

## **Research programme Global Health Systems and Health Policy Research**

### **Global health: today's challenges**

In the past 50 years there have been marked improvements in global health, and life expectancy at birth has increased by almost 20 years in this period. However, at the same time there is disturbing evidence of widening gaps in health worldwide as, particularly in sub-Saharan Africa, the price of continuing poverty and conflict can be seen in stagnating and even deteriorating health indicators. Overall, 35% of African children are at higher risk of death than they were 15 years ago. The main causes are depressingly recognizable: the perinatal conditions closely associated with poverty; malnutrition; diarrhoeal diseases; pneumonia and other respiratory tract diseases; and malaria. Those who make it past childhood are confronted with adult death rates that exceed those of 35 years ago. Life expectancy, always shorter here than almost anywhere else, is shrinking. In some African countries, it has been cut by 20 years mostly as a result of the HIV/Aids pandemic, which is now the world's leading cause of death in adults aged 15-59 years. In addition, for women of reproductive age, complications during pregnancy and childbirth still lead to unacceptably high maternal mortality ratios and disability. Simultaneously, an increase in mortality due to non-communicable diseases such as cardio-vascular diseases and cancers is occurring for men and women, adding to the daunting challenges already facing many low-income countries (LICs), the so-called double disease burden. Not also between countries, but also within countries health inequities between poor and rich populations, between urban and rural populations are persisting and have even been growing. This phenomenon is occurring in many countries worldwide, albeit at different levels and with different magnitude.

There is a growing recognition that health is central to the global agenda of reducing poverty as well as an important measure of human well-being. The WHO Commission on Macroeconomics and Health (CMH) made a strong case for investment in health, and health is at the heart of the United Nations Millennium Development Goals (MDGs), adopted in 2000. Health is represented in three of the eight goals: MDG 4 on reduction of child mortality, MDG 5 on improving maternal health and MDG 6 on combating HIV/Aids, tuberculosis and malaria. Importantly, these goals focus on problems which disproportionately affect the poor. In addition, health makes an acknowledged contribution to the achievement of the other MDGs, in particular those related to the eradication of extreme poverty and hunger, education, environmental sustainability (water and sanitation) and gender equality.

Halfway to the benchmark year of 2015 there now are serious concerns about the rate of progress towards these goals and even doubts about their ultimate attainability. Several reports and initiatives identify a common cause: progress is greatly hampered by weak, poorly functioning or in some cases non-existent health systems. While many of the necessary medical techniques and procedures are known, health system barriers are the principle barriers to scaling-up of critical health services and to achieving public health goals. For example, were it possible to ensure that all pregnant women accessed and complied with effective antenatal care and delivery services, then maternal mortality would fall sharply.

In conclusion, the grand challenge in the field of global health is to establish equitable, accessible and quality health systems that are able to provide cost-effective health promotion, disease prevention, curative and rehabilitative services responsive to real health needs. These health systems should be tailor-made for local circumstances and at the same time be flexible to external influences.

### **Health system barriers and strengthening health systems**

WHO defines a health system as encompassing all the organizations, institutions and resources that are devoted to producing health actions whose primary intent is to improve health. The universal objectives of a health system are to improve population health and to prevent and control disease, while also responding to people's expectations and offering financial protection.

The most concrete manifestation of the health system is usually the pyramid of government funded health facilities in a country. While this is clearly one aspect of the health system, health systems also comprise public health laws and regulations, financing mechanisms such as social health insurance and user fee schemes, the actions taken by households and communities to promote health, and of course the often substantial private health sector composed of both formal and informal providers.

The WHO "Framework for Action" (2007) on health systems further identifies six building blocks of health systems:

- *Service delivery* – addressing how services are organized and managed, to ensure access, quality, safety and continuity of care across health conditions, across health facilities and over time.
- *Information and evidence* – the generation and strategic use of information, evidence and research on health and health systems in order to strengthen management, leadership and performance.
- *Medical products and technologies* – ensuring equitable access to essential medical products and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.
- *Health workforce* – managing dynamic labour markets, to address entry into and exits from the health workforce and improve the distribution and performance of existing health workers.
- *Health financing* – raising adequate funds for health in ways that ensure people can use needed services and are protected from financial catastrophe or impoverishment associated with having to pay for them.
- *Leadership and governance* – ensuring that strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to health-system design issues and promotion of accountability in order to protect the public interest in health.

WHO identifies three "grand challenges" that must be tackled across these building blocks in order to improve the performance of health systems: 1) ensuring that safe, proven, and affordable interventions reach those in need; 2) improving the distribution of health services and ensuring that achieving the MDG targets does not widen the equity gap; and 3) protection and safety in relation to the quality and cost of receiving care.

Health systems strengthening interventions are those that address barriers and constraints at different levels of the health system. At the central level, a common barrier is low priority for health as measured by a low proportion of GDP spent on health. Within central Ministries of Health, inadequate health worker salaries or constraints linked to inflexible administrative structures can prevent the retention and motivation of qualified staff. Among regional or local health management, resource barriers such as irregular cash flow or shortages of qualified staff weaken the performance of the health system. At the facility level, health workers might not know clinical guidelines or simply fail to put them into practice because of perverse incentives within the organisational or financing system. Households might not routinely seek preventive care because they do not see its value or low quality services prevent them from seeking care. They might also utilize practitioners that do not adhere to minimum standards.

In summary, there are multiple systemic barriers that prevent health systems worldwide from reaching their goals and potential. In most African countries these barriers are particularly grave, among which very low levels of financial, infrastructural, human and material resources, and historically weak governance and accountability structures. At the same time there is large potential for improvement as the continent has the highest external resource flows, and there are numerous local and (inter)national health system development initiatives aiming to strengthen health systems and collaboration. Unfortunately, remarkably little is known about how best to address health system constraints through effective and efficient interventions. The key questions concern how best to approach strengthening, and

what specific types of action or reforms are appropriate to specific types of settings. Health policy and systems research can help to provide answers.

### **The domain of health policy and health systems research**

*Health policy and systems research* is defined broadly as the production of new knowledge to improve how societies organize themselves to achieve health goals. The prime focus of health policy and systems research is the health system as a whole, and *health systems research* addresses any or several of the six building blocks of health systems with the ultimate objective to promote the coverage, quality, efficiency and equity of health systems. *Health policy* research is concerned with understanding how different actors interact in the policy process to contribute to policy outcomes.

Health policy and system research can sometimes adopt a disease or service-specific focus as sometimes specific diseases or services can, alone, raise major challenges for the health system. For example, several health systems research studies have addressed the scaling up of antiretroviral therapy which entails significant health system demands.

Another complementary approach to understanding the field of health policy and health systems research is to consider the unit of analysis. Health policy and systems research focuses primarily upon the more downstream aspects of health: it focuses upon policies, organizations and programs, and needs to take into account countries' political and social structures, and the heterogeneity of health system structures. Health policy and health systems research does not address basic human biology, medical/clinical - or pharmaceutical research.

### **Global health policy and health systems research: the international context**

The past 15 years have seen new international scientific collaboration initiatives and increased political commitment in health policy and health systems research, which is triggered by the increasing realization that without adequate health and research systems it is impossible to achieve sustainable improvements in health. Among the most important international initiatives are the Council on Health Research and Development (COHRED), the Global Forum for Health Research (GFHR) and the Alliance for Health Policy and Systems Research. A common concern of these initiatives is the need to strengthen health research and research capacities in LICs, with particular emphasis on Africa. This is urgent due to the so-called "10-90" gap, which acknowledges that only a marginal proportion of scientific research is addressed to the health conditions of a large majority of people and countries.

At the political level, the Ministerial Summit in Mexico in 2004 discussed the critical role of knowledge in strengthening health systems. The Ministers of Health stressed in the *Mexico Statement on Health Research* that strong national health systems are needed to deliver health care interventions, amongst others to achieve the health-related MDGs, and to improve health and health equity in general. They also acknowledged that "research has a crucial but under-recognized part to play in strengthening health systems, improving the equitable distribution of high quality health services, and advancing human development". The World Health Assembly adopted the Ministerial Statement as resolution WHA 58.34, in 2005 and recommended an international programme on health systems research and a search for more effective mechanisms to bridge the production and use of knowledge (the "know-do-gap").

At the Mexico Summit, the WHO convened Task Force on Health Systems Research identified 12 broad topic areas as priorities for primary research and systematic reviews, summarized under 4 main headings. These are: 1) *Financial and human resources*: community-based financing and national health insurance, and human resources for health at the district and national levels; 2) *Organization and delivery of health services*: community involvement, equitable, effective, and efficient health care, approaches to the organization of health services, and drug and diagnostic policies; 3) *Governance, stewardship, and knowledge management*: governance and accountability, health information systems,

priority setting and evidence-informed policy-making, effective approaches for intersectoral engagement in health; and 4) *Global influences*: effect of global initiatives and policies (including trade, donors, international agencies) on health systems. The Global Ministerial Forum for Research for Health will be convened again in 2008 in Bamako – Mali, and will be oriented towards the need for health research to be more closely linked with ongoing developments in science, technology and innovation, with research on social determinants of health, and with the broader research community. Particular attention will be paid to strengthening the research capacity in Africa.

### **Global health policy and health systems research: the Dutch policy agenda**

The Dutch contribution to global health is strongly related to the MDG agenda. In 2007, the "*Cabinet Agenda 2015: realization of the MDGs*" called for increased governmental and societal efforts to foster progress towards achieving the MDGs and to stimulate *pro-poor* growth. The Cabinet commits to increasing the scope (up-scaling) and effectiveness of interventions aiming to reduce maternal and child deaths (MDGs 4 and 5), and to better aligning of horizontal and vertical initiatives with a priority to strengthening health systems as a whole - public, private and civil initiatives – (MDG 6). In the subsequent 2007 policy memorandum "*Our Common Concern: investing in development in a changing world*" the Dutch government is opting for a more politically oriented development aid focused on equity and better accessibility to essential services, including health care. In this policy letter, the government announces greater emphasis on growth and equity, which includes attention to cash transfer to the poor populations and strengthening health insurance initiatives, increased policy focus on the problems of MDG achievement in fragile states, and special attention to equal rights and opportunities for women, and sexual and reproductive health and rights (MDG 3 & 5).

Policy guidance on global health policy and health systems research is formulated by the Dutch Organization for Scientific Research (NWO) / 'Science for Global Development' (WOTRO), in close consultation with the stake-holder community in the Netherlands and overseas. In line with the global agenda, the "*Science for International Development. WOTRO 2007-2010 Strategy Plan*" encourages the enhancement of international (North-South) research partnerships to strengthen the local scientific capacity. In addition, WOTRO aims to re-focus the Dutch scientific community on the MDG-related problems. This is relevant as the health systems research capacity in the Netherlands has an excellent international scientific reputation, but it is rather scattered and mainly employed towards health systems problems in the Netherlands. The strategy also identifies global health and health systems as one of the 4 focus themes, where WOTRO encourages studies aimed at improving the quality of health systems of LICs. Three perspectives are mentioned as a guidance for health policy and health systems research.

- *Innovative approaches to improve access*

While extensive research has been conducted to describe social, cultural and economic barriers to and constraints on the effectiveness of health strategies, this has not led to sufficiently improved access to or performance of health systems. Therefore, research should move beyond description to analysis and intervention. WOTRO wishes to stimulate research that builds on existing knowledge, and leads to innovative approaches to improve the quality of health services as well as access to them.

- *Innovative and applicable tools and assets*

The sustainable implementation of health programmes may also call for new or adjusted tools. Interventions exist for most health problems, including those that especially burden developing countries. But for some there still is a lack of affordable, culturally acceptable and safely applicable interventions, strategies, diagnostics or other assets. WOTRO pays special attention to the application of these approaches in finding solutions to health problems that specifically affect LICs.

- *Global context*

Global processes, policies and strategies are increasingly influencing national health systems in LICs. This means that health improvements in LICs cannot be achieved without understanding the relationship

between global policies and national or regional policies, between traditional and western health care, and between public and private health care systems. WOTRO considers research addressing these relationships important.

## **Research Program**

The trends and domain described, combined with the international and Dutch agenda on global health policy and health systems research, are translated into the following three goals for the research programme, which are to:

- support to better health by conducting research aiming to strengthening health systems in LICs;
- support to strengthening the research capacity in LICs;
- support to strengthening collaboration in the Dutch research and knowledge community in order to enhance utilization of the Dutch research capacity in LICs.

The research program gives priority to health policy and health systems research which demonstrates how health systems can be improved, and practically how improved health systems can contribute to reaching the MDGs. Given the potentially large impact on poverty reduction and health-related MDGs, special attention in the research deserves the target group of women of reproductive age, in particular the sexual and reproductive health and rights of women and girls in relation to access to functional health services. Geographic priority is given to Africa, although not restricted to.

The *central strategic challenge* of the research programme is contributing to enhancing equitable access to health in quality health systems. This includes the following inter-linked and mutually dependent key themes, which are:

1. Organization and delivery of essential and quality health services
2. Financial and human resources
3. Governance and decision-making
4. Global influences and their impact on national health systems.

## **Strategic research theme: equitable access to quality health systems**

There is a long history of concern about the degree to which health systems meet the needs of different social groups. At the international level this concern was expressed in the “primary health care” concept formulated in Alma Ata (1978) and more particularly in its subsequent “health for all” strategy adopted by the World Health Assembly in 1981. A number of LICs have achieved substantial health improvements by ensuring that people have access to affordable and effective basic health services, but interest in this issue waned for a time. Nowadays, equitable access has revived to the top of the international development agenda with the return of poverty reduction and the global recognition that health systems in many countries, particularly in LICs, are far from achieving reasonable levels of access to essential health care. Basic health services intended for and traditionally believed to be reaching the poor are in fact not doing so, which suggests that inequitable access produces systematic differences between population groups in the use, experience and outcomes of health care.

The importance of research to enhance equitable access is highlighted by the most recent Global Forum on Health Research, convened in Beijing in November 2007: *'Equitable access: research challenges for health in developing countries'*. Research into equitable access can, in an integrated way, identify the presence of major health disparities, help to create understanding of the underlying causes and provide potential solutions to be tested, verified and scaled up. Unfortunately, there has been little systematic empirical work directed to the measurement of improving equitable access to services, and to the evaluation of policies aimed at promoting equitable access. Studies claiming to evaluate access are usually conducted in high-income countries and are focusing often on utilization rather than on access or (any of) its dimensions: availability, affordability and acceptability.

The research challenge is to show how the extensive knowledge on effective tools and efficient organization for prevention, management and control of disease can be integrated and synthesized into the societal goal of comprehensive and essential quality health services that are addressing the major health problems and that are accessible to all, which inherently means raising the accessibility of poor and vulnerable groups. Related to the target group of women of reproductive age, the research challenge is to illuminate how expanding access to sexual and reproductive health services (incl. information) contributes to reducing poverty and improving equitable growth, and how this can be achieved.

### **Key theme 1: organization and delivery of essential and quality health services**

In most countries, achieving the health-related MDGs will require a dramatic expansion in the delivery and coverage of essential and quality health services, which includes: public health, health promotion and (population-based) prevention programmes and services, and appropriate physical and mental care, cure and rehabilitation for the local population. The obstacles to increasing coverage of essential and quality health care are fairly well known and exist at all levels. What remains missing from the evidence base is the knowledge on how to make interventions aimed at improving coverage and accessibility to essential health services work in practice. There is a very weak research and evidence-base about what strategies, approaches, performance incentives, organizational changes and institutional arrangements work and what do not work, particularly in LICs, and in which way the community can be involved and healthy behaviour be promoted. The consequence is that policy-makers and managers are often unable to make informed choices.

The research challenge here is to show in which way essential and quality health services identified in the local context, for example through clinical and organizational audits, can achieve higher coverage and accessibility through effective and efficient implementation, and how this will benefit the general population and different societal groups, most notably the poor, women, children, people in remote areas and slum dwellers.

### **Key theme 2: financial and human resources**

#### *Sustainable and equitable financing*

Current health system funding is grossly inadequate to strengthen health systems: most governments do not allocate an adequate portion of government spending to their health systems and donor funds in developing countries are often erratic, disorganized and opaque (*Mexico report, 2004*). However, the disadvantages of a financing system based largely on out-of-pocket payments are well-known, as there is growing evidence that some households (even middle-income ones) slide into poverty when faced with health care payments, especially when combined with the loss of income due to ill-health. In addition, illness-related costs diminish the likelihood that already-poor families will be able to move out of poverty. Mitigation of the income-erosion effect of illness is thus an essential pre-requisite for alleviation of poverty, especially for the poorest households in low-income countries.

Under these circumstances it is necessary for policy- and decision-makers to redefine what sustainable financing means, and how this can be strengthened. Important choices will need to be made in relation to, for example, the desired balance of public, private (incl. out-of-pocket) and other financial sources, the design and organization (public, private, civil) of pre-financing mechanisms in relation to risk protection and risk pooling, and strategies to measure and increase the efficiency and equity of current expenditures. Different types of intervention are suggested for meeting the health care needs of the poor and for contributing to achieve the MDGs such as: universal coverage, cash transfers, voucher systems, exemption, community-based insurance, and other strategies such as contracting out services to the private or NGO sector. Integrated models of health insurance and social protection measures combined with economic resources and capability development typical of microcredit programmes are also being tested. However, there is little evidence of the impact of these interventions on accessibility, quality and

utilization of health services, as well as on promoting equity and the health of the poor. Additional research is needed in this area, which should support to designing evidence-informed program set-up involving, among others, in-depth studies of the many barriers faced by the poorest households, under different schemes, when they need medical care.

In addition, there is a large gap between plans and implementation. Financial barriers are key, as existing evidence indicates that providing health services for the poorest is more expensive than the average cost in any population due to a number of reasons such as the cost of targeting, varied service needs and acceptable quality of care to attract people for service use. Poor planning and implementation capacities, as well as vulnerability to external risks, are other important constraints. There is a role for intervention research to test innovative approaches – among which effective risk mitigation strategies – aiming to improve the coverage, quality and the impact of those schemes.

#### *Adequate human resources*

Human resources for health are central to delivering and managing health services, and for achieving health gains and the MDGs. Yet human resources are in crisis in many LICs, particularly across Africa. Three major forces are mainly responsible for this situation: HIV/Aids; accelerating migration of doctors and nurses from countries already suffering chronic labour shortages; and the legacy of chronic under-investment in human resources. Evidence indicates that human resource management is seen as essential to mitigate the impact of these forces and thus strengthen health system performance. Despite, little understanding exists on a number of important factors related to the functioning of labour markets in health care and human resource management. Research is needed to develop, monitor and evaluate evidence-based human resource interventions aimed at improving working conditions in LICs, and at developing and retaining an effective and quality workforce to deliver health services at the local, district and country levels.

#### **Key theme 3: governance, stewardship and decision-making**

For many countries the governance and stewardship will be a key factor in balancing sustainability against short-term crises. Response to this challenge in LICs will likely shape the equity and efficiency of health care systems for decades to come, and will thus contribute to MDG-achievement. However, research has suggested that weak governance and poor accountability are surprisingly widespread in the health sector. In many countries this seriously undermines the performance of health systems. One of the most important constraints is the crippling effect of corruption and power imbalances on health sector performance, as this affects mostly the weak health systems in LICs and hits the poor population hardest. Other main related barriers and constraints facing health systems worldwide are, for example, poor priority-setting and policy-making, poor monitoring, auditing and information systems, weak education and research structures, and the availability and use of un-safe therapies and medicaments.

Health policy and health systems research can play an important role in supporting policy- and decision-makers to design and implement effective and efficient health system governance and accountability structures by analysing the way in which the health system is legally and practically organized (incl. public-private mix) and guided by the most important agencies (stewardship), how different health-sector entities are governed, which types of accountability (financial, performance and democratic) are applied in the health system, and which types of strategies and best-practices may best be employed to improve governance and accountability. By so doing, the research challenge is to determine the impact of these governance and accountability structures on the accessibility, utilization, quality and safety of local health services in both public and private sectors, and to practically show how the application of better governance and accountability mechanisms can promote intersectoral and community engagement in health and improve the overall health system's performance.

#### **Key theme 4: global influences and their impact on local health systems**

Achieving good health has become an accepted international goal, and this goal increasingly depends on the process of globalization: as the geographic scale of important communicable and non-communicable health issues increases, countries and their health systems are progressively dependent on each other in establishing good health and reaching the MDGs. Global factors are also increasingly impinging on national health policies and systems. Among the most important factors are: 1) the policies of international health agencies and banks, large donors and international programs such as the Global Fund; and 2) international trade agreements, trade relations and the role of the industry.

In relation to the first factor, the research challenge is to contribute to understanding the impact of funders' policies, large international programs and health sector development projects on country-level health systems, in terms of agenda- and priority-setting, resource planning and utilization, and how horizontal and vertical programming by donors and local governments can be deployed best at country level to improve health and create sustainable health systems.

In relation to the second factor, the impact of trade relations & trade agreements on health systems needs further research, particularly where it relates to trade in drugs and trade in health services. In addition, the role of the health industry in the sponsorship of research, continuing medical education activities, and its marketing and advertising programmes in LICs will need to be assessed. The research challenge is to show how trade agreements and the role of the industry influence accessibility, quality and utilization of health services and products, and which strategies can be implemented to create win-win situations by making best use of the capacities and resources of commercial firms while addressing the obvious negative effects.

## Literature

Cabinet agenda 2015: realising the millenium development goals. Dutch Ministry of Foreign Affairs. The Hague, June 2007.

Global forum update on research for health volume 3: combating disease and promoting health. Global Forum for Health Research. Geneva, 2006.

Global forum update on research for health volume 4: equitable access: research challenges for health in developing countries. Global Forum for Health Research. Geneva, 2007.

Health and the millenium development goals. WHO. Geneva, 2007.

Health system strengthening interventions: Making the case for impact evaluation. Alliance for Health Policy and Systems Research, briefing note 2. Geneva, June 2007.

Our common concern, investing in development in a changing world: policy letter to the House of Representatives. Ministry of Foreign Affairs of the Netherlands. The Hague, 16 October 2007.

Population health through health systems strengthening – the domain of international health policy and health systems research – round table consensus. Temporary Expert Working Group of Dutch Universities & Knowledge Institutes, Civil Society Agencies, and Ministries. The Hague, May 2007 (unpublished document).

Report from the ministerial summit on health research 2004: identify challenges, inform actions, correct inequities. WHO, 2004.

Science for international development. WOTRO 2007-2010 strategy plan. Netherlands Organisation for Scientific Research. The Hague, June 2006.

Strengthening health systems: the role and promise of policy and systems research. Alliance for Health Policy and Systems Research. Geneva, 2004.

The millenium development goals will not be attained without new research addressing health system constraints to delivering effective interventions. Report of the Task Force on Health Systems Research. WHO, March 2005.

What is health policy and systems research and why does it matter? Alliance for Health Policy and Systems Research; Briefing note 1. Geneva, June 2007.

World health report 2003 – shaping the future. WHO. Geneva, 2003.

World health report 2007 – a safer future. WHO. Geneva, 2007.

