

CHALLENGES OF PUBLIC HEALTH FOR THE 21ST CENTURY

PRELIMINARY ANALYSIS -- DRAFT FOR DISCUSSION

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Introduction

The preliminary analysis of challenges for public health was prepared at the request of the members of the Working Group on PAHO (Pan American Health Organization)¹ in the 21st Century that met February 26-27 in Roseau, Dominica. The present document includes the revisions by the members of the Working Group suggested during their second meeting in Washington D.C, March 23.

The challenges for public health in the next few years could be grouped in three major feats:

- Complete the unfinished agenda, embodied for many countries in the UN Millennium Development Goals (MDG).
- Sustain achievements of the last two decades (vaccine preventable diseases, life expectancy, improve quality of life of years gained): protect vulnerable countries and populations where disparities are greater, foster emergency preparedness to face natural disasters and outbreaks.
- Tackle the new agenda with a population based approach, improved foresight and collaborative strategies, focusing on developing appropriate skills and competencies.

Although a challenge is commonly understood as a specific hurdle or difficulty, it can also become a summons to engage in special efforts that will turn this defy into opportunities and accomplishments. In the particular case of public health, the challenges focus primarily on the population, emphasizes disease prevention and prevention for the whole community, public service ethics, and a set of interventions aimed at environment, human behavior and lifestyle, and medical care

The present document seeks to approach the challenges for public health in the Region of the Americas with a futures' perspective in the context of key drivers of change and trends that shape health, health care. The context of health in the region is highlighted taking into consideration the main trends and conditions affecting population groups. The last sections of the document address the "unfinished agenda", mainly illustrated by the United Nations Millennium Goals and later, the new agenda of challenges with brief suggestions for an emerging agenda for action. The last section includes a summary table listing the challenges of public health that emerge from the analysis and which include those mentioned by the members of the Working Group of PAHO in the 21st Century.

THINKING IN FUTURE TENSE

Transformations in some sectors and issues are so deep that it may not be effective or even possible to solve some current problems with the same type of thinking used when these were generated. Uncertainty, complexity and interdependence characterize current regional and global frames of reference. This context makes nations, governments and organizations, public and private more permeable to the effects of external factors, and if

¹ Resolution CD44R.14 of the 44th Directing Council of the Pan American Health Organization mandated the establishment of this working group with the purpose of examining the situation of PAHO in the 21st century.

unprepared, vulnerability to undesired and/or unexpected events will increase. Moreover, accurate understanding of the changing nature of issues or identifying new relevant issues may be hampered, therefore affecting the capacity to respond timely and appropriately. Therefore, successful navigation of the future to avert risks and harness opportunities under new rules depend on the capacity to anticipate, embrace change and adapt, calling for developing greater foresight capacity.

Thinking in the future tense with a keen awareness of the past and the present is germane to public health and medicine, when recognizing the considering the nature of the trends and the relevance of properly addressing the challenges of public health in the Region. Greater foresight allows harnessing the benefits of change and innovation. A forward view can produce useful insights to develop timely responses to challenges, since it enables greater awareness, reduces uncertainties, contributes to the identification of early warning signs and creates opportunities for action.

The Role of Futures and Scenarios

The field of futures studies is closely related to anticipatory disciplines, such as long-term planning, policy analysis and strategic management.² As the uncertainty and complexity has increased, governments, agencies and various organizations have increasingly used anticipatory methods and tools to explore multiple alternative futures, re-examine goals and priorities, support the renewal of strategies and motivate action through participation, thus drawing people together towards creating shared futures and goals.

Most futures work involves the creation of some kind of scenario. Scenarios are images of possible, plausible, desirable and undesirable futures. However, these images or stories of the future are not predictions; they are used as learning tools to change mental models and increase foresight. Creative and strategic thinking through scenarios adds organizational flexibility and support policy formulation. The process allows a collective approach to issues from multidimensional and transdisciplinary perspectives.

KEY DRIVERS AND TRENDS

Key drivers and trends are not good or bad in themselves, however they may exert different effects (positive (represent opportunities), negative (represent threats), or innocuous (no effect) on the issue of interest. Own situation, beliefs and positions define the interpretation of their effects as well as the responses.

Major key drivers of change or driving forces are defined as compelling forces that affect in fundamental ways all spheres of human activity, shaping human interactions (production,

² The roots of future studies and foresight are found in Europe and the United States, their conceptual and methodological evolution in the Region of the Americas is linked to the history of social and economic planning and management. Many countries have engaged in the visionary construction of futures in diverse sectors, and some are involved in processes of technology foresight linked to public policy formulation through initiatives supported by the Organization for Industrial Development (UNIDO). See Costa Filho, A. *Planificación y construcción de futuro*. Instituto Latinoamericano y del Caribe de Planificación Económica y Social (ILPES). Santiago de Chile: ILPES; 1988 and Yero, L. Los Estudios del Futuro en América Latina. En: Medina Vásquez, J. y Ortegón, E. Eds. *Prospectiva: Construcción Social del Futuro*. Universidad del Valle, Cali.1997.

trade, work consumption, communications, practices, beliefs, attitudes, social and political relations, ethical standards and cognitive modalities). Globalization, changes in the natural environment, and science and technology are generally considered driving forces of change. Conversely, trends are continuous patterned events that shape the future of issues or objects of interest, they may be more localized, and their effects may not be as broad or the transformations so deep as those caused by key drivers. For the purpose of this paper, trends have been grouped in terms of the determinants of health, due to the nature of their effects on health outcomes and health care processes.

Globalization

Globalization has been defined and described in a many ways, and it is difficult to disagree that it is a critical, complex and uncertain driver of economic, political, environmental social, cultural, technological and cognitive transformations, with long-term implications. Globalization has driven the increased flow and exchange of goods and services between nations, of capital through companies or individuals, of labor, and of information.³

Although asymmetric and incomplete, the transformations have contributed to intensify the integration of national and subregional economies through trade, finance and production in a global market place mediated by interactive communication and networks of producers, suppliers and customers. The acceleration of interconnectivity has created “common virtual spaces” through the exponential expansion of internet, while e-commerce is rapidly becoming a new way of trading, shopping and banking. At the same time, it has also intensified the international transfer of health risks through humans, animals and foodstuffs, and also increased concerns for national security.

As greater permeability of national borders decreases the distinction between national, regional and global health, but represent an opportunity for synergism in cooperation through partnerships.⁴

Possible implications of globalization for public health

- Transnationalization and modification of patterns of distribution of diseases, health risks, work, lifestyles, behaviors, beliefs, attitudes and symbols...
- Higher interest in addressing the gaps between individuals and groups with access to the benefits of development and those who have not.
- Increased attention to issues related to trade and regulation of medical devices, pharmaceuticals, and intellectual property rights.
- Greater awareness of opportunities opened by the increased flow of information and knowledge to create synergisms in cooperation through partnerships.
- Greater concerns for health governance and equity issues as national decision making

³ Romanov, Roy J., Q.C. Building on Values: The Future of Health Care in Canada. Final Report. November 2002. Commissioner. Commission on the Future of Health Care in Canada, pp. 233. <http://www.hc-sc.gc.ca/english/care/romanow/hcc0086.html>

⁴ Institute of Medicine. *America's Vital Interest in Global Health*, Washington, D.C.IOM, 1997.

is increasingly interdependent and often shaped by interests and decisions in the regional and global sphere.

Environmental Change and Quality of Natural Resources

Population shifts, technological change, environmentally disruptive technologies and socioeconomic transformations contribute to shape the environment and the quality and quantity of natural resources. Although many of the effects are difficult to quantify or predict accurately, progressive environmental degradation, loss of biodiversity and the contamination of vital resources adversely affect health and well being and can generate long term social and economic costs and perhaps irreparable damage to the ecosystem.

The incidence and prevalence of communicable diseases (e.g. dengue, malaria), occupational injuries and chronic diseases associated with chemical and physical agents reflect the health effects of poor environmental quality. Furthermore, changes in climatic patterns contribute to the air pollution and aeroallergen levels, to the appearance and distribution of food, water and vector borne diseases, risk of malnutrition, droughts and famine, water shortages, and increase the frequency or severity of natural disasters. The latter cause physical and human devastation, population displacements, injury, death, and social and economic losses, sometimes setting national development back several years.⁵

Possible implications of environmental change for public health

- Improved knowledge about the effects of pollution of essential resources on diarrheal, respiratory and vector borne diseases and of environmental and occupational exposures to biological and chemical pollutant to respiratory diseases, cancers, birth defects and neurological conditions.
- Disrupted ecosystems and loss of biodiversity effects on human and animal health, agricultural production, economic productivity and sustainability of food sources.
- Diminishing fresh water sources seriously jeopardize human health, and may also be create political and armed conflicts that threaten peace and democracy.
- Greater demand for better regulation and compliance, and for environmentally friendly technologies.

Science and Technology

Science and technology, including those advances applied to communication and information technology dramatically change our lives, and increasingly challenging the scientific basis of medical and public health practice. These transformations have contributed to the expansion of economies of speed replacing economies of scale, the customization of products and services, the maximization of real time processes, and the rapid obsolescence of product life cycles...

⁵ WHO. *Climate change and human health-risks and responses*. Summary. World Health Organization: Geneva. 2003. <http://www.who.int/globalchange/publications/cchhsummary/en/>

Innovations in biotechnology, nanotechnology⁶ and pharmacogenetics⁷ will revolutionize prevention, diagnosis and treatment. Health-oriented telecommunications, medical imaging, satellite technology and other information systems will radically transform healthcare through teleradiology, telemedicine and telehealth.⁸

The unbridled development of scientific and technological innovations generates concern and actions about ethics, security and confidentiality to the forefront of the global agenda. Some of the topics addressed relate to ethical issues of social deployment of genetic individual information, accessibility to the benefits of innovations, bioethical repercussions of cloning, transplantation and the use of genetics in health care. Emerging issues being addressed include cyberthreats, disruption of essential functions by physical damage caused by terrorism and natural catastrophes, invasion of systems, blackmail, industrial espionage and data theft.⁹

Possible implications of science and technology for public health

- Heightened awareness about the ethical dimensions of health and health care, such as health equity, access to care, financing and regulation, transplantation, confidentiality of medical information, as well as issues related to life and death.
- Appreciation for the opportunities to apply science and technology innovations to improve health and medicine, including the search for equity-oriented technologies to forecast and manage health, epidemiological surveillance in “real time,” telehealth in rural areas, and others.
- Applications to social development: networks to strengthen governance and accountability, channels and sites for retrieval and sharing, creation of knowledge as a shared renewable resource across borders.

The Determinants of Health: Trends Affecting Health Conditions

Changes in health status (either those that express reduction or improvement of adverse outcomes, increasing health gains and improvement of function) are the product of complex interactions of structural determinants (genetic endowment, the social and physical environment) as well as of process determinants (individual response through

⁶ Nanotechnology involves “research and technology development at the atomic, molecular or macromolecular levels, in the length scale of approximately 1-100 nanometer range, creating and using structures, devices and systems that have novel properties and functions because of their small and/or intermediate size, and the ability to control or manipulate on the atomic scale.” National Nanotechnology Initiative. *What is Nanotechnology*. <http://www.nano.gov/html/facts/whatIsNano.html>

⁷ Pharmacogenetics is the study of how genes affect the way people respond to medicines, including antidepressants, chemotherapy, drugs for asthma and heart disease, and many others, where outcomes will improve tailoring medicines to people’s genetic make-ups and thus improve safety and effectiveness. <http://www.nigms.nih.gov/pharmacogenetics/>

⁸ Daar, A.S. et al. Top ten biotechnologies for improving health in developing countries. *Nat Genet*. 2002 Oct; 32(2):229-32. Oct 2002. <http://www.utoronto.ca/jcb/pdf/toptennng.pdf>. Pang, T. The impact of genomics on global health. *Am J Public Health*. 2002; 92: 1077-1079. <http://www.ajph.org/cgi/content/full/92/7/1077>

⁹ New York Academy of Sciences. *The Goals of Medicine*. 1997 New York: The Hastings Center.

biological characteristics and behavior and health care). Although effecting structural determinants may be beyond the scope of action the health sector, actual opportunities exist to contribute to the modification of health outcomes through effecting process determinants.

Demographics and Social Trends

By mid 2003, the population of the Latin American and Caribbean Region had reached 540 million. The projections indicate that this number will increase to 690 million people by 2025 and 789 by 2050, with an estimated population change of 46% between 2003 and 2050.¹⁰

About 77.4% of the region's population lives in urban areas, a figure lower only to that of North America.¹¹ Rapid urbanization (internal and also due to external migration) can further strain urban spaces, and be particularly injurious for poor and low income dwellers. As services are stretched to accommodate new populations, services and housing are further reduced in quantity and quality. Poverty, environmental degradation and limited access to basic sanitation and to quality recreation areas, often coupled with limited skills adversely affect individuals' social and psychological well being. Unless communities are resilient and socially cohesive, the risks of injury and death are exacerbated.

Migration continues to be an important trend, and 20 million persons have emigrated from the countries of the Region, three quarters to the United States, with women outnumbering men in intraregional and extraregional migratory flows. Considering the importance of these trends, recent initiatives are focusing attention on the health dimensions of migration through a human rights framework, with a view to increase understanding about the plight of different types of migrants, the determinants of their movement and how governments and the international community can best address the inherent issues.¹²

With respect to education, the sector has been relatively protected from the deleterious effects of economic downturns since the late eighties. Governments have long recognized the value of education to sustain and achieve goals in other sectors, and have implemented appropriate measures to improve its quality. Primary education is virtually universal in the Region however; gaps are more noticeable in secondary education and for low income individuals where the attendance rate does not reach 35% as national average in any country in Latin America.

One important regional problem is school drop out; about 40% of children do not complete primary education and in 72% to 96% of poor families have heads of households with nine years of schooling or less. These facts have implications for health and the reduction of poverty, since getting out of poverty or avoiding becoming poor requires between 11 and

¹⁰ Population Reference Bureau. www.prb.org

¹¹ United Nations. *World Urbanization Prospects*. 2002. (2001 Revision)

¹² WHO. International Migration, Health and Human Rights. World Health Organization Geneva. 2002. http://www.who.int/hhr/activities/en/intl_migration_hhr.pdf

12 years of formal education in order to obtain work that would ensure sufficient income.¹³

The situation of women is highly relevant to the subject of discussion. Despite improvements in their social status, higher educational attainment and autonomy, the unequal distribution of power between the sexes continue to limit women's full participation in decision making at home, in the community and in society. For many women, the burden of work and family responsibilities contributes to perpetuate various forms of discrimination and violence, which in turn heightens vulnerability and hinders the full exercise of their rights.

Other social trends of relevance to public health are the growth of social movements and organizations linked to equity, health and human rights, many in the heart of international advocacy. This trend has been supported by other trends in social development thinking and action, and to the recognition of the value of enhancing endogenous variables for social development.

A central topic to the previous mention is the heightened relevance of social capital for development. Numerous efforts have centered on building the social capital of excluded groups and on community mechanisms for cooperative organization. These are built on the premise that as standards of social reciprocity are adopted and networks of interaction, support, and participation established, positive social indicators (school performance, general health conditions, social, economic and gender equity, gender and racial tolerance; and social freedoms) increase and negative ones are reduced.

Political

Democracy has galvanized in the region, and citizens assign greater value to democracy and to the respect of human rights. Political participation has increased in national and local governance instances, and the social dimensions of development have been recognized at the highest levels of government and global instances.

Although people in general value democratic institutions, the satisfaction with the way in which institutions exercise their authority and power, and on the performance of the governments has eroded. Social unrest, socioeconomic instability, insecurity can threaten democracy and effective governance. Inconsistencies or at least the perception of between electoral promises and actual performance are contributing factors. The latter may be affected by the potential diminished capacity of public institutions to formulate and enforce social and health policies, particularly distributive or regulatory policies that aim at improving equity and protect the public. Nonetheless, the governments of the Region are committed to efforts leading to improved performance, greater transparency and social responsibility.

The search for self-determination, the reempowerment of the population and communities, and effective citizen participation are still pending issues. In many cases, the transfer of

¹³ Hopenhayn, Martin. Educación, Comunicación y Cultura en la Sociedad de Información: Una perspectiva Latinoamericana. *Revista de la CEPAL*, No. 81, diciembre 2003, pp. 175-194.
<http://www.eclac.cl/publicaciones/SecretariaEjecutiva/6/LCG2216PE/lcg2216e-Hopenhayn.pdf>

decision-making from the national to the subnational levels has been incomplete or has not succeeded in adequately developing local institutional capacities. Similarly, the processes that foster autonomy in public administration have not always yielded greater efficiency and better quality services, and citizen control is still marginal or nonexistent.

The current context has redefined a new era of public policy where health is increasingly intersects with domestic and foreign policy, national and global security, sovereignty, governance, multilateral and bilateral strategies and national and international interests.¹⁴ Human security has advanced to the forefront of the global agenda, and it is conceived as a “complement to state security, furthers human development and enhances human rights.” This integrated approach centers on several issues for action aimed at protecting people’s vital freedoms and fostering empowerment.¹⁵

Economics

The persistence and the severity of poverty and income inequality are pervasive obstacles to factors that exacerbate vulnerability to risks and social exclusion, thus hampering healthy economic growth and prosperous civil societies. Overall, Latin American and Caribbean countries are characterized by a slow and unstable growth, adverse structural patterns, unequal distribution of income, deterioration of employment and differential opportunities for trade. The Region has the highest GNI per capita of all regions, yet, it exhibits the greatest disparities and poverty levels are four times that of other regions with similar GDP.¹⁶

With respect to the reduction of poverty and indigence rates, these have stagnant since 1997. Between 1999 and 2002, the poverty rate rose from 43.8% to 44.0% while extreme poverty reached 19.4% of the region’s population. Currently, about 225 million are considered poor, and about 100 million people are estimated as indigent.

| | Number (in millions) and Percentage of Poor and Indigent ¹⁷ | | | | | | | |
|---------------------------|---|------|--------|------|--------|------|--------|------|
| | 2000 | | 2001 | | 2002 | | 2003 | |
| | Number | % | Number | % | Number | % | Number | % |
| Poor, non indigent | 207 | 41.1 | 212 | 42.5 | 220 | 43.4 | 225 | 43.9 |

¹⁴ Lee, Kelly. *Health, Foreign Policy and Security: A Review of the Literature*. Discussion paper prepared for The Nuffield Trust. Programme of Work on Global Health and Foreign Policy. The Nuffield Trust, January 2002. http://www.nuffieldtrust.org.uk/policy_themes/docs/hfps.pdf

¹⁵ See United Nations. *Human Security Now*. United Nations Commission on Human Security. United Nations; New York, 2003. <http://www.humansecurity-chs.org/finalreport/pdf>

¹⁶ According to a recent publication, inequality in the Region is so appalling that even for countries with the best income distribution (Uruguay and Costa Rica), the Gini Coefficient is worse than for the most unequal Eastern European country.. De Ferranti, David et al. *Desigualdad en América Latina y el Caribe: ¿Ruptura con la Historia?* Estudios del Banco Mundial sobre América Latina y el Caribe. Banco Mundial, octubre 2003. <http://wbi018.worldbank.org/LAC/LAC.nsf/ECADocByUnid/4112F1114F594B4B85256DB3005DB262?Opendocument>

| | | | | | | | | |
|----------|----|------|----|------|----|------|-----|------|
| Indigent | 88 | 17.9 | 91 | 18.2 | 95 | 18.8 | 100 | 19.4 |
|----------|----|------|----|------|----|------|-----|------|

The concentration of income presents regional variations, but for the most part and since 1997, it has remained unchanged or even worsened in most countries, a fact that seriously hampers the achievement of the goal of reducing poverty.¹⁸ Moreover, data shows that life expectancy is greater in countries with high-income levels, and at similar income levels, life expectancy is greater in the countries with narrow income gaps. The average proportion of income for the poorest 40 percent of households is about 13, 6% (extremes are Bolivia with 9, 5% and Uruguay with 21, 5%). The richest groups capture an average of 36, 1% of the income in Latin America (extreme values are 27, 3% in Uruguay and 46, 8% in Brazil).¹⁹

Extreme poverty, hunger and malnutrition are distinct phenomena with synergic and insidious consequences for physical and mental well being. This is specially so for children under 5 suffering from chronic malnutrition, because of its high prevalence and irreversible effects on school performance, psychological and physical development, seriously hampering their social and economic contribution to society. Approximately 54 million people in the Region suffer from some degree of undernourishment and about 20% was undernourished in some countries (Bolivia, Dominican Republic, Guatemala, Haiti, Honduras, Nicaragua), whereas in others the figure was below 5% (Argentina, Chile and Uruguay). While efforts are under way, improvements are slow. In recent years, greater awareness is prompting decisive actions to curb obesity in adults and most recently in children, which is a risk factor for several chronic conditions.

The current and future situation of the growing number of older adults is of equal concern. Considering that only two out of five older adults receive social security benefits in the urban areas, many continue working or return to work, generally in lower paying jobs and/or in the informal sector. This population group also tends to include a majority of women, have fewer years of school and gender disparities unfavorable to women, which places them at greater risk.

Unemployment and sub employment are contributing factors to poverty, particularly when volatility and uncertainty characterize economic activity. Employment conditions have deteriorated and unemployment increased overall from 6% to 9% in the Region. Moreover, the informal sector has expanded and seven out of ten jobs created in urban areas occurred in the informal sector. The quality of work often preempts social security and

¹⁷ Alicia Bárcena, Secretaria Ejecutiva Adjunta de la CEPAL. Presentación, Objetivos del Desarrollo. Reunión de la Mesa Directiva Ampliada del Comité Especial de Población y Desarrollo del Periodo de Sesiones de la CEPAL. Marzo 10, 2004, Santiago, Chile

¹⁸ Improvements reached over 0.05 of the Gini Index. CEPAL *Panorama Social de America Latina, 2002-2003*. CEPAL, Santiago, Chile. LC/G.2218. Noviembre 2003. <http://www.eclac.cl/cgi-bin/getProd.asp?xml=/publicaciones/xml/0/12980/P12980.xml&xsl=/dds/tpl/p9f.xsl>

¹⁹ The Latin American countries with the highest concentration of income as reflected on the Gini coefficient are as of 2002, Brazil (0,64) and Bolivia (0,61), followed by Argentina (0,59), Honduras (0,59), Nicaragua (0,58) and Paraguay (0,57). Uruguay (0,46) and Costa Rica (0,49) show the lowest coefficients.¹⁹

health benefits protection, thus increasing vulnerability and exposure to risks. Important gaps exist between unskilled and skilled workers, and between formal and informal workers, the latter lacking social and health benefits as well as opportunities to advance.

Trends in the status and role of women in society are pertinent to understanding the dynamics of health, poverty and gender equity. In spite of improvements in education and social position, women are still more likely to be unemployed and overrepresented in the informal sector, concentrate on lower paying jobs and be subject to wage discrimination. In the case of women who are heads of households, they and their children are often drawn to more disadvantaged positions.

Social expenditures have redistributive effects that benefit the lowest income groups, and although the patterns are uneven, most countries have made efforts to increase the percentage of GDP allocated to social sectors. This is a positive trend in the Region when considering that average social expenditures increased from 10.4% to 13.1% of the GDP and very few countries reduced their social spending. Yet, the increases had little effect on the reduction of disparities²⁰. Countries like Argentina and Uruguay for example protected social spending even under the strain of important reductions of GDP between 1999 and 2000. However, this situation was difficult to sustain by 2002 when the GDP constraints increased with an 11% reduction and social spending was reduced.

Measuring poverty and disparities in the Caribbean is more difficult due to the lack of household surveys and the comparability of data. However, some studies show that the incidence of poverty is highest in Haiti (80% of indigence). Dominica, Guyana, Saint Vincent and the Grenadines and Suriname show lower rates than Haiti but higher than those of the rest of the countries. However, Bahamas has very low rates of poverty and these compare favorable with other countries with high rates of economic development.

Among Caribbean countries rural poverty tends to be higher in rural areas, differing from the situation in Latin America. Unemployment rates are considered high, and according to ECLAC “there are important links between poverty and delinquency, drug trafficking, intrafamily violence and child abuse.” Environmental health issues are of high importance in the subregion due to the occurrence of natural disasters, volcanic eruptions, and hurricanes affect seriously the poorest population of the subregion.²¹

Health Sector, Systems, and Services

Although health sector reforms promoted during the nineties were widespread and aimed at positive financial, structural and institutional changes, some relevant aspects of public health were neglected. One consequence of this situation, coupled with the effects of various trends, affected the capacity of governments to fully exercise their steering role and fully perform essential public health functions. A relevant trend that redefined a new

²⁰ Regional public social spending rose until 2001 (from US\$ 501 to US\$ 552 dollars per capita). Panama, Uruguay, Argentina, Brazil, Costa Rica and Bolivia assigned a large proportion of GDP to social sectors in the mid-1990s, and the levels rose to between 18% and 26% of GDP by 2000-2001. CEPAL *Panorama Social de America Latina, 2002-2003*. Op. cit, pp.178.

²¹ CEPAL *Panorama Social de America Latina, 2002-2003*. Op. cit, pp.60.

playing field with new or reposition stakeholders is embodied in some of the implications of the state and modernization processes. Although these have been asymmetric, they have encouraged the involvement of a variety of stakeholders, particularly those in the private sector. Their involvement has generated new dynamics and transformations.

A preliminary assessment of the impact of health sector reforms in terms of their guiding principles indicates the following:²²

- Equity: Only few examples seem to have contributed to the reduction of gaps in the coverage of some basic services and programs, and in most countries, these are not affecting the reduction of gaps in the distribution of resources.
- Effectiveness and quality: Relatively little progress has been attained in improving the global effectiveness of the system, adherence to normative aspects of quality of care or user satisfaction with quality.
- Efficiency: More gains are registered in productivity and development of purchasing practices than in reorienting resource allocation (e.g. no major shifts of resources to channel resources towards problems with high externalities, or to increasing the degree of social protection in health).
- Sustainability: There are attempts to adjust expenditures to the revenues of the system, but very few countries are improving the medium or long term generation of resources for expanding or sustaining the current level of service provision. The high dependency of many countries on external financing, and the lack of mechanisms for substituting these flows of resources when they cease seem an aggravating factor.
- Social participation: Governments seem more receptive as a result of health sector reform plans, however, it remains to be seen whether greater social participation actually affects the reorientation of health sector reforms.

The segmentation of health system persists; while some countries have extremely low health expenditure, others are excessively dependent on external resources, making them highly vulnerable. Even when countries increased public resources for health and education, the increase represents a relatively small percentage when compared with the increase in out of pocket expenditures necessary to access these services. These trends have exacerbated the regressive impact on the poorest populations and few countries have been able to break away from their historical allocation of resources.

Although aging is generally considered a trend that will weigh heavily on health expenditures, some experts consider that the impact of demographic and epidemiological trends seems to have been overestimated. They contend that regardless of age, health expenditures are highest in the last few months of life, and that under this assumption,

²² Lopez Acuna, D. *Critical Issues in Health Sector Reform in Latin America and the Caribbean: An Agenda for the Future*. Presentation. The Next Generation of Reforms, Public Health, and the Millennium Development Goals in Latin America and the Caribbean. March 15, 2004 National Press Club, Washington, D.C. <http://www.iadb.org/etica/sp4321-i/DocHit-i.cfm?DocIndex=1401>

aging populations may enjoy longer and healthier lives, mortality and morbidity rates will decline and costs will be spread over several years.²³

Health systems are likely to continue to evolve progressively with increased participation of the private sector and clear efforts to improve performance, quality and participation of patients. One important element to consider in their evolution is the high costs of medical technology and pharmaceuticals which are already adding pressure to some systems.

Public health thinking and practice continues to evolve to progressively include a population-based approach, disease prevention and health promotion strategies, a keen focus on empowerment of patients, responsibility for medical care and the recognition of the bioethical aspects of that care, and the inclusion of proactive health actions.²⁴ Conversely, the critical role of behavioral and sociocultural factors in the health and illness continuum is acknowledged, and that the pathways to health through non-medical determinants are better understood. Moreover, the increasing recognition of traditional and alternative medical practices exemplifies the acceptance of diverse ways to perceive health, protect and promote wellbeing, identify and manage disease. In spite of positive transformations, the curative model still prevails in health services, and the focus on the needs and participation of consumers can be improved.

Although public health and medical practice are changing towards more integration, greater focus on quality, performance and managerial specialization, health manpower issues remain a permanent concern. Considering the financial commitment and time required to effect positive changes in education and practice, and in some cases the sustained “brain drain” of professionals, transformations may take longer than expected and involve focused efforts by the governments.

The requirement for more effective collective action by governments, agencies, civil society, and enterprises to better manage these risk and opportunities is leading to reassess the rules and institutions that govern health policy and practice at the subnational, national, regional and global levels. The experience accumulated by the countries and their recognition of the value of promoting social practices to develop a culture of life and health, to create and maintain healthy settings, and most notably, the need to build citizenship on the basis of people’s awareness of their role and responsibility to create and maintain health will undoubtedly contribute to success.

Trends in International Health Development Cooperation

Development thinking has rapidly evolved in the past decade to understand and apply the concept of human development, to recognize that development embodies broader goals,

²³ Savedoff, William D. *Is Anybody Listening? Ignoring Evidence in the Latin American Health Reform Debates*. A Health Note. SDS/SOC–Health Note No. 2. Inter-American Development Bank. Washington, DC. October, 2000.

²⁴ McEwon, T. Determinants of Health. In: *The Nation's Health*, ed. P.R. Lee, C.L. Estes and N.B. Ramsay. San Francisco: Boyd & Fraser Publishing Co., 1980. Evans RG and Stoddard G L. Producing Health, Consuming Healthcare. In Evans R G, Barer M L and Marmor T R. *Why Are Some People Healthy and Others Not? The Determinants of Health of Populations*. Berlin: Walter de Gruyter, 1994. Marmot, T. and RG Wilkinson, eds. *Social Determinants of Health*. Oxford: Oxford University Press, 1999.

and to conceptualize “development as freedom.”²⁵ The mutual contribution of health and socioeconomic development to wellbeing is better understood, and reflected in the recognized complementarity of partnerships. Moreover, health is gradually conceptualized as an investment rather than a mere expenditure.

Development partners are also assessing the effectiveness of their own cooperation, and they are challenged to improve current ways to do business and to design new ways that would allow optimal individual and collective work. Monitoring and evaluation activities have gained importance for the donors as well as for international agencies and recipient countries. These approaches aimed at improving policy and program development, increase knowledge and accountability and strengthen organizational development through the use of external accountability to promote learning and exchange of best practices, improve systems through integration with performance management systems, and use results for policy and program development.

Sector programs are moving to SWAPS (Sector Wide Approaches) with greater emphasis on collaborative and partnered approaches, accountability and performance assessment. Projects, on the other hand are shifting to a program approach, to portfolio based reviews and greater concerns about self evaluation, clear focus on goals, networking and greater use of communication and information technologies. However, hurdles remain with regard to seeking coherence between goals and strategies, implementation processes, ownership and dealing with uncertainty and complex environments.

Another important trend is the increased involvement of private sector entities and civil society organizations as partners in development. The introduction of the Global Compact in 1999, by the Secretary General of the United Nations opened the door to private sector partnerships on behalf of UN programs. Corporations and other organizations were called to adhere to nine principles aimed at improving their corporate social and environmental behavior, which has generated expressions of “new philanthropy” and grantmaking as partners in international health development. However, monitoring and evaluation of private sector activities is still weak in some countries, which calls for better implementation of performance standards through regulation and appropriate national strategies and policies.²⁶

Finally, there are important attempts to expand traditional sources of funding known as Official Development Assistance (ODA).²⁷ Net ODA increased from \$51.4 billion in 2001 to \$58 billion in 2002, an increase of almost 13% in absolute terms (5%) considering inflation and fluctuations in exchange rates. ODA is two thirds bilateral in nature and it

²⁵ Ocampo, José Antonio. *Rethinking the Development Agenda*. http://www.un.org/esa/usg_ocampo/books/pdf/lcl1503i.pdf. See: Sen, Amartya, *Development as Freedom*, Alfred A. Knopf, New York. 1999. Stiglitz, Joseph A, *More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus*. WIDER Annual Lectures 2, Helsinki, January. 1998.

²⁶ Zammit, Ann. *Development at Risk: Rethinking UN-Business Partnerships*. A Joint Publication by the South Centre and UNRISD (United Nations Research Social Development). December 2003.

²⁷ ODA are provided by the official sector of a donor country to developing countries (except the most advanced) through grants and subsidized loans for promoting the economic development & welfare of the recipient country.

represents 0.23 % of GNI as compared to 0.22% in 2001. Since the 1970s, health-related ODA showed a long-term upward trend averaging 3.3% annual growth. Recent estimates presented by the WHO Commission on Macroeconomics and Health requests donors to raise ODA for health from current annual estimate of \$6 billion to \$27 billion per year in 2007 and \$38 billion in 2015, urging developing countries to devote an additional 1% of their GNP to health by 2007 and 2% by 2015.²⁸ Based on commitments, the amount of health related ODA increased by \$1.7 billion from an average of \$6.4 billion in 1997-1999 to \$8.1 in 2002. Provided that the commitments made at the 2002 UN Conference on Financing for Development held in Monterrey materialize, the trend should continue. However, the challenge remains to ensure that these resources in fact support the achievement of the MDGs.²⁹

THE CONTEXT OF HEALTH

The current health situation in the region reflects its complex macrodeterminants; particularly, it mirrors the impact of demographic transition, epidemiological polarization, health policy effectiveness and health services performance on the peoples of the Americas in the last decades of the 20th Century.

The start of the 21st century has witnessed major achievements in health in the Americas. The achievements in health, however, appear as a heterogeneous regional mosaic. These gains are associated with improvements in overall living conditions, that is, greater access to education, water and sanitation services, primary care, cost-effective technologies and expanded immunization coverage, which have contributed to deter communicable and non-communicable diseases with serious impact on health.

However, mortality trends are also associated with an increase in risk factors like haphazard urbanization, sedentary lifestyles, female and young people smoking, violence, stress, depression and other mental health problems and other ill-health life-styles and behaviors. In addition to malnutrition, which affects millions of people, and changes in eating patterns are creating a trend toward the prevalence of diets associated with a higher risk of chronic diseases and ailments. Injuries and deaths from external causes, especially motor vehicle accidents, violence and drug abuse, are increasingly identified as causes of morbidity and mortality.

Life expectancy at birth increased by almost six years between 1980 and the year 2000, and part of these gains are due to the reduction of risks of dying from communicable diseases and perinatal conditions, reduction in mortality from diarrheas, nutritional deficiencies, acute respiratory infections and vaccine preventable diseases. Smallpox and polio have been eradicated and measles will soon be a disease of the past.

²⁸ The breakdown includes \$22 billion to developing countries, \$3 billion for research and development on diseases of the poor, \$1.5 billion for the Global Health Research Fund, \$1.5 B for existing programs e.g., tropical diseases research, and \$2 billion from WHO, the World Bank and others.

²⁹ WHO *Macroeconomics and Health: Investing in Health for Economic Development*. World Health Organization: Geneva. 2001. <http://www.cmhealth.org/>

Population growth rates have declined in almost all countries (current annual regional population growth rate is 1.3%), and a 50% reduction in fertility in the last 40 years has contributed to longevity increases. This in turn has contributed to the preponderance of chronic non-communicable diseases and a greater awareness of issues related to aging because of the economic effects of higher dependency rates on society.

| Some achievements in Health in the Americas, 1980-2000 | | | |
|--|------|------|----------|
| Indicator | 1980 | 2000 | % Change |
| Life expectancy at birth (years) | 66,9 | 72,4 | 8 |
| Literate population (%) | 88 | 93 | 6 |
| Infant mortality (per 1,000 live births.) | 37,8 | 25,0 | - 34 |
| Immunization coverage (%): DPT3 | 45 | 91 | 100 |
| Immunization coverage (%): OPV3 | 51 | 91 | 78 |
| Immunization coverage (%): Measles | 48 | 94 | 96 |
| Total fertility rate (children/woman) | 3,0 | 2,5 | - 17 |
| Access to drinking water (%) | 76 | 90 | 18 |
| Access to sewerage services (%) | 67 | 85 | 27 |
| Nurses per 10,000 population | 23,1 | 40,2 | 74 |

One remarkable contribution to the

achievement of these gains has been the reductions of information asymmetries between patients and providers, though improvements in health literacy through expanded knowledge sharing, which allows those with access to make better choices about their health and that of their families and communities.

The pattern of distribution of health gains is however uneven, and health status mirrors socioeconomic disparities, that is, societies that exhibit smaller income gaps (not necessarily those with higher income) tend to present better health status indicators and better access to water and sanitation. Improvements in average levels of health that are not accompanied by improvements in the distribution of those health gains among the population are insufficient to generate human capital and sustain human development.

Epidemiological Polarization

The mortality and morbidity profiles show the simultaneous dominance of communicable and non-communicable diseases (which vary with the living conditions of the populations). Health conditions reflect these profiles, whereby the corresponding social responses structured through the health system. The evidence suggests that epidemiological changes in terms of exposure to risks of disease, injury or opportunities to become healthier do not follow a linear and irreversible progression, yet they can coexist, reverse themselves, and be determined individually, historically, and socially.

In terms of demographic and epidemiological dynamics, life expectancy for both sexes and for all ages exhibits an upward trend. The proportion of people 65 years and over is increasing at a faster pace (nearly 2 times faster) than the population as a whole, which will have implications for resources. Yet, this trend has slowed down in some countries due

primarily to AIDS, diabetes and external causes, such as violence and non-intentional injuries.

| Type and Characteristics of Transition | Countries |
|--|--|
| Incipient transition: (high birth rate, high mortality, moderate natural growth [2.5%]) | Bolivia and Haiti. |
| Moderate transition (high birth rate, moderate mortality, and high natural growth [3.0%]) | El Salvador, Guatemala, Honduras, Nicaragua, and Paraguay. |
| Full transition (moderate birth rate, moderate or declining mortality, moderate natural growth [2.0%]) | Brazil, Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru, the Dominican Republic, Suriname, Trinidad and Tobago, and Venezuela. |
| Advanced transition (moderate or declining birth rate, moderate or declining mortality, natural growth under [1.0%]) | Argentina, Bahamas, Barbados, Canada, Chile, Cuba, the United States, Jamaica, Martinique, Puerto Rico, and Uruguay. |

Because of the specific contribution of different groups of causes of death to longer life expectancy varies among population groups. In general, communicable disease control contributes more years of potential life gained, while the increase in mortality from external violent causes, as well as

from cardiovascular diseases and malignant neoplasms, contributes more potential years of life lost. The weight of disability in healthy life expectancy is garnering more attention, and its adequate documentation requires reliable and practical instruments.

Life cycle

Children and Adolescents: Mortality patterns in children vary widely, depending on the subregion and, although there is an overall-decreasing trend, major disparities in infant mortality rates exist among and within the countries of the Region. Between 1980-1985 and 1995-2000, the increased provision of basic services (e.g., water and sanitation), the availability of simple, cost effective technologies (e.g. oral rehydration therapy, immunizations and simplified protocols for the control of acute respiratory diseases), improvements in health literacy and the implementation of health promotion strategies and primary health care contributed to a pronounced decline in the proportion of deaths from acute diarrheal diseases and acute respiratory infections in this age group.

Adults: AIDS mortality among young adults (25-44) is taking a toll on life expectancy. Mortality trends in the 45-64 age groups in the Region show patterns differentiated by sex, in which the risk of dying for men is double that for women for certain diseases. Among adult males, diseases of the circulatory system persist as the leading cause of death in the majority of the countries, while for some, the external causes component is an important contributing factor to a greater risk of dying among this group.

Older Adults: A clear upward trend in life expectancy can be observed for both sexes, although women having a longer life expectancy in every country in the Region. The aging of the population is a significant demographic trend implies greater need and demand for health care and other services linked with the quality of life and family environment in this age group.

Special Groups

Disabled People: The issue of disability is gaining importance due to the longer life with chronic/non-communicable diseases and the influence of unintentional injuries on health outcomes. This population will demand more care and require reliable and practical instruments to document the prevalence of the conditions affecting them. The inadequacy of social security in several countries of the Region forces families to shoulder the burden of the higher medical expenses, which will increase the burden on the public services and the families themselves.

Workers: The type of work performed is a risk factor in terms of mortality, years of potential life lost, years of life with disability and disability-adjusted life years. Occupational mortality was equal in magnitude to mortality from tobacco use. In Latin America and the Caribbean, barely between 1% to 5% of the cases of occupational illnesses are reported, due to underdiagnosis, underregistration, and underreporting of morbidity and mortality in the workplace. Thus, the data do not reflect traditional occupational health problems or emerging health problems stemming from the application of new technologies, much less the problems associated with the work. Nor do they reflect the health problems of workers without social security coverage.

Racial and Ethnic Groups

Indigenous peoples representing 400 different languages (mostly concentrated in Mexico, Peru, Bolivia, Ecuador and Guatemala) comprise about 6% of the population of the Americas and about 10% of the Latin American and Caribbean population. Afro-descendants³⁰ include between 150-200 million people. Together, both groups comprise almost 25 percent of the population of the Region.

Racial and ethnic groups tend to be highly vulnerable to injury, disease and death due to their generally disadvantaged social positions characterized by higher rates of illiteracy, fewer years of schooling, tend to hold lower paying jobs, may suffer from discrimination, migrate frequently and/or live in disaster prone areas. Those conditions heighten the impact of poverty on health, and health indicators for these groups (infant mortality, life expectancy as well as prevalence and incidence of certain conditions) are substantially lower than for other groups which call urgent attention from policy makers.

Specific Health Problems

Communicable Diseases: Although a number of traditional infectious diseases have been completely or partially controlled, they remain a significant problem in many territories and populations. Malaria, HIV/AIDS and other sexually transmitted infections, dengue and tuberculosis, among others, have resurfaced globally as important causes of morbidity and mortality. The emergence of epidemic diseases, like SARS, West Nile Virus, "mad-cow" disease and hanta-virus, add complexity to the health problems, as well as to the search for solutions. This trend generates higher demand for the development of local, national, regional and global capacity to warn of and respond to epidemics.

³⁰ Almost 50% of the English speaking Caribbean, and important percentages of the populations of Brazil, Colombia, Dominican Republic, Haiti, Venezuela and the United States.

Chronic Non-communicable Diseases, External Causes and Health Risk Factors: Chronic diseases, injuries and disabilities are responsible for two thirds of reported mortality. As life expectancy increases, cardiovascular diseases and malignant neoplasms become manifest more frequently. The rise in the incidence of neoplastic and endocrine disorders such as diabetes mellitus type 2 and the still significant relative weight of cardiovascular disease in the mortality profile are an important epidemiological characteristic of the Region's populations.

The resulting epidemiological profile reveals the vulnerability of populations to natural, social and biological disruptions, and calls for the strengthening of public health information and surveillance networks at the national and international levels.

Possible Implications for Public Health

Documentation of Inequalities in Health

- Measure and analyze disparities in health to improve decision making with equity criteria, and monitor the ability of societies to adapt to changing environments.
- Enable better understanding of the relationships between socioeconomic determinants and health outcomes.

Early Warning and Response Capacity

- Build capacity in early warning systems at local, national, regional and global levels to anticipate and timely respond to epidemics, develop information, integrated public health surveillance systems and establish health situation rooms to monitor and evaluate the health systems and situations.

Use of Epidemiology in Health Policy and Planning

- Reinforce the institutionalization and professionalization of epidemiology in government policy-making structures and academics.
- Develop human capital and national capacity public health, including the proactive use of epidemiology in health management, planning, policy analysis and evaluation.

Generation of Epidemiological Intelligence

- Stimulate the production and produce relevant epidemiological evidence and knowledge to support the steering role in health and the discharge of public health functions with new tools and skills.
- Produce high quality situation analysis with a view to improve capacity for policy making, public practice and advocacy.

THE UNFINISHED AGENDA

The UN attention to health as a critical component of human development is clearly expressed in many of the global summits during the last two decades, and prominently so when during the 8th Plenary Session, 8 September 2000 when the United Nations adopted the United Nations Millennium Declaration (A/55/L.2) 5/2. The Members States requested the UN to devise a road map for the UN Millennium Declaration and later, consultations among international agencies (World Bank, the IMF, the OECD, and the specialized agencies of the

United Nations) the General Assembly recognized the Millennium Development Goals (MDG) as part of the road map for implementing the Millennium Declaration.

Many of the targets represent a compilation of other targets set by international conferences and summits during the nineties, which became known as the International Development Goals. The MDGs commit the international community to an expanded vision of development, one that vigorously promotes human development as the key to sustaining social and economic progress in all countries, and focuses the attention of the international community on fostering a "global partnership for development", including increasing the official development assistance to achieve the other goals. The goals have been commonly accepted as a framework for measuring development progress.

The Johannesburg Summit on Sustainable Development enhanced the MDGs by including a goal to reduce the number of people without access to sanitation to 50% by 2015, and an action plan to ensure sustainable global development. The Johannesburg Summit was the last stage of the process, from Doha over Monterrey to Johannesburg, which maps out an overall strategy for the realization of the Millennium Development Goals. The nations of the world committed to sustain the declarations with concrete action.

Three of the eight MDGs are health related (Reduce child mortality rates by two-thirds, reduce maternal mortality ratios by three-quarters; and halt, and begin to reverse, the spread of HIV/AIDS, malaria, and other diseases), as well as target 17 (In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries) under the goal addressing the development of global partnerships. Most of the other five goals and related targets and indicators are also closely linked to health (e.g. nutrition, education, gender, access to safe drinking water). Nonetheless, goal eight seems to be the one necessary to reach the other seven.

The emergence of large number of at-risk populations such as migrant workers and refugees worsens the predicament of communicable diseases. Effective solutions in the

Millennium Development Goals (MDGs)

Goal 1: Eradicate extreme poverty and hunger

Goal 2: Achieve universal primary education

Goal 3: Promote gender equality and empower women

Goal 4: Reduce child mortality

Goal 5: Improve maternal health

Goal 6: Combat HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability

Goal 8: Develop a Global Partnership for Development

future call for a strengthened national capacity to meet the goals of eradicating and eliminating diseases such as poliomyelitis caused by the wild poliovirus, measles, neonatal tetanus, congenital syphilis, Chagas' disease, trachoma, Haemophilus influenzae type B infection and micronutrient deficiencies (vitamin A, iodine, iron and folic acid) and controlling lead poisoning and silicosis.

Income distribution has positive effects on poverty reduction. Considering the current and expected distribution in Latin America and the Caribbean, unless

concentration of income improves in most countries, the poverty target set by the UN Millennium Declaration will not be reached.

Growth with redistribution would enable countries such as Mexico, Uruguay and Brazil to meet the target in less than three years, whereas none of them will be able to do so by 2005 without distributive improvements. Similarly, Costa Rica, Ecuador, Guatemala, Panama and El Salvador would reach the target by or during 2009, but are unlikely to do so without such a distributive change...³¹. ECLAC also indicates that despite improvements in food availability, only 13 countries will be able to reach the goal of reducing hunger by 2015. Nonetheless, four countries will not achieve the target of child malnutrition and 10 may not increase the availability of food and therefore halve the percentage of undernourished people.

The greater visibility of health has been accompanied by the establishment of special funds and initiatives that will tackle the unfinished agenda, and prevent further deterioration of health status in many countries. Some of these initiatives include UNAIDS, Global Alliance for Vaccines and Immunization GAVI, The Global Fund against AIDS, Tuberculosis, and Malaria GFATM, Roll Back Malaria, or Stop TB. In fact, the 2003 World Health report, *Shaping the Future* outlines the global health agenda for the coming decade, warning that that “without significantly strengthened commitments from both developed and developing countries, the MDGs will not be met globally, and outcomes in some of the poorest countries will remain far below the hoped-for achievements.”³²

THE NEW AGENDA

In addition to completing the unfinished agenda, and sustain the achievements, the new agenda is equally demanding because of its complexity and the peculiarities that it acquires in each particular regional and national context, and for population groups.

The challenges ahead highlight the disparities in health that increase social vulnerability, the volatile nature of economic growth and the threats to national security. The governments and key sectors are keenly aware of the need to reduce the gaps in health and in access to health care. Similarly, greater attention is being placed on the international dimensions of public health and to its intimate relationship with national and local contexts.³³

The countries recognize the need for renewed efforts to prevent and combat risks and disease, and therefore a renewed way of thinking about the new generation of reforms. These need to center on the health of the population, improvements in public health interventions, and greater government capacity to craft good health policies, and

³¹ Improvements in income distribution have remarkable effects on poverty reduction; a 5% reduction in the Gini index may reduce by two to five years the amount of time needed to lower extreme poverty fifty percent. CEPAL *Panorama Social de America Latina, 2002-2003*. Op. cit.

³² World Health Organization. *Shaping the Future*. World Health Report 2003. World Health Organization: Geneva, August 2003. <http://www.who.int/whr/2003/en/>

³³ Roses, Mirta. *Presentación: Ética y Políticas de Salud*. Día de Ética y Desarrollo en el Banco Interamericano de Desarrollo (BID). 16 enero 2004. <http://www.iadb.org/etica/sp4321-i/DocHit-i.cfm?DocIndex=1401>

strengthen the capacity of government in discharging essential functions of public health.³⁴ Health for all and primary care remain a vision and a strategy worth pursuing. Thus, the reorientation of health systems and services affirms these commitments through those principles that include universal access and coverage, equity as part of the search for social justice, health promotion, the intersectoral approach, and comprehensive health care, with a view to building socially effective health systems that are capable of producing health and that generate social satisfaction within the framework of respect for plurality and the principles of universality, social participation, joint financing, efficiency, and decentralization.

Conversely, the new development agenda calls for long term goals, policy coherence, ownership, participation and collaboration leading to measurable results. Therefore, international development stakeholders are increasingly focusing on setting priorities, target setting and performance management that would allow greater focus on evidence based policies to better understand and address the problems that cooperation intends to solve, and focus on results with greater accountability and commitment.

Summary of Challenges of Public Health³⁵

| Trend/Category | Challenges |
|--|---|
| Globalization and International Public Health | <ul style="list-style-type: none"> ■ Anticipating and protecting populations from the transborder risks of diseases and environmental contaminants, including biological and/or chemical terrorism. ■ Addressing national health within a regional and global governance frame of reference and new rules. ■ Strengthening existing forms of national and regional governance to tackle the social and economic effects of globalization on health. ■ Harnessing the benefits of greater interconnectedness to improve knowledge exchange, collaboration in health, and management of technology transfers. ■ Improving and/or developing greater foresight in health policy, public health and epidemiology. ■ Balance individual and common benefits. |
| Science and Technology | <ul style="list-style-type: none"> ■ Ensuring the equitable and ethical deployment of scientific and technological innovations to improve the human condition.³⁶ |

³⁴ Institute of Medicine (IOM). *The Future of Public Health in the 21st Century*. Washington D.C., IOM, 1988 and 2002. <http://www.nap.edu/books/030908704X/html/> PAHO. *Public Health in the Americas. Conceptual Renewal Performance assessment and bases for action*. Washington D.C.: PAHO, 2002. http://publications.paho.org/english/moreinfo.cfm?Product_ID=666&CFID=6150152&CFTOKEN=52383841

³⁵ Includes deliberations of Discussion Topics from February 26, 2003, First Meeting of the Working Group PAHO in the 21st Century, Dominica.

³⁶ A recent initiative funded by the Gates Foundation has identified "grand challenges." These are "a specific scientific or

| | |
|--|---|
| | <ul style="list-style-type: none"> ■ Harnessing as well as producing Information and knowledge for evidence based decisions. ■ Improving the information flows and the quality of information exchanged within and across the countries. |
| Natural Resources and Quality of the Physical Environment | <ul style="list-style-type: none"> ■ Reducing the gaps in the provision of clean water and sanitation services, the contamination of water and air sources, and the risks of chemical contamination. ■ Improving the regulatory framework and levels of compliance to avert environmental degradation and loss of biodiversity ■ Lessening the impact of the growth of mega cities on health and well-being. |
| Health Problems | |
| | <ul style="list-style-type: none"> ■ Persistence of high infant mortality and fertility in some countries or parts of some countries ■ Persistence of unacceptable high rates of maternal mortality. ■ Non-communicable diseases, increases in injuries, obesity, new emerging diseases ■ Malnutrition ■ Communicable diseases and emerging problems (e.g. SARS, Avian 'flu, drug resistant diseases, and others). ■ Social contexts and factors that affect the spread of drug abuse and violence, including intrafamily violence. ■ Antibiotic resistance: inability of current international legislation to take on the collective responsibility to act effectively on epidemics and global pandemics. |
| Research | <ul style="list-style-type: none"> ■ Measure disparities and inequities in health, considering the gender, race and ethnicity dimensions. ■ Produce quality and reliable data for evidence based decision making. ■ Consider the needs of applied research as they relate to health priorities and needs ■ Need to improve the definition of disease patterns. |

technical breakthrough that would be expected to overcome one or more bottlenecks in an imagined path toward a solution to one or preferably several significant health problems. They include: improving childhood vaccines, creating new vaccines, controlling insects that transmit agents of disease, improving nutrition to promote health, improving drug treatment of infectious diseases, curing latent and chronic infections, measuring disease and health status accurately and economically in poor countries. Varmus, HR, et al. Public Health: Enhanced: Grand Challenges in Global Health *Science*, 302 (5644): 398-399, 17 October 2003.

| | |
|------------------------------------|---|
| Bioethics | <ul style="list-style-type: none"> ■ Growing concerns to address ethical issues posed by transplants, cloning, and genetics. |
| Resources | <p>Human Resources:</p> <ul style="list-style-type: none"> ■ Ensure that competencies and skills are appropriate to respond to the challenges needed to tackle. ■ Address globally, regionally and nationally the brain-drain, which require political stability and stable economies to retain competent professionals. <p>Financial (internal/ external)</p> <ul style="list-style-type: none"> ■ Improving levels of funding internally and externally (total funding from external sources has diminished, and funding is also a bottleneck ■ Improving equity in the distribution and utilization of financial resources. <p>Intangible resources/assets:</p> <ul style="list-style-type: none"> ■ Preserving and improving the intangible resources needed to achieve goals, such as knowledge, prestige, intellectual capital, credibility, respect, reputation, trust, etc. |
| Public Sector Institutions | <ul style="list-style-type: none"> ■ Addressing issues related to the efficiency and equity of international cooperation in health. ■ Understanding that public service reforms need to enhance efficiency and that “if service is inefficient, work is going to be frustrated/retarded.” ■ Seek ways to strengthen governance, technical quality and management of human and available financial resources. ■ Developing and/or improving vision and leadership. |
| Health Systems and Services | <ul style="list-style-type: none"> ■ Improving health services coverage and patient referral. ■ Developing more efficient, effective and equitable systems. ■ Investing to achieve universal access to health care ■ Understand and address the transformation of demand patterns, as well as issues related to health care quality and patient satisfaction resulting from reduced asymmetries between patient and provider. ■ Greater efficiency of health expenditures and improved allocation of resources and management is needed, in addition to additional financial resources. ■ Address and control the over utilization of medical interventions. ■ Promoting adequate incentives and reduce financial insecurity ■ Managing the increasing cost of medical technology and its |

| | |
|--------------------------------|---|
| | deployment. |
| Development Cooperation | <ul style="list-style-type: none"> ■ Orienting more needed assistance to the achievement of health related MDGs in the Region. ■ Effectively build national capacity in planning and management of international cooperation, in light of current trends towards more bilateral cooperation and the systemic shift away from short-term projects toward program support and SWAP (sector wide approaches). ■ Improving multilateral approaches and collaboration to preparedness and mitigation in the national agenda ■ Improving advocacy to better position health in international political and economic agendas, raise awareness about the links between health and development and establish effective partnerships. |

Considering the changing and complex nature of issues relevant to the topic of this paper, similarly, challenges do and will change in nature in the future, perhaps in unexpected or undesirable ways. Therefore, in order to understand and address these and future challenges, it will be necessary to monitor those trends that influence health and health care, as well as the behavior of providers, patients and organizations and agencies that are involved in cooperation.

The table below suggests some of these for consideration:

| Determinants | Trends to Monitor |
|---------------------------------------|--|
| Demographics and Social Trends | <ul style="list-style-type: none"> ■ Population growth and changing structure, particularly its effects on aging and the needs of this population (chronic non-communicable diseases, impact on health services and demand for complex technology). ■ Migration (e.g. impact of illegal immigrants on health services, cost, security) ■ Effects of migration and urbanization on quality of life and health in urban areas. Effects of migration and urbanization on quality of life and health in urban areas. ■ Incidence and prevalence of violence (social, environmental, political and interpersonal) |

| | |
|---------------------------------------|---|
| Political and Policy - Related | <ul style="list-style-type: none"> ■ Locating and using available resources in more innovative ways ■ Manage political pressures stemming from an expansion in the number of social actors participating in decision making ■ Design and implement intersectoral public policies. ■ Seek to effectively address the lack or misuse of available human and financial resources. ■ Reduce potential threats stemming from economic crises, unhealthy environments, and risky behaviors. ■ Identify and address health disparities through political action and policy making. |
|---------------------------------------|---|

Finally, there are signs of emerging issues that may become more important in the near future, and where some dimensions clearly intersect with public health. Some of these include for example:

- Understanding the Interplay of geopolitics, economics, religion and technology and their effects on health and the environment.
- Balancing competing needs of population growth and resources.
- Incorporating ethical considerations in global decisions.
- Recognizing and implementing appropriate actions derived from the greater complexity derived from the intersections of ethnicity, race, gender, sexual orientation and social class and their implications for health and health care and respect for human rights.
- Developing and sustaining democratic resiliency for socioeconomic stability and peace.
- Ensuring that the global convergence of information and communication technologies works for everyone.³⁷
- Averting the risks of more destructive terrorism, and controlling it. .
- Stopping transnational organized crime from becoming powerful and sophisticated global enterprises which could affect decision making and health.
- Addressing issues of illegal trade of illicit drugs, arms, intellectual property, people, human organs and toxic waste to reduce their effects on health and well being.³⁸

The current and future challenges underscore the preeminence of reaffirming health as a social and human right, extend social protection in health and develop their public health infrastructure. Improved governance, enhanced institutional capacity, increased foresight,

³⁷ American Council for the United Nations University (AC/UNU). AC/UNU. The Millennium Project. Global Challenges for Humanity. <http://www.acunu.org/millennium/challeng.html>

³⁸ Naim, Moises. Five Wars of Globalization: Other Fronts. *Foreign Policy*. http://www.foreignpolicy.com/story/cms.php?story_id=2

accurate surveillance and continuing monitoring are needed to address accumulated and current challenges and to anticipate and respond to future ones. While each nation will identify its own priorities and strategies, success will depend in part on shared regional goals built on values and national achievements.