



MIP/2003/3

WORLD HEALTH ORGANIZATION

MEETING OF INTERESTED PARTIES

GENEVA, 3 TO 7 NOVEMBER 2003

Issues papers

The MIP 2003 agenda has been structured on a number of cross-cutting themes that encompass the work of the Organization.

Each issues paper considers a topic within a given theme; a brief background is followed by points for discussion.

**CROSS-CUTTING THEMES AND TOPICS ARISING
WITHIN THE WORK OF WHO**

	Theme	Topic
1.1	Public health as a global responsibility	Global health security
1.2	Public health as a global responsibility	Capacity strengthening for surveillance and response
1.3	Public health as a global responsibility	Food safety
1.4	Public health as a global responsibility	Diet and physical activity
2.1	Millennium Development Goals	Reduce child mortality (Goal 4)
2.2	Millennium Development Goals	Improve maternal health (Goal 5)
2.3	Millennium Development Goals	Combat HIV/AIDS, malaria and other diseases (Goal 6)
2.4	Millennium Development Goals	Ensure environmental sustainability (Goal 7)
3.1	Focusing on countries	Challenges of health systems and structures
3.2	Focusing on countries	Access to essential medicines
3.3	Focusing on countries	Scaling up WHO technical support
3.4	Focusing on countries	Countries in crisis
4.1	Building the knowledge base for health	Knowledge management and information technology
4.2	Building the knowledge base for health	Health metrics
4.3	Building the knowledge base for health	Research and product development
4.4	Building the knowledge base for health	Global public goods
5.1	Partnering for better health	Global alliances and mechanisms
5.2	Partnering for better health	Working in countries: achieving results through cooperation

1.1 GLOBAL HEALTH SECURITY

- International Health Regulations: global alert and response
- Biological and chemical threats

Background information

Public health emergencies throw into sharp relief the strengths and weaknesses of infrastructures designed to protect the public on a daily basis. The international response to severe acute respiratory syndrome (SARS) was an extreme test of mechanisms for outbreak detection and containment under development at WHO since 1997. These mechanisms were themselves the response to an earlier crisis: the 1995 outbreak of Ebola haemorrhagic fever in Kikwit, Democratic Republic of the Congo. That outbreak, which escalated undetected for three months, caught the international community by surprise, highlighting the urgent need to improve capacity in several specific ways.

WHO's success in containing the latest crisis so quickly was in large measure thanks to detection and response mechanisms already in place. In order to expedite outbreak detection, the Global Public Health Intelligence Network was set up and is responsible for the real-time systematic gathering of disease intelligence; to broaden international capacity, the Global Outbreak Alert and Response Network, currently uniting 120 partners, was established as a "strike force", a pool of specialized staff and technical expertise on standby for emergency investigations and on-the-spot assistance. In addition, a system of electronic communications was extended to all 141 WHO country offices; the network of collaborating centres, including biosafety level 3 and 4 laboratories, was expanded in number and geographical reach; virtual networks of laboratory researchers were established for enhanced surveillance; and new procedures for outbreak verification together with standardized protocols for all phases of outbreak response were developed, bringing order to the potentially chaotic conditions at outbreak sites. A sweeping revision of the International Health Regulations was also set in motion.

SARS tested the ability of these mechanisms to work together under emergency conditions. Each component played a decisive role – from immediate dispatch of Global Outbreak Alert and Response Network teams, through real-time sharing of data at all outbreak sites, to the virtual laboratory network that identified the SARS coronavirus within a month. The global containment of SARS, achieved less than four months after its recognition as an international threat, provides some reassurance that the world is now better prepared for such problems. However, the SARS outbreak also exposed major weaknesses at both country and global levels.

SARS gave a vivid demonstration of the damage, well outside the field of health and well beyond affected countries, that a new disease can cause in a highly mobile, closely interconnected and interdependent world. Several major investigations of the outbreak, commissioned by government authorities, have concluded that the impact of SARS and the speed of its containment have raised the political profile of public health to unprecedented heights. Just as the Ebola haemorrhagic fever crisis of 1995 stimulated major improvements in response capacity, the SARS global emergency of 2003 now represents an opportunity to identify and correct weaknesses, enabling public health to take a major leap forward. These improvements will stand the world in good stead when the next new disease emerges; the next inevitable influenza pandemic begins; or a biological agent is deliberately used in a terrorist attack.

The following shortcomings in global health security were pointed up by the SARS outbreak:

- *Inadequate detection and reporting.* SARS smouldered unreported and internationally undetected from mid-November 2002 until the end of February 2003. As a result, the first international cases caught health systems by surprise and led to explosive outbreaks.
- *Inadequate response capacity.* The extreme measures needed to treat SARS patients and prevent further spread threatened to overwhelm even the most advanced health systems; surge capacity was a major worry. These problems would also arise during an influenza pandemic or following a bioterrorist attack.
- *Poor preparedness.* Lapses in infection control amplified spread in hospital settings. Systems for rapid data collection and electronic sharing were inadequate and sometimes outmoded. Systems for contact tracing and follow-up – of vital importance should the smallpox virus be deliberately released – were likewise absent or rudimentary. In some cases, legislation needed urgent amending.
- *Inadequate laboratory biosafety.* The September SARS case in Singapore, linked to a laboratory accident, highlighted the need to upgrade safety standards and introduce systematic staff training.

Nevertheless, SARS also provoked positive outcomes which include heightened global awareness, swift completion of preparedness plans, exceptionally strong international collaboration, rapid evolution and sharing of knowledge, and good electronic communications with governments, staff at outbreak sites, and the media. The urgent need to contain SARS also led to the rapid introduction of many fundamental and permanent advances in health infrastructures. Improvements were made in the following: surveillance and reporting systems, data management methods, hospital policies, procedures for infection control, and channels for informing and educating the public.

Points for discussion

- How can the SARS legacy be used to strengthen country and global preparedness for the next emergency caused by an infectious disease?
- What is a realistic way forward for strengthening capacity in developing countries?
- What role can the corporate sector play?
- How can the base of partners be increased as a cost-effective way of improving global response capacity?

1.2 CAPACITY STRENGTHENING FOR SURVEILLANCE AND RESPONSE

Background information

This session will consider issues relating to the following activities: making the shift from poliomyelitis surveillance to multi-disease surveillance; integrated communicable and noncommunicable disease surveillance (with a case study on Mozambique); and quality assurance in noncommunicable disease surveillance systems.

Infectious diseases threaten global health security causing high morbidity and mortality, particularly in developing countries. Strengthening country capacity to provide timely, high-quality information effectively is essential for the early detection of outbreaks; for monitoring the disease burden and trends; and for checking and evaluating the impact of disease prevention and control programmes.

Acute flaccid paralysis surveillance for poliomyelitis eradication is implemented by means of well-established systems, using standard indicators, and with strong laboratory support. If improvements in acute flaccid paralysis surveillance are to be consolidated, country capacity must be built up and a smooth transition ensured to other national surveillance strategies. Additional challenges include improving the way data are used for determining action; responding to needs for training and improved laboratory capacity; making more efficient use of resources; improving coordination, and enhancing the positive impact of acute flaccid paralysis surveillance in order to build sustainable surveillance systems.

WHO is actively meeting these challenges, its response taking the form of the WHO global health security strategy. The strategy involves containing known risks, responding to the unexpected, and improving preparedness. WHO and partners assist countries to assess their surveillance systems and develop national plans of action. These initiatives are implemented through training, by strengthening laboratory capacities, and by providing tools, norms and guidance. WHO promotes a multi-disease surveillance strategy which encourages the integration of processes, structures, and resources when appropriate; and which eliminates weaknesses, and increases the efficiency, cost-effectiveness, and sustainability of systems, without compromising disease-specific programme needs.

Every year, noncommunicable diseases cause almost 10 million deaths in high-mortality developing countries, representing 37% of all deaths. In low-mortality developing countries, over 11 million deaths, or 70% of all deaths, are caused by noncommunicable diseases, sharing at least one prevalent risk factor (e.g., tobacco, alcohol, physical inactivity, diet, obesity, high blood pressure, high blood cholesterol, high blood glucose). Several issues relating to the surveillance, prevention and control of threats from both communicable and noncommunicable diseases remain and need to be resolved.

While progress has been made in the integration of communicable disease surveillance, little attempt has been made to integrate surveillance systems beyond communicable diseases. A pilot project to build on existing strengths and resources within a selected country (Mozambique) and to integrate where appropriate, has been undertaken by WHO in collaboration with the Ministry of Health. Data on four noncommunicable conditions (stroke, hypertension, diabetes, and injuries) will be collected from various levels of the health system. The successful integration of a communicable and noncommunicable disease surveillance system involves settling a number of issues. Unresolved matters concern the inclusion of data sources; the resources available for data collection and forms; the responsibility for data, analyses, reporting mechanisms and frequency of reporting. Ensuring that data are useful is essential for estimating the burden of noncommunicable disease; for health service and programme planning; and for improved case management.

While disease-specific data are useful, noncommunicable disease risk factor surveillance underpins prevention and is essential for planning and evaluating noncommunicable disease programmes. Surveillance data on noncommunicable diseases are scarce in many developing countries, seriously impeding efforts to control noncommunicable disease epidemics.

In response to current challenges, WHO recommends the STEPwise approach to surveillance. This noncommunicable disease surveillance tool provides protocols for population-based surveillance in order to achieve data comparability over time. It also offers an entry point for low- and middle-income countries to increase country capacity and it benefits from linkage to the Global NCD InfoBase, a WHO database on noncommunicable diseases. Outstanding issues include the need to ensure sufficient resources at country level for training, advocacy, and implementation; and the need to encourage closer collaboration with countries lacking capacity.

Points for discussion

- The integration of processes and resources when appropriate (for example, integrating software for syndromic acute flaccid paralysis surveillance and other epidemic prone diseases); the integration of laboratory sample collection and transport for acute flaccid paralysis and other viral epidemic prone diseases; and the integration of training for communicable and noncommunicable disease surveillance.
- Funding to strengthen surveillance, alert and response capacities at the national level for communicable and noncommunicable diseases.
- Building more coordinated and efficient surveillance systems.
- Ensuring quality and consistency within and between countries for noncommunicable disease risk factor data by increasing country capacity through various means, including advocacy, training, standardized data collection approaches and analysis tools.

1.3 FOOD SAFETY

Background information

Ensuring the availability of safe food improves people's health and is a basic human right. Safe food contributes to health and productivity, and provides a solid platform for development and poverty alleviation. Food- and water-borne diarrhoeal diseases are leading causes of illness and death in less developed countries, killing an estimated two million people annually. In the past decade, serious outbreaks of foodborne illnesses have been documented on every continent, illustrating both the public health and social significance of the diseases concerned.

Existing chemical and microbiological hazards, together with the risks posed by new food-related technologies, place dual demands on WHO: namely, for risk assessment and the evaluation of risk-reduction methods. WHO's capacity in these areas needs to be enhanced. Additionally, WHO must continue to help Member States to put in place and update the means for establishing efficient food safety systems.

Any solutions to these challenges need to take account of one essential point: food safety must be tackled along the entire food chain, as laid down in the *WHO Global strategy for food safety*. In addition, since food safety affects the whole community, all stakeholders must be involved. If country-level interventions are to be effective, a high degree of local knowledge must be exploited at all points in the chain. The elaboration of health-based international standards and their adoption by Member States will improve the safety of food both in the domestic market and at a global level. It can also facilitate safe trade in food and contribute economically both to development and to improving living standards in food-exporting countries.

WHO is elaborating a coherent response to these challenges. Effective national food safety systems – including outreach support to local communities – are essential to protect the health of consumers, while the application of international food safety standards promotes health both nationally and within the international food trade. WHO's food safety work supports these requirements, giving scientific advice and providing training capacity. The Organization's country work focuses on strengthening national food safety infrastructures and outreach potential; enhancing national capability to manage food safety risks and to operate as an equal partner in the international food arena.

In formulating an action response to food safety challenges, work needs to be done in the following areas:

- *Coordinating scientific advisory activities, including risk assessment.* Risk assessment is the scientific estimation of the potential for adverse effects resulting from exposure to foodborne hazards. WHO and FAO have initiated a process to improve scientific advice related to food safety, which will culminate in an expert consultation in 2004.
- *Performing foodborne disease surveillance.* Surveillance of foodborne diseases is the basis for formulating national strategies to reduce food-related risks. The present lack of reliable data is a serious impediment to satisfactory evidence-based interventions. Foodborne disease surveillance is a major element in WHO's global strategy for food safety.
- *Promoting health consideration in the FAO/WHO Codex Alimentarius Commission.* WHO is increasing its contribution to the budget for the Codex Alimentarius Commission and has set up the FAO/WHO Trust Fund for participation in Codex. The Fund will enable developing countries to promote their interests effectively in the Commission.

- *Improving food safety at all levels.* WHO believes that improving food safety is vital at every point in the food chain and that basic food safety rules have to be understood and followed by everyone. WHO is developing training material based on the messages given in WHO's "Five keys to safer food".
- *Establishing networks and communication.* WHO is seeking to set up an international network of food safety agencies, and to strengthen the role of the health sector therein.

Points for discussion

- WHO's role at the intersection between health, agriculture and trade at the international level.
- How to promote national health sector participation in cross-cutting food safety issues, especially within the framework of the Codex Alimentarius Commission.
- How to improve data collection on foodborne diseases at national level.

1.4 DIET AND PHYSICAL ACTIVITY

Background information

Noncommunicable diseases – including cardiovascular diseases, diabetes, cancers and obesity-related conditions – now account for 59% of the annual figure of 56.5 million deaths worldwide, and 45.9% of the global burden of disease. They increasingly affect people from developing as well as developed countries. Cardiovascular diseases are the world's leading cause of fatalities, accounting for almost 17 million deaths annually. There are five key risk factors: high blood pressure, high cholesterol, obesity, alcohol and tobacco use. Independently, although often present in combination, these are among the major causes of cardiovascular diseases. This situation reflects a significant change in dietary habits, physical activity levels, and tobacco use worldwide. In an effort to combat noncommunicable diseases, WHO was mandated by its Member States to develop a strategy on diet, physical activity and health.

The first challenge in tackling noncommunicable diseases was to raise global awareness of this emerging public health burden. The second was to consult extensively and openly with all major stakeholders – some of whom have competing interests. The aim was to create a strategy that would provide a flexible policy tool for Member States, facilitating implementation at global, regional and national levels. Despite having a very short period in which to realize the project, WHO was able to produce good-quality scientific evidence.

During the elaboration of the strategy, every effort was made to organize extensive consultations with all stakeholders. The strategy process had four aims: to ensure stronger evidence for policy; to advocate for policy change; to involve stakeholders; and to provide a strategic framework for action. Once approved, this strategy will become the backbone for the work of WHO and its Member States. It will enable them to participate with other stakeholders in global activities to encourage healthier diets and increased physical activity – thus preventing the onset of noncommunicable diseases and promoting population health.

The process was divided into three main phases: the completion of a WHO/FAO expert consultation report; extensive consultation with stakeholders: Member States, United Nations agencies, the private sector and civil society; and the final drafting of the global strategy, in consultation with an expert reference group. The process will end with the approval of the strategy by WHO governing bodies in 2004.

The report of the joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases was completed and formally launched in April 2003. Six regional consultations were held between March and June 2003, attended by more than 80 countries. A consultation with United Nations agencies took place on 4 June 2003 and extensive consultations have also been held with representatives of civil society and the private sector.

The increasing global health care burden imposed by noncommunicable diseases is a major concern, especially for developing countries, many of which are facing the double challenge of noncommunicable and infectious diseases. Preventing noncommunicable diseases involves complex considerations that require the active involvement of multiple stakeholders and the application of cross-sectoral policies both within countries and at a global level. It is now recognized that the private sector and civil society must be actively and positively engaged in Member States' efforts to change behaviour in relation to both diet and physical activity.

The work outlined above is expected to produce a number of results. At its 113th session, the Executive Board will consider a report by the WHO Secretariat on integrated prevention of noncommunicable

diseases, together with a resolution on the global strategy. In May 2004, the Fifty-seventh World Health Assembly will consider a resolution approving the global strategy.

WHO will also begin work on developing tools for the implementation of the global strategy at regional and Member State levels, whilst striving to ensure that these dovetail with existing national and regional initiatives.

Points for discussion

- Strategic and technical implementation of the strategy at Member State level.
- Mechanisms to increase intersectoral collaboration.
- Strengthening noncommunicable disease prevention across WHO and in countries.

2.1 REDUCE CHILD MORTALITY (GOAL 4)

Background information

Millennium Development Goal 4 calls for a two-thirds reduction in childhood mortality by 2015 compared to 1990. Projections of global trends show that this can only be achieved if there is a sharp acceleration in the pace of progress.

Children under the age of five bear an undue share of the global burden of disease. The major reductions achieved in childhood mortality during previous decades have more recently given way to stagnation and many countries have even witnessed negative trends.

Nearly all of this year's 10.8 million child deaths will be confined within the world's 42 lowest-income countries, concentrated in sub-Saharan Africa and South Asia. Diarrhoea, pneumonia, and neonatal conditions are the most important causes of childhood mortality worldwide, with malaria and HIV infections contributing in many areas. Malnutrition is associated with 54% of all child deaths. Measles remains an important cause of death and is a predisposing disease, leaving its victims vulnerable to subsequent diarrhoeal or respiratory infections with high case fatality rates.

Two-thirds of child deaths could be prevented by interventions which are not only already available but which are also feasible to implement in low-income countries:

- a group of nutrition interventions including appropriate breastfeeding and complementary feeding, together with vitamin A and zinc supplementation could save 2.4 million children or 25% of total deaths;
- management of infections (diarrhoea, pneumonia, malaria and neonatal sepsis) could save 3.2 million children or 33% of total deaths;
- a package of neonatal health interventions could prevent 55% of deaths in the first month of life, or 18% of all child deaths;
- full coverage of measles vaccination would prevent all deaths due to measles, approximately 700 000 per year.

Many promising interventions can be delivered at the community or household level, with limited need for additional resources.

WHO, with partners, supports interventions that have a direct impact on child mortality and health. These include immunization, management of common illnesses, infant and young child feeding (including micronutrient supplementation), presumptive treatment of malaria, use of insecticide-treated bednets, and maternal and newborn care.

In order to maximize the use of resources and opportunities, delivery of interventions is integrated wherever possible. For example, Integrated Management of Childhood Illness (IMCI) combines curative and preventive interventions, at health facilities and in communities. IMCI has been introduced in over 100 countries; a recent evaluation confirms the effectiveness of IMCI clinical management training. In addition, related community-level activities are supported by numerous partners, including UNICEF, bilateral agencies, and nongovernmental organizations.

Unfortunately coverage of IMCI, vaccination, and other interventions remains low, particularly in countries with weak health systems. Increased investment in health systems is urgently needed, as is operational research to explore complementary delivery mechanisms.

Over the next two years, WHO's response to the challenges above will involve the following activities:

- Exploring innovative ways to increase coverage of interventions, particularly in the 42 countries with the highest under-five mortality rates.
- Providing guidance to Member States, assisting them to develop comprehensive national child health policies and strategies.
- Helping to establish monitoring systems enabling Member States to follow progress towards the Millennium Development Goals.
- Ensuring that WHO-backed research is used to guide country-level activities, and that it reflects the needs of Member States.

Points for discussion

- Strategies for mobilizing resources in substantial quantities, enabling Member States to implement interventions on a scale large enough to have a significant impact on national child mortality.
- Ways of enhancing synergy among all child health programmes, in particular IMCI, immunization, nutrition, and malaria control.
- Partnership building in order to ensure that child health – including mortality reduction – remains a high priority on the global public health agenda.
- The role of WHO in activities to promote child health and which extend beyond health facilities, e.g. involving families and communities to improve key practices.

2.2 IMPROVE MATERNAL HEALTH (GOAL 5)

Background information

Every year 215 million women become pregnant; all of them need skilled care. However, many are denied this basic right. In many developing countries, obstetric complications are the leading cause of death among women of reproductive age. Each year, more than half a million women die in pregnancy and childbirth, 99% of them in developing countries. In addition to maternal death, millions of women experience maternal health complications annually, and as many as 300 million women – more than a quarter of all adult women living in the developing world – currently suffer from short- or long-term illnesses and injuries related to pregnancy and childbirth. Of the major health indicators, maternal mortality demonstrated the highest differential between high- and low-income countries; and at country level, it is the least well off who are the principal victims.

Neonatal deaths are closely linked to maternal death and illness. Every year, three million newborn babies die during their first week of life and another three million are born dead. Not only is each maternal death a tragedy, but it also affects children, families and communities. An estimated one million young children die every year as a result of the death of their mother.

To address this human disaster, Member States endorsed the Millennium Declaration which committed signatories to improving maternal health, with the target of reducing maternal mortality by three-quarters between 1990 and 2015. It is clear that this target cannot be achieved, especially for low-income and marginalized groups, unless concerted efforts are made.

However, strategies for reducing maternal and newborn suffering and death are well known: high-quality maternal and newborn health services, including the presence of a skilled attendant at birth; the prevention and treatment of complications during pregnancy, childbirth and after birth; postpartum family planning and basic newborn care – these solutions can save millions of lives. These evidence-based interventions are reliable, cost-effective and feasible, even in resource-poor settings; indeed, a number of less-developed countries have succeeded in reducing maternal mortality, and in demonstrating what can be achieved despite a lack of economic development.

Based on evidence and building on lessons learned, the WHO Making Pregnancy Safer strategy is designed to strengthen the capacity of health systems to improve maternal and newborn health. The strategy operates by increasing equitable access to and utilization of high-quality services through concerted action at the policy, service and community levels, with special attention to reaching the poorest and most vulnerable groups.

This strategy focuses on the need for every pregnancy and childbirth to benefit from skilled care. To achieve this, it emphasizes the critical importance of:

- a skilled workforce for safer pregnancy and birth
- an environment that supports and ensures safe, effective practice
- strong collaboration with other key public health programmes, such as HIV/AIDS and malaria control programmes.

These factors need to be underpinned by strong partnerships, such as the Partnership for Safe Motherhood and Newborn Health, and appropriate advocacy strategies. Fundamental and operational research will continue to be necessary to generate the new evidence needed in order to improve interventions. Political

commitment, and its expression through intersectoral support, is essential for the sustainable implementation of quality maternal and neonatal health services.

Points for discussion

- What is the likelihood of achieving the Millennium Development Goal for maternal health by 2015?
- Should other reproductive health services and HIV/AIDS and malaria control programmes be integrated with maternal health services, and if so, which ones and how?
- How can one ensure that health sector reforms do not have a negative effect on maternal health services?
- Social inequities have an impact on health. How can human rights issues be used to advance maternal health?

2.3 COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES (GOAL 6)

Human resources issues

Background information

Of the eight Millennium Development Goals adopted by the United Nations Millennium Summit in September 2000, six relate to health development and its contribution to poverty reduction. An important part of achieving these goals lies in the delivery of interventions that address critical health threats such as HIV/AIDS, tuberculosis and malaria.

However, many developing countries are facing major crises in human resources for health, crises that are impeding the delivery of effective interventions to deal with priority health problems. In sub-Saharan Africa in particular, these difficulties have been compounded by the impact of the HIV/AIDS epidemic, especially when combined with tuberculosis and malaria.

Each country has its own, unique contextual characteristics. However, some issues appear to be priorities for all: health policy-makers are under pressure from urgent requirements that are not always amenable to a long-term approach; investments and interventions concerning human resources for health, on the other hand, generally yield results only in the medium to long term.

Countries deploy their health workforce within the limits of the human, financial and material resources available, but external policies often shape their choices for training and technical capacity and for the development of health policy options, with effects that can be far from optimal. During the past two decades, socioeconomic changes have given rise to additional pressures. There has been a massive exodus of skilled health workers leaving developing countries and moving to countries in the West in search of better remuneration; skills and numbers of the remaining health workers are no longer optimally distributed, either geographically or between different professions in countries. The Director-General has warned of the implications of these changes: "health systems depend most of all on skilled and dedicated personnel, and here we face a major challenge: the brain drain. It is, above all, good health workers that will enable us to reach "3 by 5", global tuberculosis targets, control malaria and achieve the Millennium Development Goals, and everyone is short of human resources".

In addition, certain countries continue to use inappropriate training models, providing health skills that no longer match the health needs of the populations to be served – in particular the poor. Moreover, the increasing toll of HIV/AIDS is directly affecting service capacity and staff: those remaining in the services face an ever-increasing workload in high-burden countries; health workers are suffering increased morbidity and mortality, the difficulty of their task reflected in prolonged absence from work and low morale.

Countries are therefore facing multiple human resources difficulties and, with this in mind, WHO should give them the support they need, working closely with them to develop innovative methods of training, deploying and supervising health workers, with particular emphasis on the community and primary health care level.

WHO is addressing these issues through a variety of activities: performing task analysis and integrated planning for priority diseases; exploring more effective ways of designing codes of ethical practice in overseas recruitment, in collaboration with institutions concerned with migration; supporting regional and national capacity-building efforts including training activities in HIV/AIDS, tuberculosis and malaria in order to encourage governments (ministries of health, finance and education) and technical and financial partners to invest in and develop human resources. The Organization is also coordinating partners to mobilize resources and support human resource development activities in countries burdened with

HIV/AIDS (including the rapid training of health workers to meet the “3 by 5” goal). Similar work is also being carried out for malaria, tuberculosis and poverty in synergy with programmes for other major health problems.

In its efforts to develop human resources for health in order to achieve the Millennium Development Goals, WHO has the following objectives:

- To put human resources for health into the Poverty Reduction Strategy Papers, as they are essential for delivering the health interventions that are needed for the Millennium Development Goals.
- To enable countries to design, implement, monitor, evaluate policies and practices for human resources for health in order to improve the performance of their health workers, and taking into account gender issues.
- To design capacity-building strategies to create a critical mass of key competencies in targeted countries.
- To increase the numbers of appropriately trained health staff.
- To develop strategies and approaches to improve recruitment, retention and distribution of health personnel in order to meet long-term needs in human resources and health.

Points for discussion

- What are the opportunities and challenges at country and regional level for implementing the WHO programme on human resources for health and reaching the Millennium Development Goals and the targets for disease specific control and service delivery?
- Building and strengthening partnerships: how to find additional partners and strengthen existing partnerships.
- Delivery mechanisms: what are the best ways of making WHO’s contribution on human resources issues present in countries?

2.4 ENSURE ENVIRONMENTAL SUSTAINABILITY (GOAL 7)

Background information

This Millennium Development Goal aims to “ensure environmental sustainability” by integrating the principles of sustainable development into country policies and programmes and by reversing the loss of environmental resources (Target 9); by halving by 2015 the proportion of people without sustainable access to safe drinking-water and basic sanitation (Target 10); and by having achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers (Target 11). It is essential to improve access to better water and sanitation since the lack of adequate water supply and sanitation is responsible for approximately 5.5% of the global burden of disease. This key issue is addressed through a specific target, while the problem of solid fuel use, itself responsible for approximately 2.7% of the global burden of disease, is one of the indicators contributing to Target 9.

The work of WHO in the health and environment field goes well beyond this Millennium Development Goal. Interventions to reduce exposure to environmental risks will help achieve a significant reduction in child mortality (Goal 4); alleviating the drudgery of collecting water and fuel will contribute to promoting gender equality and empowering women (Goal 3); and make more time available for education and income generation activities which should help eradicate extreme poverty (Goal 1). The provision of sanitary facilities in schools is likely to assist the creation of equal opportunities in education, since the lack of adequate and private sanitation facilities is a key reason for girls dropping out of school (Goal 2).

While WHO’s work concerns all these areas, this session will focus on WHO’s contributions towards achieving the targets related to water supply and sanitation, and will consider the Organization’s work with partners, particularly the Healthy Environments for Children Alliance (HECA). HECA is dedicated to reducing the environmental risks to child health that arise from the settings where children live, learn, play, and sometimes work.

Population growth, urbanization, migration and global climate change all draw attention to the ongoing importance of water, sanitation and hygiene in health and development. Water scarcity and pollution are a major challenge at national and local levels and leadership, practical tools and appropriate capacities in the health sector are required in order to champion intersectoral policy and activities.

The work of WHO in the field of water and sanitation has been progressively reoriented towards actions supporting the achievement of these targets from the Millennium Development Goals:

- Country support and technical cooperation have been strengthened.
- Support has been given to the elaboration of ethical and evidence-based policy, particularly the creation of the biennial plan of work of the United Nations Commission on Sustainable Development.
- Official data to monitor progress towards the water and sanitation goals have been provided jointly with UNICEF.
- Emerging issues have been tackled with a focus on assessing the impact of water management activities.
- A base of scientific evidence has been provided to support the development of country policies, legislation and practices.

HECA provides a mechanism for dealing with water and sanitation issues within a broad, intersectoral, settings-based framework; addressing multiple risks on a joint basis; and providing practical, integrated solutions. Since HECA was launched by WHO, UNICEF, UNEP, UN-HABITAT and other key partners at the World Summit on Sustainable Development, the Alliance has developed in a participatory manner, and is poised to put into practice the commitments that are described in the HECA framework for action.

At country level, progress towards achievement of the Millennium Development Goals is enhanced by cooperative action and collaborative institutional arrangements. The more significant collaborations and networks include: UN-Water Group, a network of Collaborating Centres, and the Water Supply and Sanitation Collaborative Council. The latter is a powerful partner in implementing and promoting work at community level, and in empowering public action. It also adds value to a number of innovative activities including the linkage between biological diversity and health (with Harvard University), and health impact assessment of water resources projects.

Points for discussion

- The role of the health sector in ensuring that health benefits derived from international policy initiatives contribute to poverty alleviation and development.
- The development of tools and capacities to enable effective health sector participation in intersectoral policy elaboration.
- The implementation of selected actions to benefit “unserved” populations.
- The development of approaches to strengthen settings-based interventions and support local movements.

3.1 CHALLENGES OF HEALTH SYSTEMS AND STRUCTURES

Background information

Lack of social protection has had a huge impact on access to health care, generating not only breaches in terms of equity and human rights, but also having a negative impact on the conditions essential for development. The inability of health systems to deal with these issues has excluded millions of people around the world from the basic mechanisms for solving their health problems.

This situation can be further complicated by deteriorations in public health infrastructure, partly related to the weakening of the State and the fragmentation of health systems after years of reform. This situation has increased the vulnerability of sectors of the population to traditional and emerging risks to health. The frequency of infectious diseases has been linked in many countries to the collapse of traditional public health functions, such as disease surveillance, regulation and control. In the context of globalization, the inability to protect public health and reduce exposure to health risks may result in severe economic consequences.

Underlying the two problems mentioned above is the current state of the health workforce: its composition, competencies and distribution. The development of human resources remains largely hospital-centred and urban-based, compounding the problem of accessibility to appropriate, community- and family-oriented health services and prevention. The migration of key health professionals only aggravates the situation further. The absence of public health leadership and a primary health care workforce with cross competencies in public health precludes the development of population-based programmes and interventions, including effective regulatory measures.

Exclusion in health is complex and multidimensional; it cannot be dealt with solely by improving health care provision. A new approach is needed to allow for health systems to confront current and future challenges associated with the above-mentioned problems in a setting in which health, human rights and development are intertwined. It is in this context that the extension of social protection in health and the strengthening of essential public health functions acquire significant importance – and require a firm place on national health agendas.

National health authorities must play a more active role in order to formulate human resources policies in support of health services based on primary health care and public health.

International agencies can play a key role in assisting countries to address effectively the challenges within the context of a sector-wide approach and a coherent framework of international cooperation.

Health systems must be redirected in order to confront the challenges. This entails the following: the development of strategies for the extension of social protection in health; the strengthening of essential public health functions; and the development of innovative human resources policies.

The extension of social protection in health requires a strong relationship between the ministries of health and social security; the integration of health policies with social policies; and the promotion of a social dialogue to build up citizenship and increase awareness of citizens' health rights.

The strengthening of public health requires the development of institutional capabilities to improve stewardship in terms of policy formulation, regulation, management and surveillance, and to ensure the provision of public goods.

An intersectoral approach is needed for the development of human resources policies, as well as the promotion of sustained collaboration between academic institutions, professional associations and health services. A promising example of this approach is provided by the Observatory of Human Resources in the Health Sector Reforms, an initiative promoted by the Regional Office for the Americas in the countries of the Region, and one which is encouraging the participation of all relevant stakeholders.

Points for discussion

- Ensuring universal access to quality health care, regardless of the purchasing power of the user.
- Supporting the development of policies and actions to improve the performance of essential public health functions.
- Assisting the development and expansion of human resource policies, through initiatives like the Observatory of Human Resources in the Health Sector Reforms, with special focus on the public health workforce.

3.2 ACCESS TO ESSENTIAL MEDICINES

Background information

This topic focuses on global, regional and national contributions to initiatives to accelerate access to medicines for HIV/AIDS, tuberculosis and malaria.

Increasing equitable access to priority medicines – especially for treating HIV/AIDS, tuberculosis and malaria, but also for treating other major infectious diseases – is a global public health priority. Indeed, the devastating health impact of HIV/AIDS, tuberculosis and malaria and its wider socioeconomic implications demand that efforts to increase access be intensified. As the Director General has stated, “We must change the way we think and the way we act. Business as usual will not work”. This new approach must also include settling policy development issues.

Policy development provides the framework for action to increase access to medicines. However, ill-conceived policies can be highly counter-productive. Trade agreements that serve to reduce access to lower-priced medicines, inefficient drug supply management systems, inadequate regulation of medicines quality, and irrational drug use, can each contribute to a situation in which essential medicines fail to reach the people that need them.

The draft WHO medicines strategy 2004-2007 proposes a number of core areas for global, regional and national attention; each should feature in sound medicines policy development:

- The implementation and monitoring of medicines policies.
- The promotion of equitable availability and affordability of essential medicines, through the provision of guidance on medicines pricing and financing, together with efficient medicines supply management.
- The development of national legislation, incorporating public health safeguards compatible with the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights, in order to maximize access to essential medicines, including generics.
- Ensuring the quality of medicines through the development and application of norms and quality standards.
- The promotion of therapeutically sound and cost-effective use of medicines, including the development and use of treatment guidelines and essential medicines lists.
- Conducting research to ensure that best practices for promoting rational use are updated and modified as necessary.

In recent years, many new actors have emerged in the field of medicines and new technical and financial resources are now becoming available. Similarly, improved interaction with the medicines research community, and a greater understanding of evidence-based assessments, have expanded the potential for maximizing pharmaceutical impact.

At the same time, global partnerships – Roll Back Malaria and Stop TB, and the recently-announced “3 by 5” initiative to facilitate the delivery of HIV/AIDS antiretroviral treatment to three million people living with AIDS by the year 2005 – are now offering many new opportunities for delivering medicines where they are most urgently needed. Each of these initiatives will be supported by a comprehensive

programme of work in medicines at global, regional and country level. In addition, global procurement and supply support mechanisms, including the Global TB Drug Facility, the forthcoming global AIDS and diagnostics facility, and regional pooled procurement mechanisms, such as the PAHO/WHO strategic fund, will facilitate the supply and rational use of medicines of assured quality. Furthermore, the prequalification programme for United Nations organizations will be expanded further, to enable greater numbers of products and suppliers to be assessed more quickly. Clearly, however, the success of these initiatives will be largely dependent on rapid, effective and sustained collaboration among the partners.

The challenges facing efforts to improve access to medicines concern:

- Maintaining long-established medicines policies and programmes.
- Generating and maintaining effective partnerships with all stakeholders to ensure the optimal use of resources.
- Ensuring that global initiatives are underpinned by sound medicines policies; take into account existing medicines knowledge and expertise; and lead to sustainable health systems.

It is expected that these initiatives will produce the following results:

- Sound medicines policies at national, regional and international levels.
- Integrated country policies and programmes to meet medicines needs, with an emphasis on planning, programming and medicines supply management.
- Fully functioning global and regional buyers groups, ultimately leading to bulk procurement.
- An increased number of people with access to affordable quality medicines.

Points for discussion

- How can partnerships be optimized with other international and regional institutions, and financing agencies, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the World Bank?
- Using the current “3 by 5” initiative to support the strengthening of health services.
- Securing resources in support of activities to increase access to medicines in general, including those focusing on essential medicines other than those needed for treating HIV/AIDS, malaria and tuberculosis.

3.3 SCALING UP WHO TECHNICAL SUPPORT

Background information

At the high-level consultations on the health-, nutrition-, and population-related Millennium Development Goals (held in Ottawa in May 2003), it was stated that achieving the Millennium Development Goals requires improvements to be made in several areas: namely, strengthening health systems; extending coverage of health services and enhancing the performance of public health functions. For most developing countries, and certainly for all least developed countries, this requires WHO to scale up its technical support to countries.

In his speech to the Fifty-sixth World Health Assembly, Dr Lee Jong-wook, as Director-General elect, committed the Organization to achieving results at country level and to responding better to country needs. With this new focus on countries, WHO will be “closer to the ground”, working more intensively with national authorities to achieve their priority goals. This vision of the Organization’s role is consistent with the approach now being made to technology transfer for development, involving a move away from assistance imposed from above towards greater country-level cooperation. On the basis of this approach, the organizations within the United Nations system are concentrating on capacity building and fostering institutional change, together with insuring sustainability and national ownership of developmental processes. In addition, WHO must take account of the effects of globalization and assist national entities to take part in decision-making and standard-setting at national, subregional, regional and global levels.

Objectives for technical cooperation include the following:

- improving health information gathering and analysis in order to produce more detailed, “personalized” evidence for decision-making and for monitoring progress towards the achievement of the Millennium Development Goals;
- assisting the design and implementation of policies and programmes for social protection together with the expansion of health and environmental services coverage; and
- improving the control and prevention of prevalent health problems, in particular HIV/AIDS.

In determining its response to the challenge of scaling up, WHO has to accelerate and improve its response to country needs. WHO’s country presence should optimally comprise a “core team” of technical staff, assisted by the proper mix of infrastructural, administrative and technological support. In many countries, this approach to scaling up translates into a direct increase in the presence and/or availability of “core advisers”. However, this is not invariably the only solution as there are several other factors to be taken into account (for example, the scarcity of resources, potential economies of scale, opportunities for cross-fertilization and the relative capacity already available in countries). For this reason, a number of complementary strategies that have already proven to be successful are being considered.

The following are under serious consideration:

- Decentralizing technical staff and resources from global to regional and on to subregional and national levels.
- Joint planning at country, regional and global levels, in support of countries. This support will be adapted to suit country-level imperatives, as identified through country cooperation strategies.

- Placing intercountry technical staff at subregional level with a responsibility for providing support to several countries in a subregion.
- Delegating more responsibilities to WHO country representatives, guided by clear accountability processes.
- Developing a more efficient financial management system, integrating regular and extrabudgetary resources.
- Mobilizing the technical capacity already achieved by countries, to support not only national health development within individual countries themselves but also in other countries (making optimal use of national centres of excellence and WHO collaborating centres).
- Decentralizing technical cooperation at subnational levels, to increase effectiveness and equity. However, this option requires clear criteria to be established for the selection of territories and counterpart institutions.
- Upgrading connectivity, both within the WHO country office and at key national health institutions, and exploiting the advantages of information technology in order to achieve optimal knowledge management.

Increasingly, these decisions on the size and composition of the WHO country presence are based on the application of a sound methodology (like the country cooperation strategy) involving the three levels of the Organization. Indeed, the renewed country focus is not meant only to involve the country office; regional offices and headquarters need to increase their level of “intelligence” and awareness about processes at country level. This, in turn, will feed into the strategies for advancing global and regional mandates, which should not be based on an “average country” concept. The most effective approach is one that will allow all countries to advance (as in the case of poliomyelitis eradication) using differentiated and specific tactics, designed for various tiers or clusters of countries – for example, the small developing island States; countries at intermediate stage of development (India, Brazil and South Africa, and others); and countries in crisis.

3.4 COUNTRIES IN CRISIS

Background information

The occurrence of a disaster (natural, man-made or complex), even a sudden-impact disaster such as an earthquake, has serious consequences for development; no country in crisis can escape serious health problems in the short, medium and long term.

Periodic (or even massive) post-crisis humanitarian assistance is useful, but such help will be of limited impact if it is not conceived in a broader context.

The greater a country's degree of preparedness, the greater its ability to benefit from assistance. WHO's main function is to develop the capacity of countries to respond to health crises. This preparation must include coordination between different governmental entities, and between international organizations, and requires the participation of an informed community. No programme will work if it is not "endorsed" or perceived as being useful by the affected population.

Countries in crisis have a common denominator that requires a consistent way of analysing and solving problems quickly and efficiently. The main issues the health sector faces typically involve four elements:

- *Aid preparedness.* Major sudden-impact disasters, such as the recent earthquakes in Algeria and Turkey, have required a massive assistance from local communities, complemented by international aid. The only way to address this situation is through vigorous efforts to ensure preparedness well in advance of the event.
- *Dealing with complexity.* Some countries face a continuous succession of crises frequently described as complex emergencies. The situations in Afghanistan, Angola, Colombia, Iraq and Liberia illustrate the intertwining of crises and development. The beginning of the crisis is frequently sudden; however, the health sector only returns to normal after months or even years. If the complex nature of such crises is to receive a comprehensive treatment, capable quick response experts must liaise with long-term development experts.
- *Forward planning.* Most countries in the world have the necessary planning capacity and hence the choice of how activities are implemented. All crises, even the aftermath of a natural disaster, could ideally be prevented. In countries such as Costa Rica, for example, the proper construction of health facilities has allowed patients' needs to continue to be met even after a serious earthquake. The support of agencies such as development banks and the United Nations International Strategy for Disaster Reduction is essential to protect the health sector.
- *Who should be involved?* Common to all these elements is the need for a multiplicity of experts and actors. Is WHO the agency best placed to provide overall public health technical cooperation at national or regional levels? The knowledge required for this endeavour cannot be concentrated in one single unit. All departments, from nutrition to transmissible diseases, from waterborne diseases to the organization of health services, must contribute in one way or another.

Points for discussion

- Challenges in disaster preparedness.
- How to build national capacity in complex emergencies.
- Is disaster prevention possible in low-income countries?
- WHO's added value in crisis response activities.

4.1 KNOWLEDGE MANAGEMENT AND INFORMATION TECHNOLOGY

Background information

In the field of knowledge management, there is a sharp divide between information and action. The regions with the most critical health problems suffer from an additional information handicap: not only is basic health information in short supply, but there are also fewer systems in place to exploit the information available and solve health problems effectively. As a result, information fails to be transformed into effective health products, whether they be new medicines, treatment guidelines or government policies.

The discipline of knowledge management (KM) aims to bridge this gap. Starting with the premise that local problems have local solutions, effective KM in health can provide the knowledge necessary for local innovation on an equitable basis, and then create new local knowledge that is fed back into a dynamic self-regenerative process. Although KM is often thought of as simply providing solutions that are limited to information technology (IT), in practice KM goes beyond the facilitating power of any single IT tool: it harnesses experience through collaboration in order to solve problems in a very direct and human way.

Although WHO has a long and established history of gathering, synthesizing and disseminating information, it is relatively new for the Organization (as well as for the public health sector) to look at the process as a whole and integrate it into a knowledge management frame. Presentations and discussions at this session will explore some of the opportunities, constraints and current projects that will lead the way to a WHO KM strategy.

Among the aims of WHO-sponsored programmes involving aspects of KM are:

- to ensure access to vital information in resource-poor settings, supporting the creation and application of local knowledge;
- to aggregate and synthesize existing knowledge in a way that is effective for health needs in resource-poor settings;
- to foster and support communities and networks in public health in order to maximize existing knowledge in its direct application to specific health problems.

Strengthening knowledge systems by sharing information and experience could produce a dynamic, innovative effect in the areas where health issues are most critical. In an era when a health problem in remote rural areas can explode into a health crisis in major urban centres across the globe in a matter of days, and vice versa, local problem-solving and effective, timely knowledge-sharing are becoming all the more indispensable.

There are a number of challenges currently facing WHO in its work to develop an integrated KM programme for health:

- Knowledge efforts must be directed in ways that are relevant to resource-poor settings.
- Data must be aggregated and standardized for better macro analysis.
- Data need to be broken down to obtain greater resolution for local resource allotment.
- Health research and knowledge-sharing in collaboration with countries should be promoted.

- Inequities in infrastructure and resource availability in countries need to be tackled.
- Logistical challenges must be overcome.
- Data collection needs to be improved.
- Advocacy must be undertaken in order to ensure impact.
- Cultural barriers to knowledge-sharing must be broken down.

In response to these challenges discrete initiatives have been, or are being, developed by WHO, both internally and with partners. These projects will work in concert to further catalyse development of knowledge management practices in the wider public health sector.

Previous attempts at knowledge management initiatives have often failed because they failed to take into account both local needs or existing local knowledge. Often “IT solutions” have been presented as an end rather than as a means, resulting in low usage. For successful KM implementation, knowledge needs to be understood as something to be shared simultaneously rather than something that is simply given or taken.

It is intended that current initiatives will produce:

- Stronger communities of practice in resource-poor health settings.
- Health solutions that are more relevant to local problems and that are found more quickly as a result of greater local learning.
- More targeted resource allotment and better informed policy decision-making.

Points for discussion

- Strategic and technical implementation of the initiatives.
- Building advocacy, partnerships and the right constituency for a global effort.
- Ways of mitigating infrastructure, training and cultural constraints.

4.2 HEALTH METRICS

Background information

A strong health information system is essential for sound programme development and implementation, and is a prerequisite for strategic decision-making. In short, a health information system provides the basis upon which improved health outcomes depend. As new resources are channelled into health-related initiatives, the drive towards performance-based resource allocation will accelerate. At present, the demand for health information, both within countries and at the global level, is often driven by specific programme needs, often in the context of international initiatives. This results in duplication, waste and a lack of standardization and overall coherence. To date, inadequate resources have been allocated to building streamlined health information systems, capable of generating data on the full array of health-related issues and of providing information with an equity dimension. Joint investment in the development of such systems should bring significant advantages, enabling decision-makers to:

- monitor progress towards international and national health goals;
- monitor and promote equity in health;
- detect and control emerging and endemic health problems;
- improve governance and ensure accountability for the use of health resources;
- strengthen the evidence base, facilitating the design of effective health policies and permitting the evaluation of efforts to scale-up;
- inform populations in order to promote healthy behaviour and to increase the demand for improvement in health policies and services;
- drive improvements in the quality of services;
- enable innovation through research; and
- mobilize new human and financial resources for health.

The main challenges facing WHO in the field of health information are as follows:

- To achieve effective and efficient coordination of data collection and analysis at country level.
- To improve the quality of health information through innovation and by creating a culture of transparency and data sharing.
- To ensure the availability of high-quality health information to facilitate the evaluation of global and large-scale national efforts.
- To strengthen national capacity to generate and utilize health information.

In January 2002, in response to these challenges, WHO initiated talks with the Bill & Melinda Gates Foundation regarding the improvement of information systems as the essential prerequisite for ensuring better health outcomes in developing countries. Since then, informal discussions with other potential partners have produced a partnership concept, called the health metrics network. Developing country

governments, bilateral donors, global initiatives, and implementing agencies have confirmed their interest, although further clarification is needed regarding the goals, objectives, structures and functions of such a network. Following a first meeting of health metrics network partners in July 2003, an interim steering committee was convened to guide the further development of the network. Since then, a task force and seven issues groups with a broad and diverse representation have been formed. McKinsey & Company is advising on an appropriate structure for the network.

It is expected that these initiatives will lead to a broad, international network of experts and key stakeholders in support of efforts to strengthen country health information systems. These systems will be able to provide sound information for monitoring progress towards international health goals together with essential information for improved public health programmes within countries.

Points for discussion

- Investors in health information: What are their concerns? What role do they play?
- The objectives of the health metrics network: at the global, country, and subnational levels.

4.3 RESEARCH AND PRODUCT DEVELOPMENT

Background information

The lack of a significant market for drugs, vaccines, diagnostics and other pharmaceutical products in developing countries means that the pharmaceutical industry will not, on its own, make the multi-million dollar investment that is necessary for new products to obtain regulatory approval and be brought to the market. Public sector agencies therefore need to engage in and drive the research and development (R&D) agenda and activities necessary to generate products appropriate to the health concerns of developing countries. This activity is usually most successful when undertaken in association with the private sector through public-private partnership.

Of particular relevance to such research are the drugs, vaccines and diagnostics required to treat the infectious diseases that predominantly affect developing countries. Also of central importance are vector control tools together with appropriate tools for improved reproductive health.

There is no doubt that much work is needed: in the area of drugs for neglected infectious diseases (excluding HIV/AIDS), it is reported that of the 1393 new chemical entities registered by western health authorities during the period 1975-1999, only 13 were specifically indicated for such diseases. Indeed, for many important diseases (malaria, tuberculosis, human papillomavirus, HIV/AIDS and all human parasitic diseases) there are as yet no vaccines. Appropriate, effective and easy-to-use diagnostics are also lacking, as are tools for prevention in reproductive health, such as contraceptive methods for men or microbicides.

Major challenges facing WHO in this work include:

- Ensuring that a good level of basic research is in place for the diseases and indications mentioned above.
- Obtaining the involvement of and partnerships with industry in undertaking R&D for products required by developing countries.
- Identifying mechanisms in which public sector resources and expertise can be matched with private sector resources to ensure product development.
- Identifying mechanisms by which the public and not-for-profit sector may undertake and coordinate aspects of product R&D by themselves where necessary.
- Undertaking product R&D in a manner designed to promote downstream access to products.
- Generating resources and finances to undertake high-cost, high-risk R&D projects.
- Building research capacity and ensuring technology transfer to developing countries.

WHO, working with partners, is involved in several areas of research for new tools to support health care in developing countries. The Organization is also active in research directed toward the optimal use and implementation of these tools. The major research-oriented units are as follows:

- the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), and the WHO/UNAIDS Initiative for Vaccine Research both of whose work is focused on drugs, vaccines and diagnostics for a range of important infectious diseases; and

- the Special Programme of Research, Development and Research Training in Human Reproduction (HRP), which focuses on products relating to fertility regulation and the prevention of sexually-transmitted diseases.

TDR was a critical and instrumental partner in the development of over half the 13 drugs for neglected diseases produced between 1975 and 1999. Vaccine research partnerships promoted by WHO have yielded evidence for expanding the use of vaccines such as Hib to developing countries, and have promoted several large R&D initiatives. HRP has also yielded new tools (e.g., injectable contraceptives, products for emergency contraception) that are now marketed and in use. All three units work through partnerships and, where necessary, help to establish other “independent” not-for-profit initiatives in order to take certain activities forward.

The biotechnology and informatics revolution, combined with increased research activity in recent years, has led to an unprecedented supply of products for certain diseases. However, much remains to be done, and many indications have no significant R&D activity directed against them. All three WHO units have product R&D partnership activities and programmes expected to deliver new products in the coming years.

These activities are not taking place in isolation and due note should be taken of the following:

- other WHO units participating in research-related work and which make an assessment of research evidence for their policies;
- the WHO Research Policy and Cooperation unit;
- broader global research issues; and
- the broader global activities of many other organizations: national and international, nongovernmental, public and private.

Points for discussion

- How can WHO best add value to global efforts for accelerated research and product development targeted at the diseases that affect low-income countries?
- Research capacity building, technology transfer and the involvement of developing country institutions as full partners in product R&D.
- Public-private partnerships.
- The increasing number of independent product R&D and other research initiatives and how they fit into the overall picture.
- Ensuring best practices (e.g., good laboratory practice, good clinical practice and bioethics).

4.4 GLOBAL PUBLIC GOODS

Background information

Many products (drugs and vaccines, for example) are of potential value in addressing diseases and public health concerns, regardless of the length of their track record. However, a large number of products are not making the impact that they could because those who should be benefiting do not have access to them. This is particularly the case at the periphery of the health care system, at community level. Conversely, there are many products that are available and in use on the strength of the unsupported claims of their suppliers and backers.

There are various responses available for dealing with this situation. These include a mix of vertical and integrated programmes and initiatives, combined with numerous research activities. In addition to international, governmental and bilateral initiatives, single-product organizations – including public-private partnerships – together with a variety of nongovernmental organizations are also working to deliver improved products and health care. Financing issues and strengthening health care infrastructure are essential to improving access to health care delivery. Independent private financing (for example, through foundations) tends to focus on health benefits and outcomes. However, much of the thinking behind public sector financing is governed by the concept of “global public goods”. This concept has a radical impact on choices: for example, on the basis of the global public good, public sector financing and subsidy is easier to justify for vaccines or preventive treatments than for drugs. In undertaking these responses, special attention is needed to ensure that poor and marginalized communities are included and targeted for improved access to tools and health care programmes.

The main challenges facing the development and supply of goods are as follows:

- once products and tools are developed, research needs to be extended to identify how best to utilize the products in a “real world setting”, at community level;
- an evidence base must be generated to assess which products and tools deserve to be identified as essential elements of public health policy;
- it must be ensured not only that policy is implemented, but also that an appropriate infrastructure is developed to ensure that initiatives have impact at the periphery of the health care system, at community level;
- policy needs to be monitored through appropriate indicators and continuing research;
- appropriate surveillance and response must be established;
- financing needs to be obtained.

WHO is organizing a comprehensive response to those challenges.

The primary research-based units – the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, the UNAIDS/WHO Initiative for Vaccine Research and the UNFPA/WHO Special Programme of Research, Development and Research Training in Human Reproduction – working with and through partners, are undertaking extended research to assess best use and best practice concerning products, tools and methodologies; where appropriate, they are gathering evidence for policy and advice to countries. A major component of this work is directed toward enhancing ease of use and accessibility at community level. Many of WHO’s normative functions concern the assessment of evidence, providing the basis of recommendations on how best to exploit products and policy decisions. This is followed by work to promote the appropriate implementation of such policies in partnership with countries. On issues related to drug use, the Department of Essential Drugs and Medicines Policy plays a

key role. Strong databases to inform and monitor policy implementation are also important, and several powerful databases are available and being further developed. Finally, WHO works continuously for resources to support appropriate health care implementation at country level, both through its own offices and through other agencies.

Points for discussion

- Research to inform policy and best practice.
- Research to improve access at the periphery of health care systems.
- Health systems research and strengthening (capacity building).
- Policy implementation and scale-up issues.
- Financial mechanisms to promote access.

5.1 GLOBAL ALLIANCES AND MECHANISMS

Background information

The number of partnerships formed to tackle specific health problems has grown rapidly in recent years, with WHO often involved as the lead technical agency. Several factors underpin this trend. In some cases, the availability of powerful drugs capable of relieving great suffering has created a moral imperative to act; drugs are donated by manufacturers, and multi-partner efforts have been organized at field level to ensure adequate delivery. Other partnerships, such as those for poliomyelitis eradication and tobacco control, arise from a sense of international solidarity in the face of a shared threat: a focused effort, adequately supported, can bring lasting benefits for all.

In other cases, partnerships have formed because the magnitude of the health problem – AIDS, tuberculosis, malaria or maternal and infant mortality – is so great and broadly determined that no single agency can achieve progress acting on its own. Other partnerships again, aimed at product research and development, recognize that badly needed new drugs, vaccines, and other tools will not be made available through market forces alone. Many of these product-focused partnerships further aim to ensure that developing countries reap the benefits, at affordable prices, of revolutionary advances in biotechnology.

While the health problems addressed by these partnerships are not new, the momentum and determination to solve them are. For example, the Global Alliance for Vaccines and Immunization has revitalized global immunization efforts, while also ensuring that children are not denied the protection afforded by new or previously underutilized vaccines. The WHO Framework Convention on Tobacco Control has demonstrated how complex and often contradictory positions can be reconciled in the interests of considerable long-term public health gains. The Partnership for Safe Motherhood and Newborn Health is leading the way, a good example of harmonized and coordinated action by a large number of partners.

This renewed determination to take concerted initiatives against a growing number of health problems is a welcome trend. It deserves analysis in terms of the progress being made, the factors that contribute to success, and possible ways of harnessing successful mechanisms and best practices to serve other programmes.

Achievements. Several partnerships, both long-established and very recent, have moved rapidly towards the realization of ambitious goals: eradicating poliomyelitis and dracunculiasis, adopting the Framework Convention on Tobacco Control, controlling schistosomiasis and soil-transmitted helminthiasis, and eliminating lymphatic filariasis, leprosy, and onchocerciasis as public health problems. Efforts have been made to avoid the potential pitfalls of partnerships, which can, on occasion, distort national health agendas; divert resources away from priority problems; focus undue attention on short-term goals, and ultimately compromise WHO's integrity. Current studies indicate that partnership activities are yielding considerable health benefits, especially for poor populations. To take one example, during 2003, around 150 million people are expected to receive drugs to protect them against lymphatic filariasis, thus contributing to the eventual elimination of this disease.

Alliances and partnerships can also stimulate improvements in health policy and infrastructure. In the Stop TB Partnership, for example, the Global TB Drug Facility has built-in features that motivate countries to improve both their treatment strategies and their systems for drug procurement, warehousing, and distribution. To qualify for grants of free tuberculosis drugs, governments and nongovernmental organizations must demonstrate their strict adherence to proven and effective practices within the WHO-recommended strategy for tuberculosis control. This comprehensive verification concerns diagnostics, treatment and disease monitoring. The drive to eradicate poliomyelitis has pioneered delivery mechanisms and surveillance systems that are now being used for other diseases. Efforts to eradicate dracunculiasis

have carved out similar infrastructures in extremely poor and inaccessible parts of Africa. The Health InterNetwork Access to Research Initiative, which gives institutes in 113 countries free or low-cost access to more than 2200 journals, is also stimulating locally-led improvements in information technology and internet connectivity.

Factors contributing to success. Almost all partnerships work to achieve precise time-limited targets. This encourages multiple partners to cooperate according to individual strengths. Partnerships also expand the resource base considerably – open-ended drug donations and the hundreds of thousands of volunteers mobilized by Rotary International for the poliomyelitis campaign are good examples. In addition, many partnerships are successful because they build on lessons learned during the period of WHO’s strategy of health for all by the year 2000; they explicitly recognize the importance of certain essential elements: community participation, a sense of local ownership, an ability to move from pilot projects to national coverage, integration into general health services, and support from quality-assured technology. It could be argued that the quality of drugs and other interventions being distributed in these partnerships goes beyond that associated with “appropriate technology”. Partnerships for the strategic development of new drugs and vaccines, such as those for HIV/AIDS, tuberculosis, malaria, and the neglected tropical diseases, are expected to further advance this trend of bringing the best quality tools to bear on diseases of the poor.

Points for discussion

- How can successful mechanisms and best practices be applied to other initiatives?
- What are the most appropriate governing structures for partnerships?
- What opportunities exist for synergy among different partnerships?
- What specific mechanisms could work for other new initiatives, namely the “3 by 5” target for antiretroviral drugs?
- Resources are now forthcoming and commitment to act is high; how, then, can partnerships take advantage of this favourable context and contribute to a rapid strengthening of health infrastructures – currently the major impediment to solving health problems?
- How can other partners, including civil society, be engaged effectively?
- What are the challenges of working with WHO?

5.2 WORKING IN COUNTRIES: ACHIEVING RESULTS THROUGH COOPERATION

Background information

If health outcomes are to be improved dramatically, taking advantage of the prominent position health is currently enjoying on the international health agenda, then strong partnerships are essential. Special efforts are required to bring partnerships into being and to maintain them for good results. While it is the case that no two partnerships are identical, there are nevertheless certain elements that are common to all.

At country level, the health sector often lacks mechanisms for enhancing coordination between governments, development agencies, nongovernmental organizations and private entities. Opportunities can be missed because efforts are not combined and scarce resources not shared. Moreover, too many initiatives are imposed “top down” and are thus poorly adapted to local needs. Improving coordination and collaboration has helped to reduce duplication and has increased the efficiency and effectiveness of national and donor-funded programmes.

In recent years, in order to coordinate and improve health development, governments, the United Nations system, intergovernmental organizations and other key development partners have launched a number of partnership mechanisms at the country level. Such mechanisms include, for example, poverty reduction strategies and sector-wide development programmes. Mechanisms specific to the United Nations (for example, the Common Country Assessment and the United Nations Development Assistance Framework) together with country coordination mechanisms related to global initiatives (the Global Fund to Fight AIDS, Tuberculosis and Malaria and the Global Alliance for Vaccines and Immunization) have helped to harmonize policies and programmes. Often, the complexity of health and health-related problems at the country level has demanded enhanced technical collaboration between two or more agencies in order to make effective use of each other’s comparative advantage.

WHO’s partnerships at country level involve the relevant governments (mainly ministries of health), together with bilateral and multilateral organizations, organizations of the United Nations system, international financial institutions, the International Committee of the Red Cross, nongovernmental organizations, civil society and volunteer organizations. WHO is pursuing these partnerships for the full range of technical cooperation relating to the health sector. Indeed, WHO corporate strategy recognizes that new ways of working are needed if WHO is to respond effectively to the changing international environment. Negotiating national and international partnerships is, therefore, one of WHO’s core functions. As an illustration of its current involvement in partnership and coordination mechanisms, WHO has joined the United Nations Development Group, a United Nations coordinating mechanism, in order to pursue the reform agenda further, and WHO is also part of the United Nations resident coordinator system at the country level.

Case studies from Bangladesh, Kenya, Kyrgyzstan, Philippines and Zambia will provide further evidence of the positive experiences WHO has enjoyed in each of the three categories of partnership mechanisms mentioned above.

Points for discussion

- The lessons learned from partnership initiatives.
- The impact of partnerships at country level and the challenges faced.
- Ongoing work to strengthen WHO offices at country level.