

Primary health care and the Millennium Development Goals: issues for discussion

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Executive summary

Both the Millennium Development Goals (MDGs) and the *Report of the Commission on Macroeconomics and Health* recommend and assume extensive new financial inputs to health care. If these recommendations and expressed funding targets materialize, development will be greatly facilitated. The influence of these activities and recommendations will be shown in the decisions made by donor countries concerning their development aid. A crucial issue for success would be how developing countries ensure, vis-à-vis these global initiatives, the necessary country leadership, harmonization and alignment with nationally defined priorities and policies.

The three health-related MDGs are either disease-specific or they specify a rather narrow target problem area. They give an impression of vertical programmes directed to specific population groups and specific diseases, whereas the ideology and implementation of primary health care (PHC) emphasize universal access and coverage, PHC's role as the site of first contact, coordination and integration of services and programmes. This issue will need careful guidance by international organizations, especially the World Health Organization (WHO). Because finding synergy between the vertical programme approach and the development of PHC infrastructure may be very difficult, the better option would be to advocate a lucid and strong stewardship function nationally and worldwide in order to avoid vertical programmes altogether.

The MDGs fail to cover the important issues of preventable risks and chronic noncommunicable diseases that are rapidly transforming the required patterns of work in PHC and setting new requirements for knowledge and skills of doctors and other PHC professionals. Organizations delivering PHC services will need to improve and increase their ability to adapt and respond to these changes.

The emphasis on changes in the basic training of health professionals that has persisted for the last 25 years is certainly good, but that process is very slow if the MDGs are to be attained by 2015. The focus should be on postgraduate education and continuing education, in which results will be seen much faster.

To attain the MDGs but also to effectively implement PHC everywhere, it will be crucial to attract and retain competent staff and to keep PHC workers highly motivated and self-reliant in order to guarantee their commitment and positive attitudes towards their work and consumers. Development of local research and performance measurement in PHC has great potential for the development of the work. It will also facilitate attainment of the MDGs in the time limits envisioned.

Ownership of the MDG targets must be addressed, not only by governments but also by civil society and health care providers. To achieve the MDGs requires integrated approaches to service delivery. This means that not only must there be increased allocation of funds to identified priorities, but service planning and delivery must also be strengthened if priorities are to be met. With regard to

success in the development of PHC, it will be crucially important to address and overcome the issue of rigidity of traditional public policy and conflicting political/economic interests in societies.

PHC will need strengthening in both the developing and developed world in order to be able to meet the challenges set by the MDGs, the rapidly changing environment, the changing disease panorama, changes in society, ageing populations, urbanization, poverty and unhealthy lifestyles. The integration of the attainment of the MDGs and PHC and the realization of the recommendations of the Commission on Macroeconomics and Health will open fundamental new possibilities in the implementation, improvement and strengthening of PHC.

Introduction

During the last 25 years primary health care (PHC) has evolved and developed. Governments in most countries have accepted and adapted the philosophy and principles of PHC as the basis for their strategy for reforming and developing their health services systems. In consequence, the principles of PHC have been translated into operational systems for its implementation.

As originally defined, PHC was implicitly a health development strategy as well as a level of health services. In most cases, it has been adopted and adapted by each country according to its own health and socioeconomic conditions. Within that context, many countries have understood PHC as the primary level of care – the point of contact with the community and the population's gateway to the health system. This concept has tended to predominate in countries that have achieved adequate levels for basic health services.

In another perspective, in some countries – within the context of segmented health care, a model increasingly based on technology development and specialization but with the exclusion of broad social services – PHC has been interpreted as a health care strategy based on the principles of social justice and has been seen as a way to provide health care to poor and marginalized populations who lack access to services. This approach has largely been abandoned because of its narrow and limited view. According to the prevailing vision, PHC is not a "limited package of interventions for poor people" but the basic strategy of health systems to ensure greater coverage and equity.

In another variation in the development of PHC, generalist physicians or nurses are seen as gatekeepers – those responsible for managing access to the health system. This perspective relies on the capacity of PHC units and personnel to manage a wide variety of health problems that make up most of the demand for health care.

Models for delivering PHC will continue to emerge, since, according to the WHO global review of primary health care, countries view it as a policy cornerstone. There is a general move towards service systems based on and led by PHC with the realization that its principles – such as universal access and coverage, its role as the site of first contact, community participation, integration of services and programmes – are relevant to all populations and all communities.

Parallel to this development, since Alma Ata dramatic changes have occurred in the pattern of disease, in demographic profiles and in socioeconomic environment that present massive new challenges to PHC. These changes are seen in both industrialized and developing countries. In the latter, increases in the prevalence of preventable risks and chronic, noncommunicable diseases, as well as violence, threaten societies already burdened by communicable diseases.

Many countries are reforming their health sectors and basing these reforms on PHC. Because of this, it is clear that PHC must be strengthened in all countries, and especially in developing countries. Funding, organization, coverage, quality, effectiveness, performance, human resources, capacity building, social participation and accountability are all among the salient issues when services are developed and continuously improved to better meet the challenges and responsibilities.

Of the developments during the last few years that may have a significant positive influence on health services and population health globally, the most important and novel are the setting of the Millennium Development Goals by the United Nations Millennium General Assembly, published in September 2001; and the *Report of the Commission on Macroeconomics and Health*, submitted in December 2001. Both of these set out an agenda for the future that would see major new investments in health systems.

This paper will describe the basic contents and recommendations of these important and influential documents. It will study PHC as it is now understood, then consider the challenges to health services presented by the rapid and extensive changes in disease panorama, demographics and society, as well as some of the frequently cited weaknesses in the implementation of PHC. Finally, it will discuss the relationships between the attainment of the Millennium Development Goals by 2015 and the strengthening of primary health care. The references used are listed in alphabetical order at the end of the paper.

1. The Millennium Development Goals

At the Millennium Summit in September 2000, the United Nations reaffirmed its commitment to working toward a world in which sustaining development and eliminating poverty would have the highest priority. After review and editing by the United Nations Secretariat, the IMF, the OECD and the World Bank, the objectives were published in September 2001 as a set of eight goals, each expressed in very general terms and accompanied by one to six considerably more specific targets and a larger number of indicators for measuring progress toward the target.

These goals, the Millennium Development Goals (MDGs), which were published in September 2001, summarize the commitments and have been commonly accepted as a framework for measuring development progress are assuming increasing strategic importance. They are being used to focus and reorient the work of individuals and programmes and as a benchmark against which to assess overall country and organizational performance.

The first seven goals are mutually reinforcing and directed at reducing poverty in all its forms. The last goal is concerned with establishing partnerships for development to meet the first seven goals. It recognizes the need for inputs from different partners to contribute to this end.

The MDGs give high prominence to health: three of the eight development goals, nine of the 18 targets spread over six of the goals and 18 of the 48 indicators are health-related. Overall, the MDGs propose outcomes relevant to the development of national health policy frameworks and for tracking the performance of health programmes and systems. Although the MDGs do not cover the whole span of public health domains, it was believed that a broad interpretation of the goals provides an opportunity to address important cross-cutting issues and key constraints to health and development.

Progress towards achieving the MDGs is reported annually by WHO, in collaboration with UNICEF and UNAIDS. The trends indicate that despite political consensus and stated commitments of countries throughout the world, the MDGs will not be achieved at current rates of progress.

It appears that only the targets of halving income poverty and halving the proportion of people with access to safe water may be achieved. While this is true in China and India, recent World Bank statistics indicate that sub-Saharan Africa shows trends of worsening HIV/AIDS and hunger. The indicators for reducing child mortality and maternal mortality are not optimistic, especially in southeast Asia and sub-Saharan Africa.

It should perhaps already be noted that some very important health-related problem areas are not covered by the MDGs, including the noncommunicable diseases, human resources, health systems functions and health information systems. In addition, because the MDGs are usually presented as

averages, they may hide the equity health gap between rich and poor, therefore making it possible to "achieve" an MDG irrespective of how the gap evolves.

Table 1 lists the MDGs that include health-related items, although especially goals 4, 5 and 6 are directly connected with health.

Table 1. The Millennium Development Goals with health-related indicators

Millennium Development Goal	Health-related indicators for measuring progress
Goal 1: Eradicate extreme poverty and hunger	Prevalence of underweight children under five years of age
Goal 4: Reduce child mortality	Under-five mortality rate
	Infant mortality rate
	Proportion of 1-year-old children immunized against measles
Goal 5: Improve maternal health	Maternal mortality rate
	Proportion of births attended by skilled health personnel
Goal 6: Combat HIV/AIDS, malaria and other diseases	HIV/AIDS prevalence among young people aged 15 to 24
	Condom use rate of the contraceptive prevalence rate
	Number of children orphaned by HIV/AIDS
	Prevalence and death rates associated with malaria
	Proportion of population in malaria risk areas using effective malaria prevention and treatment measures
	Prevalence and death rates associated with tuberculosis
	Proportion of tuberculosis cases detected and cured under Directly Observed Treatment, Short course (DOTS)
Goal 7: Ensure environmental sustainability	Proportion of population using solid fuels
	Proportion of population with sustainable access to improved water source, urban and rural
	Proportion of urban population with access to improved sanitation
Goal 8: Develop global partnerships for development	Proportion of population with access to affordable essential drugs on a sustainable basis

WHO, 2003

2. Commission on Macroeconomics and Health

With regard to future developments in health and health services, another important step at the start of the new millennium was the launching of the Commission on Macroeconomics and Health in 2000 by Dr. Brundtland, Director-General of WHO from 1998 to 2003. The work of this group is expected to greatly influence the decision-making and development of health services. The group's mandate was to examine the links between health and macroeconomic issues. In its report in December 2001, the

Commission made ten main recommendations that are also relevant to achieving the health-related MDGs:

- Developing countries should begin to map out a path for universal access to essential health services based on epidemiological evidence and the health priorities of the poor. They should also aim to raise domestic budgetary spending on health by an additional 1% of their GNP by 2007, rising to 2% in 2015, and use resources more efficiently.
- Developing countries could establish a National Commission on Macroeconomics and Health or similar mechanism to help identify health priorities and financing mechanisms, consistent with the national macroeconomic framework, to reach the poor with cost-effective health interventions.
- Donor countries should begin to mobilize annual financial commitments to reach the international recommended standard of 0.7% of OECD countries' GNP, in order to help finance the scaling up of essential interventions and increased investment in health research and development and other "global public goods".
- WHO and the World Bank would be charged with coordinating the massive, multi-year scaling up of donor assistance for health and with monitoring donor commitments and funding.
- The WTO Member Governments should ensure adequate safeguards for developing countries, in particular the right of countries that do not produce the relevant pharmaceutical products to invoke compulsory licensing for imports from third-country generic suppliers.
- The international community and agencies such as WHO and the World Bank should strengthen
 their operations. The Global Fund to Fight AIDS, TB and Malaria should have adequate funding
 to support the process of scaling up actions against HIV/AIDS, TB and malaria. A Global Health
 Research Fund was proposed.
- The supply of global public goods should be bolstered through additional financing of agencies such as WHO and the World Bank.
- Private-sector incentives for drug development to combat diseases of the poor must be supported. The Global Fund to Fight AIDS, TB and Malaria and purchasing entities should establish precommitments to purchase targeted new products as a market-based incentive.
- The international pharmaceutical industry, in cooperation with WHO and low-income countries, should ensure that people in low-income countries have access to essential medicines. This should be achieved through commitments to provide essential medicines at the lowest viable commercial price in poor countries and to license to producers the production of generic forms of essential medicines.
- The IMF and the World Bank should work with recipient countries to incorporate the scaling up of health and other poverty-reduction programmes into a viable macroeconomics framework.

According to the Commission's report, much disability and premature death can be prevented. Effective health interventions already exist to either prevent or cure the diseases that take the greatest toll of human lives. But the fact remains that these interventions do not reach the billions of the world's poor. The Commission argued that by taking essential interventions to scale and making them available worldwide, eight million lives could be saved each year by 2010.

To achieve these huge gains in health and economic development, the Commission calls for a major increase in the resources allocated to the health sector over the next few years. About half of the total increase would come from international development assistance, with developing countries providing the other half by reprioritizing their budgets. A few middle-income countries will also require assistance to meet the high costs of HIV/AIDS control.

These efforts will also require concerted action to remove structural constraints and strengthen the capacity of national health systems: to deliver essential interventions, to set priorities in response to health needs, to ensure equity and to work in partnership with other sectors. Ensuring government commitment, transparency, effective governance, donor partnerships and – above all, good stewardship in health services – would require a properly structured health delivery system that can reach the poor.

The Commission stated that creating a close-to-client (CTC) system at health centres, health posts or through outreach facilities is one of the highest priorities for scaling up essential services. The CTC system would operate locally, supported by nationwide programmes for major infectious diseases, and could involve a mix of state and non-state health service providers with financing guaranteed by the state.

The Commission proposed, among other things, that USD 8 billion per year reach the Global Fund to Fight AIDS, TB and Malaria by 2007 from the proposed overall USD 22 billion donor assistance. In its report the Commission estimates that assistance from developed nations should increase from the current levels of about USD 6 billion per year to USD 27 billion by 2007 and to USD 38 billion by 2015. Increased aid for health must be in addition to current aid flows.

The report urges that access to life-saving medicines be increased, that development of new vaccines and medicines be stimulated, that guidance and technical advice be provided to countries on health issues, and that locally relevant evidence-based information be provided to political decision-makers. The report also emphasizes the need to invest in human resources, including leadership development. When the Commission's report is translated into action at the country level, it will be important to study it carefully, to allow for flexibility and avoid creating overly rigid macroeconomic frameworks that may contradict the Commission's recommendations.

3. Primary health care

As indicated at the beginning of this paper, there are considerable differences in how PHC has been understood, defined and – more importantly – applied at country level. This suggests that there is no common blueprint relevant to all PHC experiences around the world. The various models of PHC have only added to the richness of its implementation and experiences.

Originally the basic principles and values of PHC recognized during the Alma-Ata Conference were:

- essential health care based on practical, scientifically sound and socially acceptable methods and technology;
- universal access to and coverage of health services based on health needs;
- commitment, participation and individual and community self-reliance;
- intersectoral action for health;
- cost-effectiveness and appropriate technology, as the available resources permit;
- health service provision and health promotion.

In terms of level of care, PHC was understood as the first point of contact for service users within an organized health care system. Also in this context, closeness to the population as well as a continuing care process were emphasized.

The list continues to be valid. However, according to the WHO global review of PHC, it is clear that it is all of the following:

A. A set of principles. The Declaration of Alma-Ata Declaration proposed that PHC should:

- Reflect and evolve from the economic conditions and sociocultural and political characteristics of
 the country and its communities, and be based on the application of the relevant results of social,
 biomedical and health services research and public health experience.
- Address the main health problems in the community, providing promotion, preventive, curative and rehabilitative services accordingly.
- Involve, in addition to the health sector, all related sectors and aspects of national and community
 development, in particular agriculture, animal husbandry, food, industry, education, housing,
 public works, communications and other sectors; and demand the coordinated efforts of all these
 sectors.
- Require and promote maximum community and individual self-reliance and participation in the
 planning, organization, operation and control of PHC, making fullest use of local, national and
 other available resources, and to this end develop through appropriate education the ability of
 communities to participate.
- Be sustained by integrated, functional and mutually-supported referral systems, leading to the
 progressive improvement of comprehensive health care for all, and giving priority to those most
 in need.
- Rely, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, who are suitably trained socially and technically to work as a health team to respond to the expressed health needs in the community.
- B. A set of core activities that are normally defined nationally or locally. According to the Declaration of Alma Ata, these should include at least:
- Education concerning prevailing health problems and methods of preventing and controlling them
- Promotion of food supply and proper nutrition
- An adequate supply of safe water and basic sanitation
- Maternal and child health care, including family planning
- Immunization against the major infectious diseases
- Prevention and control of locally endemic diseases
- Appropriate treatment of common diseases and injuries
- Provision of essential drugs.

The importance of integration of these elements and activities into a common service system is emphasized instead of separate vertical service lines.

- C. When PHC is considered in the context of WHO's corporate strategy, clear strategic imperatives emerge, which correspond with the policy questions.
- Reduce excess mortality of poor or marginalized populations: PHC must ensure access to health services for the most disadvantaged populations, and focus on interventions that have a direct and disproportionately significant impact on the major causes of mortality, morbidity and disability for those populations.
- Reduce the leading risk factors to human health: PHC, through its disease prevention and health promotion roles, must address known risk factors lying within but mainly outside the health sector that largely determine health outcomes for local populations.

- Develop sustained health systems affordable for the poor: PHC as a component of health systems
 must develop in ways that are financially sustainable, supported by political leaders and supported
 by the populations served.
- Developing an enabling policy and institutional environment: PHC policy must be integrated with other policy domains and play its part in pursuit of wider social, economic, environmental and development policy.
- D. The policy questions that evolve from A, B, and C include at least the following:
- Are the needs and demands of diverse populations that are addressed through PHC sufficiently understood?
- Are the policy and health system responses to those needs and demands providing equity of access and health services that are cost-effective, evidence-based and appropriate to their context?
- Is PHC being developed within an integrated approach to wider health system and community development?

Some issues will now be discussed that require recognition and that, although already present, will create important challenges for PHC in the future.

4. The challenges

Trends in the disease panorama

Health issues and health status continue to change rapidly with new health problems, such as the emergence of HIV/AIDS when noncommunicable diseases were reaching epidemic proportions in developed and developing countries, and chronic conditions now presenting challenges for which most health systems are ill-equipped. Population demographics continue to present new scenarios with substantial increases in birth rates in some countries, declines in others, a much larger world population of the elderly and dramatic changes in life expectancy in countries most affected by HIV/AIDS. In Africa life expectancy (including its infant mortality component) in most severely affected counties has been reduced by almost a third, from 60 years to 43 years. HIV prevalence in adults ranges from below 5% in some countries in North Africa to above 30% in the high-prevalence countries in Southern Africa.

Africa has the highest maternal mortality rate in the world: about 1 in 20 African women die largely preventable deaths from pregnancy and childbirth, compared to 1 in 4000 in Europe. About 50% of African women have their first pregnancy by the age of 19 years.

It was estimated that in the year 2000 about 270 million people of a total of 800 million still lacked access to a safe water supply and about 280 million were without adequate sanitation.

In developing countries communicable diseases of childhood continue to exact a heavy toll; the scourge of gender-based violence and abuse is also of great concern. In addition to and on top of these problems, noncommunicable diseases that have been well known in industrialized countries for decades are a growing cause of both death and disability in developing countries as well, creating a double burden of ill-health. The major noncommunicable diseases, which include cardiovascular diseases, cancer, diabetes, violence, chronic rheumatic and respiratory diseases, and genetic disorders, are often associated with urbanization and changing lifestyles and are posing an increasing challenge to national health systems in many developing countries. It is estimated that such diseases account for almost 40% of deaths in developing countries and 75% in industrialized countries.

Changes in lifestyles are causing great concern globally. As a result of poverty, marginalization and unhealthy lifestyles, inappropriate dietary patterns, consumption of tobacco and alcohol, unsafe sex, environmental pollution and other risks are rapidly increasing. The top 10 of the major preventable risks together account for about 40% of the 56 million deaths that occur worldwide annually and one-third of global loss of healthy life-years. These 10 risks are:

- childhood underweight
- maternal underweight
- unsafe sex
- high blood pressure
- tobacco consumption
- unsafe water, sanitation and hygiene
- iron deficiency
- indoor smoke from solid fuels
- high serum cholesterol
- obesity.

The majority of these risks are related to consumption, and arise either from excessive consumption or from undernutrition. Fighting, controlling and preventing these risk factors will be an enormous challenge to health services, especially PHC, in both developed and developing countries during the years to come. This will require profound changes in attitudes and practices of health care staff. First of all, effective training programmes and capacity building will be needed.

Trends in demographics

Overall improvements in socioeconomic situations, education, diet, sanitation, disease prevention and health care are resulting in increased life expectancy and a general ageing of the population, with the gap in life expectancy between industrialized and developing countries continuing to close. For example, PAHO reports that the population aged 65 or older is growing at a rate of more than 2% a year, and the population aged 85 or older is increasing at 3% to 5% per year. The regional population growth is 1.3% a year. In 2000, the proportion of urban population was 76% of the total 833 million.

But there are also countries in the world where the most significant demographic change is the increasing number of children, who present a different set of health and development problems to be addressed. The three important demographic trends are population growth, urbanization and demographic ageing. As the demographic structure in most developed countries is changing, with anticipated sharp increases in the proportions of elderly people, relative reductions among young people and increased average age by the end of the first quarter of this century can be expected.

The consequences of this trend are widespread. Health care must reckon with an increasing demand and a prevalence of chronic problems. More residential accommodations and nursing homes will be needed, as well as increased community-based medical and nursing care. The reduced proportion of younger people, especially in developed countries, may result in reductions in recruitment to the caring professions and lead to greater dependence on informal carers. Traditional family support is being eroded by social change, creating increases in numbers of people living alone or at a distance from relatives.

Primary care physicians may expect an increased and more diverse workload. This will also require new knowledge and skills and a new orientation towards work. There will need to be compensatory reductions in the number of patients served by each such physician and more delegation to other professional and paramedical staff. Effective teamwork should be developed.

Failure by PHC workers to meet these demands can lead to a movement into the community of alternative care providers, such as hospital-based teams. Also with the rapid progress of technology in medicine, the scope of primary care has increased. A higher standard of care can be achieved at home, while hospital stays following surgery have been reduced. Both these trends result in greater numbers of people with serious illnesses being treated at home.

These changes create challenges that must be accepted and met by high-quality vocational training and continuing education of physicians and other health care professionals. Innovative ways of organizing and delivering PHC will be needed. Together with an increase in chronic diseases and chronic problems that are characteristically noncommunicable, another important area connected with ageing of the population is injuries, especially those occurring at home. To reduce these increasing problem areas, improved and effective health promotion activities should be carried out much earlier and for younger population and patient groups.

Trends in society

Socioeconomic trends such as globalization, industrialization and urbanization are transforming how populations live, regardless of where they live. In addition to the expected demographic changes, Europe, for example, is witnessing greater social changes that affect many established ways of doing things. Increased personal freedom, greater emphasis on and awareness of the rights of the individual, increased mobility, the declining importance of the family unit and higher rates of divorce all have an impact on community-based social networks and have indirect effects on the provision of health care.

Social and cultural changes do not influence only the demand side. In developed countries, physicians are acting more defensively in fear of complaints and because of uncertainty. Primary health care professionals also see themselves as people with rights, in particular, the right for "free time." Young doctors are less willing to commit themselves to positions in the public sector. Free movement of labour across the borders in some parts of the world and open labour markets within countries have implications to health services, as public and private health care sectors compete for the same skilled labour force.

The continuous increase in the numbers and proportions of female doctors; increased demands for services out-of-hours, especially for non-acute care; increased street violence and crime; and threats to health workers' physical safety create challenges to the organization of PHC services. This is especially true for curative services, but is also significantly reflected in other services. The problem of how to attract and retain competent staff is a growing dilemma of the public health sector in many areas.

All these phenomena point out the importance of research in primary health care and of incentives to motivate PHC professionals to undertake such research. Up to now there have been few motivating incentives present in PHC in most health systems; attitudes towards research thus are not very positive among PHC staff and employers. This fact contributes towards undermining PHC's scientific credibility.

From a development perspective, poverty and overall inequalities have increased worldwide, making PHC and health for all even more relevant today. Together with the MDGs they can be more effective means for contributing to improving the health outcomes of the poor, and by doing so, contribute to reducing poverty and inequalities. The human rights and health perspective can support more inclusive and participatory approaches to health development as originally conceived in Alma-Ata.

It has been pointed out that most developed countries and increasing numbers of developing countries now face an epidemic caused by changes in lifestyles that is causing great concern worldwide. This manifests itself as an increasing and excessive prevalence of obesity and other important risk factors in the population. This phenomenon has been connected with "sick consumption" in a society where fatty, sugary and salty foods are easily available and where regular physical exercise and activity are declining. Alarmingly, the *World health report 2002* shows that risk factors that lead to both communicable and noncommunicable diseases are on the rise, particularly in the poorest countries and communities of the world. These risk factors are not yet under control and will continue to cause avoidable deaths. Effective measures and human resources will be needed to stop and turn this trend.

5. Common problems and important future issues

The weaknesses in PHC in 2003 look very similar to those in the late 1980s:

- weaknesses of national health systems, with respect to policy analysis and formulation, coordination and regulation
- weak managerial capabilities at all levels of care that have hindered the effective and efficient implementation of health programmes
- inequitable and insufficient resource allocation, with limited resources for promotional and preventive activities and programmes
- poor organization and management of health services at all levels and ineffective referral systems
- inappropriate human resources policies and planning, leading to imbalances between the number of health professionals in different disciplines and categories and to inequitable geographical distribution
- unsatisfactory working conditions of health workers: low salaries, poor living conditions and inadequate career structures
- inappropriate use of medical technology leading to escalating cost of health care services
- limited intersectoral cooperation for health development
- weakness of health information systems at central and peripheral levels, resulting in difficulties in collecting and using information to measure performance and make decisions
- a limited quality culture and limited use of clinical audit, review and evidence-based practice.

Some other frequently identified problem areas in PHC practice include:

- setting objectives and measuring achievement
- vagueness of roles
- preventive care and health promotion
- organizational and managerial skills
- integration of various activities, teamwork skills and attitudes towards teamwork
- quality of care and the assessment of one's performance
- research and development, social participation and coordination between PHC and specialized hospital care.

The global review of primary health care also led to the conclusion that dependence on international resources often results in the donors' influencing and conflicting with national policy-making bodies in ways that are not always helpful to the receiving nations. And a failure in implementation of PHC may be due to lack of practical guidance, poor leadership and insufficient political commitment, inadequate resources and unrealistic expectations.

6. Discussion

Both the MDGs and the *Report of the Commission on Macroeconomics and Health* assume and recommend extensive new financial inputs to health care. If these recommendations and expressed funding targets materialize, development will be greatly facilitated.

The Global Fund to Fight AIDS, TB and Malaria already exists and the first funding round in April 2002 disbursed USD 616 million to 40 countries. The Global Alliance for Vaccines and Immunization awards performance-based grants giving special attention to ensuring that the health systems receiving the resources are performing adequately. More than 30 million vaccine doses have already been delivered to 27 countries and funds transferred to national immunization programmes in 34 countries. The Commission on Macroeconomics and Health in its report proposed a new Global Health Research Fund to support basic, biomedical and applied sciences research on health problems of the poor and on health policies and systems required to address them. The suggested annual budget was USD 1.5 billion.

Certainly the influence of these activities and recommendations will be shown in the decision-making made by donor countries concerning their development aid. How this assistance is directed will be an interesting and important issue, as perhaps donor assistance targets may be based on the MDG targets. But a crucial issue for success would be how developing countries ensure, vis-à-vis these global initiatives, the necessary country leadership, harmonization and alignment with nationally defined priorities and policies.

The three health-related MDGs are either disease-specific or they specify a rather narrow target problem area. They give an impression of vertical programmes directed to specific population groups and specific diseases, whereas the ideology and implementation of PHC emphasizes universal access and coverage, its role as the site of first contact, coordination and integration of services and programmes.

This issue will need careful guidance by international organizations, especially WHO. It seems to be sensitive and confusing, as a recent analysis of the MDGs by Gwatkin indicates: he concluded that it cannot be taken for granted that the poor will benefit from faster progress towards the MDG health targets, as it appeared probable that some scenario notably less favourable to the poor than to the better-off would emerge in the natural course of events. According to Gwatkin, this argues that greater efforts to reach the poor will be required if they are to benefit significantly from overall improvements resulting from current efforts directed toward MDG target attainment. On the other hand, it is unrealistic to expect attainment of the MDGs without organized PHC. A proper way must be found through which these two apparently contradictory approaches support and supplement each other.

As shown earlier in this paper, PHC will need strengthening in both the developing and developed world in order to be able to meet the challenges set by the MDGs, the rapidly changing environment, the changing disease panorama, changes in society, ageing populations, urbanization, poverty, inequity and unhealthy lifestyles.

The MDGs fail to cover the important issue of preventable risks and chronic noncommunicable diseases that are rapidly transforming the required patterns of work in PHC and setting new requirements for knowledge and skills of doctors and other PHC professionals. Organizations

delivering PHC services will need to improve and increase their ability to adapt and respond to these changes.

A crucial issue in this context will be to find ways through which the vertical programmes that could be negatively envisaged by the MDGs could be used to strengthen PHC in developing countries. The programmes connected with the attainment of the MDGs and PHC should support each other to be effective. In addition to increasing the effectiveness of the delivery of services there are important areas to be developed, such as the strengthening of the public health function in local PHC settings in order to ensure adequate local public health surveillance and to reinforce health promotion and disease prevention interventions as well as the identification and management of local health inequalities.

Another important issue will be the specific targets associated with each MDG. Possibly donor countries will tie their assistance to these targets in recipient countries. The problem would be similar to that of vertical programmes and should be avoided as much as possible.

The issue of chronic noncommunicable diseases and the effect of unhealthy lifestyles in the form of the rapid increase in the prevalence of life-threatening preventable risks – which are not in good control even in the most developed countries – is very serious. This epidemic is a threat in both developing and developed countries and will form an extremely challenging task to PHC, which will have the greatest responsibility for meeting this challenge.

Irrespective of the stage of development of PHC, vertical programmes require strong central management to be effective. The failure to develop basic local PHC infrastructure can diminish the impact and cost-effectiveness of vertical programmes. Thus the investment made in vertical programmes can be seen as an opportunity for wider infrastructure development and surveillance improvement. It would be essential to recognize the potential for synergy between the vertical-programme approach and the development of PHC infrastructure. As this may be very difficult, the better option would be to advocate a lucid and strong stewardship function nationally and worldwide in order to avoid vertical programmes altogether.

Also connected with the MDGs are such crucial issues as access to medicines, the reduction of tobacco consumption in the world and healthier food products, but as these must be solved primarily outside health care in national agreements, agreements within the WTO, agreements within the pharmaceutical industry, international food industry, and international organizations, they will not be discussed here.

As for the strengthening of PHC, the issues of ideology and philosophy have been dealt with for the last 25 years. The focus now should be on implementation. It will be the key to progress and to meeting the big challenges described.

The list of observed problems and weaknesses in the implementation of PHC is long and has been largely unchanged for the entire 25-year period. In this, PHC has been studied as a part of health services. The identified problems should be seen as opportunities for improvement and the important issue for discussion will be how to effectively solve them. In this context, an issue that has not been included among the problems but that in the past has had a negative impact on the development of PHC should be taken up: this is the issue of rigidity of traditional public policy and conflicting political/economic interests in societies. It will be crucially important to address and overcome this problem area.

Financing

Governments, local authorities and communities should be prepared to invest more in better health services everywhere. For PHC to be effective, well-functioning and competitive, sound, sustained and

equitable financial input will be needed. PHC suffers from being regarded as a cheap service for poor rural people delivered by second-rate staff. Instead it should be seen as essential health services of high quality – promotive, preventive and curative – benefiting the entire population.

The rapid changes in the environment have caused a need to strengthen PHC everywhere. For this, adequate funding will be needed. This is a strong recommendation of the Commission on Macroeconomics and Health. Adequate funding will make it possible to develop infrastructure, improve and extend services and compete for skilled personnel. New methods of complementary funding should be identified and tested. Community health funds, mutual health organizations and revolving drug funds are examples of innovative initiatives to improve coverage. Both the integration of the attainment of the MDGs and PHC as well as the realization of the recommendations of the Commission on Macroeconomics and Health will open fundamental new possibilities in the implementation, improvement and strengthening of PHC.

Human resources and their development

The current and past problem lists have often focused on the knowledge and skills of PHC personnel. The personnel working in specialized hospitals have not been under similar scrutiny. But the people working in PHC organizations are the most important resource of these organizations. They should be well managed in order to be motivated and effective in their important work. The basic questions to be considered in any organization concerning the staff are: Are they appropriate to the objectives? How are they used? How competent are they?

As stated, the problems have remained very much the same for 25 years. This emphasizes the importance of the development of human resources for health. Opportunities for improvement are numerous and effective methods are available, but the challenges facing PHC are massive; the development of human resources for health is not a simple operation. Much intensive work is needed and adequate financing is crucial. The emphasis on changes in the basic training of health professionals that has persisted for the last 25 years is certainly good, but that process is very slow if the MDGs are to be attained by 2015.

The focus should be on postgraduate education and continuing education in which the results will be seen much faster. And the participants are different: in both postgraduate and continuing medical education, the participants seek the training on their own initiative, have already practical experience and are motivated to learn more. The duration of training in both cases is also much shorter than in undergraduate education. In recent years important evaluations of continuing medical education have been conducted, which have shown the ineffectiveness of traditional continuing medical education. New tested and effective methods should be employed. Capacity building in PHC will be extremely important in the years to come. Berwick has stated that improvement comes from knowledge, but improvement requires cooperation among disciplines.

For the attainment of the MDGs but also for the effective implementation of PHC everywhere, it will be crucial to keep PHC workers highly motivated and self-reliant in order to guarantee their commitment and positive attitudes towards their work and consumers. As the environment is changing, and as the values and attitudes of young people – young doctors and nurses included – are also changing, it will be important to pay attention to the ability of PHC to attract and retain competent staff.

Organization

Innovative experiments will be needed in the development of PHC organizations. There can be no standardized solution or model, but there are ample opportunities to learn from experience elsewhere. This learning will be facilitated by the use of the possibilities of modern communication and

information technology, which is spreading fast. For many reasons already touched upon, PHC organizations must be able to adapt and to respond quickly to changes in the environment, which they must monitor carefully so as to act appropriately when necessary. To act appropriately may require innovative changes in the current or traditional organizational structure and the way services are delivered. New models of the work of doctors and other PHC professionals may be needed, which may require increased accountability and development of methods of contracting and commissioning. Based on their analyses, the Commission on Macroeconomics and Health recommends that the most effective interventions can be delivered through health centres and similar facilities and through outreach, which they collectively describe as "close to client" (CTC) systems. This can be seen as an endorsement of PHC principles and practice. All these efforts to improve and increase service quality and effectiveness in terms of improved health outcomes will need adequate funding.

Performance

One of the most important reasons for the repeated appearance of the same problems is the striking lack of research activity in PHC. Through analysing the work, many of the problems could be identified and solved.

It will be of utmost importance to start measuring performance in PHC at the local level, as this will immediately direct attention to the objectives and contents of the work. An important incentive from the point of view of the development of PHC could be encouragement for research and a merit system that would reward this activity.

Development of local research and performance measurement in PHC has great potential for the development of the work. It will also facilitate attainment of the MDGs in the time limits envisioned.

The report of the Commission on Macroeconomics and Health recommends considerable increases in operational research at country level in conjunction with the scaling up of health interventions equal to at least 5% of national programme funding. The important issue in this respect for the development of PHC services and for staff development is the recommendation for expanded availability of scientific information on the Internet, with efforts to increase connectivity of universities and research sites in poor countries. Everywhere access to current evidence about effectiveness of PHC models and interventions is a key issue.

Another important facilitating issue would be the development of collaborative research and development between university departments of PHC and service organizations. This will require funding but it will facilitate supervision, mentoring, relevance of research methodology and tailored training for PHC staff.

Ownership of the MDG targets must also be addressed, not only by governments but also by civil society and health care providers. To achieve the MDGs requires integrated approaches to service delivery. This means that not only must there be increased allocation of funds to identified priorities, but service planning and delivery must also be strengthened if priorities are to be met. In many countries, this means strengthening PHC and the health system as a whole. Although there have been significant improvements from the extension of specific vertical programmes, it will not be possible to ignore the need to strengthen health care systems to cope with the massive new challenges described.

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