply providing health for vulnerable groups and maintaining an ongoing commitment to the right to health. This public health paradigm, in conjunction with health promotion, is considered to be essential for work.

Technical elements

These refer to development of communication skills for management of resources, and how these should be related in order to obtain greater benefit; conduct quantitative and qualitative research; recognize elements of discrimination and exclusion; innovation for change and conflict resolution; interdisciplinary teamwork; knowledge of alternative medicine and lay and secular health care; respect for diversity (sexual orientation, and types of health care); identify and interact with special groups; acquire skills in interpersonal relations; understand that local reality is influenced by the global community; training on local health situation analysis, and on showing health leadership; and finally, design, implementation, and evaluation of plans, policies and projects.

Political elements

These refer to the capacity to negotiate between the public and private spheres; recognize inequalities and inequities and proposals for intervention strategies; develop international cooperation related to health; management of the health regulatory framework and to pursue infractions and violations; implement the intersectoral political approach and establish strategic partnerships and networks; facilitate construction of health citizenship with a gender approach and respect for intercultural diversity.

8.3. METHODOLOGIES AND INSTRUMENTS

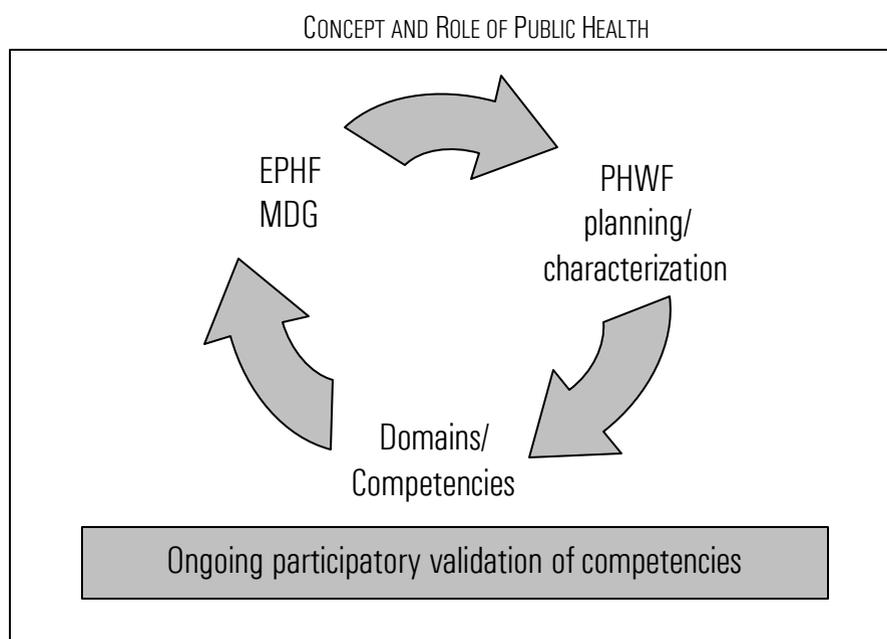
In this stage of the construction of methodologies and the definition of instruments, a critical path has been proposed in order to guide the steps to be followed. Specifically, it is based on the concept and role of public health in each social context; secondly, the inclusion of Essential Public Health Functions and other specific aspects. The next step is description of the PHWF and achievement of an approach to PHWF planning. These steps lead to competencies that are defined according to the specific occupational profiles of the countries and should be used to monitor progress of EPHF performance. In this step, the procedure used by the Public Health Agency of Canada is recognized, with identification of central elements derived from the functions in order to specify a set of domains that facilitate definition of the competencies.

8. ELEMENTS FOR PREPARATION OF A REGIONAL STRATEGIC ACTION PLAN FOR THE DECADE OF HUMAN RESOURCES

In the methodological approach to the description of the PHWF, first of all, the number and location must be considered. There is also a need to prepare the nomenclature used to classify personnel included in the PHWF, and then basically identify the gaps in distribution of personnel and their competencies. It is also important that this description analyze the academic offer in public health. This task should be performed at a government level.

Furthermore, it is necessary to consider an ongoing validation process in order to monitor the relevance of competencies. This implies participation by the actors involved, such as schools, community, professional and union associations, as well as the levels of government involved in public health. Some categories suggested for validation are implicit in the questions. What training is received by the PHWF? How do workers feel with regard to the competencies and their performance? Finally, how are the needs for training as stated by the PHWF, taken into account?

The following diagram illustrates the circular and spiral movement required in order to renew construction of the core competencies of the PHWF.



Finally, it should be pointed out that some of the ideas and strategies to provide contents to this Regional Strategic Action Plan for the Decade of Human Resources in Health are considered within the framework of the MDGs as a strategic pact for development and social justice in favor of the health of populations.

9. FINAL CONSIDERATIONS

9.1. PUBLIC HEALTH AND PUBLIC HEALTH WORKFORCE

The analyses and reflections with regard to the achievement of the MDGs, and the implications of this in terms of development and promotion of public health, clearly lead to critical challenges to be faced and overcome. Therefore, these considerations pose some specific questions, some of which are conceptual and others operational, in order to improve and promote the development of the PHWF.

Some of the questions that have led to these considerations in support of the important social policy of the MDGs and the health policy in different countries were as follows: What are the implications of the MDGs for the development of the PHWF?, what capacities should be developed in the PHWF?, how?, for whom?, for what purpose?

It has been pointed out that the countries of the Region have different social and health situations, which entail different possible strategies and actions in order to offer a social response to the challenges posed by the MDGs. Nevertheless, in all cases the situation of social exclusion, inequity, growing health inequality and, therefore, growing social inequality that requires joint action by the social actors involved, is recognized.

The proposal of the MDGs is considered to be an important opportunity to act in harmony and with commitment. That is precisely the challenge faced by the governments: to promote commitment to better and more equitable social development and to include public health as an essential element in this development. Nevertheless, it is evident that targeting is favored over a universal approach to social policies, to the detriment of equity.

The MDGs have become a good point of reference for developing the new capacities of the PHWF, especially because they call for action and consider gender equity to be one of the most crucial elements for the achievement of these goals. The countries have conducted diagnoses of the social and health situation in order to act with effectiveness and equity in health, based on the PHC strategy, which currently has a redeveloped and renewed scope after 25 years of experience in its implementation. Therefore it is noteworthy that the MDGs do not include the Declaration of Alma-Ata, since it has not been replaced and it promotes this renewed effort and commitment.

On the other hand, the situations that determine the different problems and the challenges that must be considered to create positive conditions for the development of the capacities required of the PHWF are stated clearly. The statement of critical topics that need to be addressed so that new capacities can be renewed and developed in the health services and institutions also leads to, and facilitates, new actions and guidelines on the increased quality of the PHWF.

The individual capacities to be developed in the PHWF are a factor in which the training schools should take advantage to define new competencies. These should include the capacity for ongoing and continuing learning that favors situational and structural analysis of the field of public health; greater political skills for public health advocacy and public policy-making; emphasis on inclusion of social determinants of health, particularly the gender, intercultural, ethnic group and generational approaches to health situation analyses rather than relying exclusively on the biological approach.

Furthermore, the following should be considered: promotion of health research capacities—as an aspect of daily work and not only as an academic activity—with emphasis in the problems of inequality, the ability to establish relations with the community and its social and health problems;

the use of interdisciplinary concepts to explain health problems, as well as teamwork and integral interventions; and the capacity to encourage and monitor regulation of public health practices.

Since it is considered to be an integral part of the consolidation of the PHWF, the need for educational institutions, as well as those in the health sector, to develop institutional capabilities is emphasized. In the latter, the quality of the principles, the practices of the public health care model, the trend toward fragmentation of the health systems, the biological and technocratic approaches, as well as the emphasis on management that guides the care models—without underestimating this function, but questioning the central role it has played to the detriment of the health objectives and goals—should be taken into account. Another strategic aspect is the integration of research in services and conducting health situation analyses by population group, identifying social and health gaps, and designing strategies in light of health inequality. This entails an in-depth reflection on targeting and the universal approach to health care policies and practices, which should guide health actions with equity.

The struggle for a system of social health protection, guaranteed insurance for the population and the right to health are other key elements that, along with those considered previously, should lay the groundwork for the design of training programs by the services in order to strengthen continuing education as a right of the PHWF that ensures satisfactory and appropriate performance.

In summary, the Consultation considers that one of the problems in Latin America is the poor distribution of its human resources, along with the problems of traditional education, the fact that national insurance is still based on a medical model, and the training of human health resources has been adapted to this model.

Therefore, a new list of competencies is needed and should be included in the human health resources education processes to develop new actions such as leadership, communication, participation, and social commitment, to collaborate in a leading role in the fulfillment of the MDGs. It must also be added that development of human resources with the capacity to face the MDGs requires consideration of structural, functional, ideological and practical elements in the field of public health and in its actions, by health organizations and institutions as well as training institutions, especially the schools of public health. This currently requires redefining the concept of public health in more dynamic and active terms.

There is extensive agreement that the integrity and transparency of the concepts used in the approach to public health is the determining factor that guides the PHWF. Equity and social justice must be the main reference point and orientation of public health, as collective action that applies basic functions addressed to promotion of health, social protection of health, and disease prevention. Similarly, the political issue of health is activated by increasing communication with other sectors.

9.2. EDUCATIONAL INSTITUTIONS AND CORE COMPETENCIES OF THE PUBLIC HEALTH WORKFORCE

As regards the educational institutions, the urgent review of academic supply that include a set of core competencies, promote leadership and include action-oriented research as the main focus of education, has led to the conclusion that among the competencies of public health professionals should be included the ability to convince politicians of the factors that affect the health of the population. This also implies that human resources should be capable of exercising leverage, promoting mobilization of technical personnel, as well as planning appropriate interventions with contents related to national and international solidarity, as needed.

Competencies should be defined in accordance with the technical and cultural differences of the countries. In this regard, the working groups at the Consultation contributed a series of elements

to be considered as competencies that the PHWF should possess. A consensus is needed in order to determine how the public health workforce is formed and whom it comprises. It is usually a human component that is poorly defined in Latin America. Furthermore, occupational profiles that respond to the reality of public health work and facilitate description of the PHWF are needed. Moreover, there is also a need to analyze the characteristics of current public health education and include popular aspects of health and policy elements in order to mobilize interests in favor of population-based health. To this end, processes of adjustment or changes in the curriculum and careers are required. This entails adjustments and new methodological and pedagogical approaches. Educators are an inherent part of these processes of change. This human factor is a key determinant in training.

In general, this workshop does not develop a final concept of the PHWF. Rather, different notions are described, and it remains implicit that the workforce consists of all health workers who participate in direct care and management of public health programs and services at all levels of care. However, there is a need to reconsider and identify the categories of personnel that perform EPHF from the intersectoral field of health.

9.3. TRAINING INSTITUTIONS AND THE CHALLENGES IN FULFILLING THE MILLENNIUM DEVELOPMENT GOALS

The schools of public health, in particular, will have to review their current position and academic orientation toward promotion and achievement of the MDGs. This is particularly the case in the health sciences, which continues to use “old” paradigms that promote eminently curative models. The educational objectives do not take into account a thematic approach to public health. This often occurs in countries that have already controlled or eradicated a specific public health problem (e.g., malaria, tuberculosis). Similarly, there is a tendency to overlook emerging problems in the field of public health, such as drug addiction and violence, as well as issues that affect certain population groups with greater social vulnerability, such as migrants, ethnic groups, and others. In addition, there is still weakness in regard to decreasing biological approaches to human resources education that are clearly detrimental to the approach that favors health promotion.

This is based on some preliminary reflections about the context and frame of reference for this problem. In this regard, the trends and orientations in the health education sector of the countries are noteworthy. For schools and universities the challenges proposed are equally important. In some cases, the description provided by academia is far removed from the reality of public health, and overlooks the specific characteristics and contextual threats. It is vital that academia provide a description of formal workers who enter public health education, and that the academic supply be relevant and available for priority groups (e.g., politicians, management of health institutions) so that the schools can systematically proceed to review the design of their curriculum and programs, particularly as regards the orientation toward reducing discrimination associated with ethnic groups, generation, or gender, as well as development of new information technologies and knowledge, and appropriate pedagogical techniques and methodologies for public health education.

Human resources education entails a change in the model that favors autonomy, since this also implies recognition of further duties and rights. All of the above summarizes the challenges faced by the schools and the demands that they focus on inter-institutional, intersectoral, and interdisciplinary approaches. Moreover, there is a need for a closer relationship between action and practice in the field of public health and in educational activity in this field.

As regards the description of the PHWF, the development of competencies for human health resources, and the possible contributions by public health associations and universities, there are several conclusions. There is agreement that it should be based on a broad as well as specific concept of the scope of public health, with progress towards the EPHF and the definition of the domains of the competencies, in order to promote the description of the PHWF taking into account

the current academic supply in this field and, finally, supporting PHWF planning processes leading to good health and the achievement of the MDGs.

Participatory, action-oriented research should be included as a key training strategy in order to encourage good practices, and the teaching-learning process should become the linchpin of sociocultural analysis of the health situation and the gender perspective. Moreover, the EPHF should emphatically include critical aspects such as the inequalities that cause inequity, the persistent problem of smoking and associated interests, as well as the difficulties inherent to economic globalization.

9.4. PUBLIC POLICY ON HUMAN RESOURCES AND CHALLENGES FOR DEVELOPMENT OF THE PUBLIC HEALTH WORKFORCE

The need to describe and define the actions that strengthen the PHWF is essential: distribution (how many? where? what do they do?), establishment of inter-institutional policies for training, employment status, assessment, and demand for incentives.

It is precisely the sectoral approach that highlights several elements to be considered in human resources education. The analysis focuses on intersectoral relations that contribute new elements to health practices, and are the key to providing activities and achieving the objectives of health promotion, disease prevention, medical care, and rehabilitation, in order to promote fulfillment of the MDGs. Therefore, an important question arises: Is this a human resources problem from the sectoral perspective?

Some intersectoral implications have been pointed out, particularly protection of people with regard to health care and exclusion of people from health services. These are two sides of the same problem: the MDGs do not comprehensively address the problem of exclusion of population groups from the health systems. Therefore, further management and research by academia, as well as evidence of these problems, are needed.

The intersectoral approach to development of public health also requires common objectives that contribute to construction of health and support human resources education based on interdisciplinary, collective approaches. The global trend in practice tends to favor individualistic models, with limited participation by people in resolution of their health problems.

Undertaking an in-depth analysis of the MDGs is an essential requirement, since they do not address aspects such as the need for health services, or limited growth of the infrastructure in order to provide for the health of people, families, and communities. Another influential aspect in this consideration is the approach to human resources education, which in most countries currently continues to be very limited and reductionist. This is an approach that is far from the health problems of the population, and from new problems that ravage the population as a result of social decisions that contribute to the prevalence and incidence of conditions such as HIV, suicide, drug addiction, with different specific manifestations in each country. Moreover, emerging diseases such as tuberculosis, malaria, and maternal mortality are problems that are mostly associated with the poverty in which the inhabitants in poor countries live, and not so much with the performance of the public health workforce.

In addition to these reflections, it is concluded that, while we analyze the frame of reference and context, as well as other integral aspects in order to improve human resources education, the agencies that finance and manage the policies establish vertical programs that lack focus and fail to grant priority to human resources and the reality of services in contending with health problems. Furthermore, another key consideration in the field of public health is the urgent need for countries to clarify and improve national definitions of the scope, practices, and opportunities of public health

on the institutional, local and national levels. A nonlinear conception of this situation would encourage more creative actions, with greater imagination and innovation, in this field.

Public health research conducted in different countries should translate into new ideas, practices, and synergies. It should encourage the measurement of inequalities in order to reach the MDGs as well as define different levels of intervention, leading from a general perspective to the design of public health care policies with real possibilities of granting priority to the most vulnerable populations. This capacity of the public health system should serve as a guide for the levels of human resources education. Research in this field is another challenge that has been identified in order to provide education that is appropriate and necessary for active, committed human resources, with technical capacities according to their work competencies. This also implies creation of taxonomies and lists of job descriptions and categories for the PHWF.

Empowerment of communities in public health in order to encourage their participation in social change processes, and greater intervention by NGOs, would facilitate opportunities to increase social participation and build citizenship, while also committing the population to the improvement of their own health and to the support of overall social improvement. That political component is the determining factor, which also plays a central role in the orientation of human resources training and education. The workers are people with a high level of specialization in health work; however, they must also have political vision and be community activists in order to mobilize common health interests with subsequent improvements in social development. This political level should be a goal to be reached. New competencies should also be identified in these technical and political fields, so that they become fundamental in the development of capacities based on the population health needs and social group's differences as experience in their local reality.

The establishment of links and relations that promote public health work in the countries and the sharing of experience in human resources planning and monitoring through a collaborative process involving associations, universities, and ministries of health, with international cooperation, is highly strategic

In synthesis, the following questions provide the contents of these reflections: What is the orientation and direction in the building of the new public health? What role do the health needs of the population play in education and delivery of services? What is considered a priority in the delivery of public health services? In other words, the countries will have to define their own specific values and principles for operation of public health.

DECLARATION ON THE URGENT NEED TO STRENGTHEN THE PUBLIC HEALTH WORKFORCE TO SUPPORT THE ESSENTIAL PUBLIC HEALTH FUNCTIONS AND THE MILLENNIUM DEVELOPMENT GOALS

San José, Costa Rica
19 August 2005

As a result of the meeting called by PAHO, CPHA, WFPHA, and the support of ALAESP and ACOSAP, representatives from ministries of health, public health schools, and public health societies and associations in Brazil, Canada, Cuba, Costa Rica, Jamaica, Chile, United States, and Mexico met in San José, Costa Rica (16-19 August 2005) and decided to join efforts in Public Health Workforce Education and Development, as an essential element for the achievement of the Millennium Development Goals in the Region of the Americas.

This Declaration originated in the preliminary meetings held in Brighton, England (April 2004), Geneva (May 2004) and Mazatlán, Mexico (November 2004), co-sponsored by WFPHA and PAHO, as well as in the Global Conference on Health Promotion held in Bangkok, Thailand (August 2005).

WHEREAS:

1. In recent years, new challenges have arisen in public health related to globalization, the threat of war and terrorism, growing inequality in access to health services, gradual environmental degradation, the double burden of communicable and noncommunicable diseases, and the complex interaction between the determinants of health.
2. At the same time, the Public Health Workforce (PHWF) has faced new difficulties in recruitment, education, retention, and distribution of human resources due to health services restructuring; inadequate investment in health prevention, promotion and protection; lack of evaluation of public health personnel, and increased migration of personnel to other countries.
3. In order to fulfill the Millennium Development Goals (MDG), the PHWF must be well-trained not only in medical and scientific matters, but also in understanding economic and political factors.
4. The scope of the MDGs also depends on satisfactory coordination between the entities responsible for training, use, and retention of human health resources.
5. There is a need to renew primary care strategies in light of new realities, placing special emphasis on socialized medicine without detracting from the importance of technical factors.
6. The link between public health and health care is considered to be an essential aspect of health systems that seek to produce social welfare.
7. The PHWF in the Region of the Americas does not currently have the capacity to face these new challenges as they are also providing for a growing demand for traditional services at this time.

THEREFORE, it is agreed:

1. To work together with ministries of health, schools of public health, and public health associations in the Region of the Americas to strengthen the PHWF, in support of the MDGs.
2. To advocate at all levels the need to pay more attention to strengthening the PHWF.
3. To identify and define the PHWF in our countries more precisely, in qualitative as well as quantitative terms.
4. To develop the key professional competences of the PHWF, and link them to their essential functions.
5. To be informed of and assess new health technologies, their distribution and effectiveness.
6. To establish mechanisms to monitor PHWF development.
7. To share national experiences and plans on these issues on the regional level.
8. To socialize these agreements in the respective academic, governmental, and associative entities.

All of the above is based on the following principles:

- I. Health is a fundamental human right.
- II. Governmental intervention in providing health services should be a permanent and perfectible responsibility.
- III. Health care should be universal.
- IV. Health services should be provided with equity, solidarity, and social justice.

