Public policies for the public's health

Public policies in the health sector, together with those in other sectors, have a huge potential to secure the health of communities. They represent an important complement to universal coverage and service delivery reforms. Unfortunately, in most societies, this potential is largely untapped and failures to effectively engage other sectors are widespread. Looking ahead at the diverse range of challenges associated with the growing importance of ageing, urbanization and the social determinants of health, there is, without question, a need for a greater capacity to seize this potential. That is why a drive for better public policies – the theme of this chapter – forms a third pillar supporting the move towards PHC, along with universal coverage and primary care.

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The chapter reviews the policies that must be in place. These are:

- systems policies – the arrangements that are needed across health systems' building blocks to support universal coverage and effective service delivery;
- public-health policies – the specific actions needed to address priority health problems through cross-cutting prevention and health promotion; and
- policies in other sectors – contributions to health that can be made through intersectoral collaboration.

The chapter explains how these different public policies can be strengthened and aligned with the goals pursued by PHC.

The importance of effective public policies for health

People want to live in communities and environments which secure and promote their health[1]. Primary care, with universal access and social protection represent key responses to these expectations. People also expect their governments to put into place an array of public policies that span local through to supra-national level arrangements, without which primary care and universal coverage lose much of their impact and meaning. These include the policies required to make health systems function properly; to organize public-health actions of major benefit to all; and, beyond the health sector, the policies that can contribute to health and a sense of security, while ensuring that issues, such as urbanization, climate change, gender discrimination or social stratification are properly addressed.

A first group of critical public policies are the health systems policies (related to essential drugs, technology, quality control, human resources, accreditation, etc.) on which primary care and universal coverage reforms depend. Without functional supply and logistics systems, for example, a primary-care network cannot function properly: in Kenya, for example, children are now much better protected against malaria as a result of local services providing them with insecticide-treated bednets[2]. This has only been possible because the work of primary care was supported by a national initiative with strong political commitment, social marketing and national support for supply and logistics.

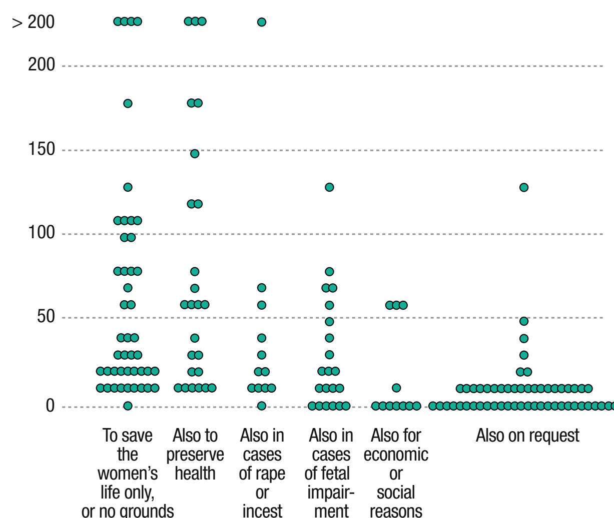
Effective public-health policies that address priority health problems are a second group without which primary care and universal coverage reforms would be hindered. These encompass the technical policies and programmes that provide guidance to primary-care teams on how to deal with priority health problems. They also encompass the classical public-health interventions, from public hygiene and disease prevention to health promotion. Some interventions, such as the fortification of salt with iodine, are only feasible at the regional, national or, increasingly at supra-national level. This may be because it is only at those levels that there is the necessary authority to decide upon such policies, or because it is more efficient to develop and implement such policies on a scale that is beyond the local dimensions of primary-care action. Finally, public policies encompass the rapid response capacity, in command-and-control mode, to deal with acute threats to the public's health, particularly epidemics and catastrophes. The latter is of the utmost political importance, because failures profoundly affect the public's trust in its health authorities. The lack of preparedness and uncoordinated responses of both the Canadian and the Chinese health systems to the outbreak of SARS in 2003, led to public outcries and eventually to the establishment of a national public health agency in Canada. In China, a similar lack of preparedness and transparency led to a crisis in confidence – a lesson learned in time for subsequent events[3,4].

The third set of policies that is of critical concern is known as "health in all policies", which is based on the recognition that population health can be improved through policies that are mainly controlled by sectors other than health[5]. The health content of school curricula, industry's policy towards gender equality, or the safety of food and consumer goods are all issues that can profoundly influence or even determine the health of entire communities, and that can cut across national boundaries. It is not possible to address such issues without intensive intersectoral collaboration that gives due weight to health in all policies.

Better public policies can make a difference in very different ways. They can mobilize the whole of society around health issues, as in Cuba (Box 4.1). They can provide a legal and social environment that is more or less favourable to health outcomes. The degree of legal access to abortion, for example, co-determines the frequency and related mortality of unsafe abortion[6]. In South Africa, a change in legislation increased women's access to a broad range of options for the prevention and treatment of unwanted pregnancy, resulting in a 91% drop in abortion-related deaths[7]. Public policies can anticipate future problems. In Bangladesh, for example, the death toll due to high intensity cyclones and flooding was 240 000 people in 1970. With emergency preparedness and multisectoral risk reduction programmes, the death toll of comparable or more severe storms was reduced to 138 000 people in 1991 and 4500 people in 2007[8,9,10].

In the 23 developing countries that comprise 80% of the global chronic disease burden, 8.5 million lives could be saved in a decade by a 15% dietary salt reduction through manufacturers voluntarily reducing salt content in processed foods and a sustained mass-media campaign encouraging dietary change. Implementation of four measures from the Framework Convention on Tobacco Control (increased tobacco taxes; smoke-free workplaces; convention-compliant packaging, labelling and awareness campaigns about health risks; and a comprehensive advertising, promotion, and sponsorship ban) could save a further 5.5 million lives in a decade[11]. As is often the case when considering social, economic and political determinants of ill-health, improvements are dependent on a fruitful collaboration between the health sector and a variety of other sectors.

Figure 4.1 Deaths attributable to unsafe abortion per 100 000 live births, by legal grounds for abortion[a,12,13]



[a]Every dot represents one country.

Box 4.1 Rallying society's resources for health in Cuba[14,15,16]

In Cuba, average life expectancy at birth is the second highest in the Americas: in 2006, it was 78 years, and only 7.1 per 1000 children died before the age of five. Educational indicators for young children are among the best in Latin America. Cuba has achieved these results despite significant economic difficulties – even today, GDP per capita is only I$ 4500. Cuba's success in ensuring child welfare reflects its commitment to national public-health action and intersectoral action.

The development of human resources for health has been a national priority. Cuba has a higher proportion of doctors in the population than any other country. Training for primary care gives specific attention to the social determinants of health. They work in multidisciplinary teams in comprehensive primary-care facilities, where they are accountable for the health of a geographically defined population providing both curative and preventive services. They work in close contact with their communities, social services and schools, reviewing the health of all children twice a year with the teachers. They also work with organizations such as the Federation of Cuban Women (FMC) and political structures. These contacts provide them with the means to act on the social determinants of health within their communities.

Cuban national policy has also prioritized investing in early child development. There are three non-compulsory preschool education programmes, which together are taken up by almost 100% of children under six years of age. In these programmes, screening for developmental disorders facilitates early intervention. Children who are identified with special needs, and their families, receive individual attention through multidisciplinary teams that contain both health and educational specialists. National policy in Cuba has not succumbed to a false choice between investing in the medical workforce and acting on the social determinants of health. Instead, it has promoted intersectoral cooperation to improve health through a strong preventive approach. In support of this policy, a large workforce has been trained to be competent in clinical care, working as an active part of the community it serves.

System policies that are aligned with PHC goals

There is growing awareness that when parts of the health system malfunction, or are misaligned, the overall performance suffers. Referred to variously as "core functions"[17] or "building blocks"[18], the components of health systems include infrastructure, human resources, information, technologies and financing – all with consequences for the provision of services. These components are not aligned naturally or simply with the intended direction of PHC reforms that promote primary care and universal coverage: to obtain that alignment requires deliberate and comprehensive policy arrangements.

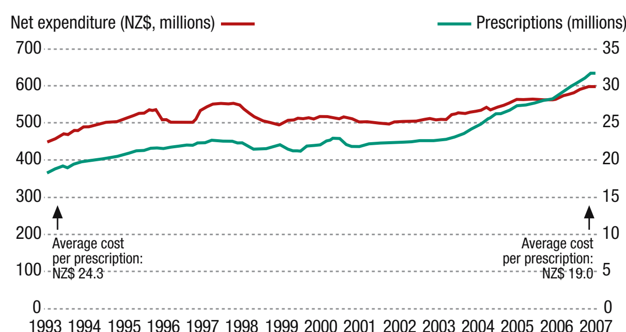
Experience in promoting essential medicines has shed light on both the opportunities and obstacles to effective systems policies for PHC. Since the *WHO List of Essential Medicines* was established in 1977, it has become a primary stimulus to the development of national medicines policies. Over 75% of the 193 WHO Member States now claim to have a national list of essential medicines, and over 100 countries have developed a national medicine policy. Surveys reveal that these policies have been effective in making lower cost and safer medicines available and more rationally used[19,20]. This particular policy has been successfully designed to support PHC, and it offers lessons on how to handle cross-cutting challenges of scale efficiencies and systems co-dependence. Without such arrangements, the health costs are enormous: nearly 30 000 children die every day from diseases that could easily have been treated if they had had access to essential medicines[21].

Medicines policies are indicative of how efficiencies in the scale of organization can be tapped. Safety, efficacy and quality of care have universal properties that make them amenable to globally agreed international standards. Adoption and adaptation of these global standards by national authorities is much more efficient than each country inventing its own standards. National decision-making and purchasing mechanisms can then guide rational, cost-effectiveness-based selection of medicines and reduce costs through bulk purchase. For example, Figure 4.2 shows how centralized oversight of drug purchasing and subsidization in New Zealand significantly improved access to essential medicines while lowering the average prescription price. On a larger scale, transnational mechanisms, such as UNICEF's international procurement of vaccines, PAHO's Revolving Fund and the Global Drug Facility for tuberculosis treatment, afford considerable savings as well as quality assurances that countries on their own would be unlikely to negotiate[22,23,24,25].

A second key lesson of experience with essential drugs policies is that a policy cannot exist as an island and expect to be effectively implemented. Its formulation must identify those other systems elements, be they financing, information, infrastructure or human resources, upon which its implementation is dependent. Procurement mechanisms for pharmaceuticals, for example, raise important considerations for systems financing policies: they are interdependent. Likewise, human resources issues related to the education of consumers as well as the training and working conditions of providers are likely to be key determinants of the rational use of drugs.

Systems policies for human resources have long been a neglected area and one of the main constraints to health systems development[27]. The realization that the health MDGs are contingent on bridging the massive health-worker shortfall in low-income countries has brought long overdue attention to a previously neglected area. Furthermore, the evidence of increasing dependence on migrant health workers to address shortages in OECD countries underlines the fact that one country's policies may have a significant impact on another's. The choices countries make – or fail to

Figure 4.2 Annual pharmaceutical spending and number of prescriptions dispensed in New Zealand since the Pharmaceutical Management Agency was convened in 1993[26]



make – can have major long-term consequences. Human resources for health are the indispensable input to effective implementation of primary care and universal coverage reforms, and they are also the personification of the values that define PHC. Yet, in the absence of a deliberate choice to guide the health workforce policy by the PHC goals, market forces within the health-care system will drive health workers towards greater sub-specialization in tertiary care institutions, if not towards migration to large cities or other countries. PHC-based policy choices, on the other hand, focus on making staff available for the extension of coverage to underserved areas and disadvantaged population groups, as with Malaysia's scaling up of 11 priority cadres of workers, Ethiopia's training of 30 000 Health Extension Workers, Zambia's incentives to health workers to serve in rural areas, the 80 000 Lady Health Workers in Pakistan, or the task shifting for the care of HIV patients. These policies direct investments towards the establishment of the primary-care teams that are to be the hub of the PHC-based health system: the 80 000 health workers for Brazil's 30 000 Family Health Teams or the retraining of over 10 000 nurses and physicians in Turkey. Furthermore, these policies require both financial and non-financial incentives to compete effectively for scarce human resources, as in the United Kingdom, where measures have been taken to make a career in primary care financially competitive with specialization.

The core business of ministries of health and other public authorities is to put into place, across the various building blocks of the health system, the set of arrangements and mechanisms required to meet their health goals. When a country chooses to base its health systems on PHC – when it starts putting into place primary care and universal coverage reforms – its whole arsenal of system policies needs to be aligned behind these reforms: not just those pertaining to service delivery models or financing. It is possible to develop system policies that do not take account of the PHC agenda. It is also possible to choose to align them to PHC. If a country opts for PHC, effective implementation allows no half measures; no health systems building block will be left untouched.

Public-health policies

Aligning priority health programmes with PHC

Much action in the health sector is marshalled around specific high-burden diseases, such as HIV/AIDS, or stages of the life course such as children – so-called priority health conditions. The health programmes that are designed around these priorities are often comprehensive insofar as they set norms, ensure visibility and quality assurance, and entail a full range of entry points to address them locally or at the level of countries or regions. Responses to these priority health conditions can be developed in ways that either strengthen or undercut PHC[28].

In 1999 for example, the Primary Care Department of the Brazilian Paediatrics Society (SBP) prepared a plan to train its members in the Integrated Management of Childhood Illness (IMCI) and to adapt this strategy to regional epidemiological characteristics[29]. Despite conducting an initial training course, the SBP then warned paediatricians that IMCI was not a substitute for traditional paediatric care and risked breaching the basic rights of children and adolescents. In a next step, it objected to the delegation of tasks to the nurses, who are part of the multidisciplinary family health teams, the backbone of Brazil's PHC policy. Eventually, the SBP attempted to reclaim child and adolescent care as the exclusive domain of paediatricians with the argument that this ensured the best quality of care.

Experience with priority health programmes shows that the way they are designed makes the difference: trying to construct an entire set of PHC reforms around the unique requirements of a single disease leads to considerable inefficiencies. Yet, the reverse is equally true. While AIDS has been referred to as a metaphor for all that ails health systems and the wider society[30], the global response to the HIV pandemic can, in many respects, also be viewed as a pathfinder for PHC. From the start, it has had a strong rights-based and social justice foundation[31]. Its links to often marginalized and disadvantaged high-risk constituencies, and concerns about stigma, have led to concerted efforts to secure their rights and entitlements to employment, social services and

health care. Efforts to scale-up services to conform to the goals of universal access have helped to expose the critical constraints deriving from the workforce crisis. The challenge of providing life-long treatment in resource-constrained settings has inspired innovations, such as more effective deployment of scarce human resources via "task shifting", the use of "patient advocates"[32], and the unexpected implementation of electronic health records. Most importantly, the adoption of a continuum of care approaches for HIV/AIDS from prevention to treatment to palliation has helped to revive and reinforce core features of primary care, such as comprehensiveness, continuity and person-centredness[32].

Countrywide public-health initiatives

While it is essential that primary-care teams seek to improve the health of populations at local level, this may be of limited value if national- and global-level policy-makers fail to take initiatives for broader, public policy measures, which are important in changing nutrition patterns and influencing the social determinants of health. These can rarely be implemented only in the context of local policies. Classical areas in which beyond-local-scale public-health interventions may be beneficial include: altering individual behaviours and lifestyles; controlling and preventing disease; tackling hygiene and the broader determinants of health; and secondary prevention, including screening for disease[33]. This includes measures such as the fortification of bread with folate, taxation of alcohol and tobacco, and ensuring the safety of food, consumer goods and toxic substances. Such national- and transnational-scale public-health interventions have the potential to save millions of lives. The successful removal of the major risk factors of disease, which is technically possible, would reduce premature deaths by an estimated 47% and increase global healthy life expectancy by an estimated 9.3 years[34]. However, as is the case for the priority programmes discussed above, the corresponding public-health policies must be designed so as to reinforce the PHC reforms.

Not all such public-health interventions will improve, for example, equity. Health promotion efforts that target individual risk behaviours, such as health education campaigns aimed at smoking, poor nutrition and sedentary lifestyles, have often inadvertently exacerbated inequities. Socioeconomic differences in the uptake of one-size-fits-all public-health interventions have, at times, not only resulted in increased health inequities, but also in victim-blaming to explain the phenomenon[35]. Well-designed public-health policies can, however, reduce inequities when they provide health benefits to entire populations or when they explicitly prioritize groups with poor health[36]. The evidence base for privileging public policies that reduce inequities is increasing, most notably through the work of the Commission on Social Determinants of Health (Box 4.2)[37].

Rapid response capacity

While PHC reforms emphasize the importance of participatory and deliberative engagement of diverse stakeholders, humanitarian disasters or disease outbreaks demand a rapid response capacity that is crucial in dealing effectively with the problem at hand and is an absolute imperative in maintaining the trust of the population in their health system. Invoking quarantines or travel bans, rapidly sequencing the genome of a new pathogen to inform vaccine or therapeutic design, and mobilizing health workers and institutions without delay can be vital. While the advent of an "emergency" often provides the necessary good will and flexibility of these diverse actors to respond, an effective response is more likely if there have been significant investments in preparedness[38].

Global efforts related to the threat of pandemic avian influenza (H5N1) provide a number of interesting insights into how policies that inform preparedness and response could be guided by the values of PHC related to equity, universal coverage and primary-care reforms. In dealing with seasonal and pandemic influenza, 116 national influenza laboratories, and five international collaborating centre laboratories share influenza viruses in a system that was started by WHO over 50 years ago. The system was implemented to identify new pandemic virus threats and inform the optimal annual preparation of a seasonal influenza vaccine that is used primarily by industrialized countries. With the primarily

Box 4.2 Recommendations of the Commission on Social Determinants of Health[37]

The Commission on Social Determinants of Health (CSDH) was a three-year effort begun in 2005 to provide evidence-based recommendations for action on social determinants to reduce health inequities. The Commission accumulated an unprecedented collection of material to guide this process, drawing from theme-based knowledge networks, civil society experiences, country partners and departments within WHO. The final report of the CSDH contains a detailed series of recommendations for action, organized around the following three overarching recommendations.

1. Improve daily living conditions

Key improvements required in the well-being of girls and women; the circumstances in which their children are born, early child development and education for girls and boys; living and working conditions; social protection policy; and conditions for a flourishing older life.

2. Tackle the inequitable distribution of power, money and resources

To address health inequities it is necessary to address inequities in the way society is organized. This requires a strong public sector that is committed, capable and adequately financed. This in turn requires strengthened governance including stronger civil society and an accountable private sector. Governance dedicated to pursuing equity is required at all levels.

3. Measure and understand the problem and assess the impact of action

It is essential to acknowledge the problem of health inequity and ensure that it is measured – both within countries and globally. National and global health equity surveillance systems for routine monitoring of health inequity and the social determinants of health are required that also evaluate the health equity impact of policy and action. Other requirements are the training of policy-makers and health practitioners, increased public understanding of social determinants of health, and a stronger social determinants focus in research.

developing country focus of human zoonotic infections and the spectre of a global pandemic associated with H5N1 strains of influenza, the interest in influenza now extends to developing countries, and the long-standing public-private approach to influenza vaccine production and virus sharing has come under intense scrutiny. The expectation of developing countries for equitable access to protection, including affordable access to anti-virals and vaccines in the event of a pandemic, is resulting in changes to national and global capacity strengthening: from surveillance and laboratories to capacity transfer for vaccine formulation and production, and capacity for stock-piling. Thus, the most equitable response is the most effective response, and the most effective rapid response capacity can only emerge from the engagement of multiple stakeholders in this global process of negotiation.

Towards health in all policies

The health of populations is not merely a product of health sector activities – be they primary-care action or countrywide public-health action. It is to a large extent determined by societal and economic factors, and hence by policies and actions that are not within the remit of the health sector. Changes in the workplace, for example, can have a range of consequences for health (Table 4.1).

Confronted with these phenomena, the health authorities may perceive the sector as powerless to do more than try to mitigate the consequences. It cannot, of itself, redefine labour relations or unemployment arrangements. Neither can it increase taxes on alcohol, impose technical norms on motor vehicles or regulate rural migration and the development of slums – although all these measures can yield health benefits. Good urban governance, for example, can lead to 75 years or more of life expectancy, against as few as 35 years with poor governance[39]. Thus, it is important for the health sector to engage with other sectors, not just in order to obtain collaboration on tackling pre-identified priority health problems, as is the case for well-designed public-health interventions, but to ensure that health is recognized as one of the socially valued outcomes of all policies.

Such intersectoral action was a fundamental principle of the Alma-Ata Declaration. However, ministries of health in many countries have struggled to coordinate with other sectors or wield influence beyond the health system for which they are formally responsible. A major obstacle to reaping the rewards of intersectoral action has been the tendency, within the health sector, to see such collaboration as "mostly symbolic in trying to get other sectors to help [health] services"[40]. Intersectoral action has often not concentrated

Table 4.1 Adverse health effects of changing work circumstances[5]

Adverse health effects of unemployment	Adverse health effects of restructuring	Adverse health effects of non-standard work arrangements
Elevated blood pressure Increased depression and anxiety Increased visits to general practitioners Increased symptoms of coronary disease Worse mental health and greater stress Increased psychological morbidity and increased medical visits Decreased self-reported health status and an increase in the number of health problems Increase in family problems, particularly financial hardships	Reduced job satisfaction, reduced organizational commitment and greater stress Feelings of unfairness in downsizing process Survivors face new technologies, work processes, new physical and psychological exposures (reduced autonomy, increased work intensity, changes in the characteristics of social relationships, shifts in the employment contracts and changes in personal behaviour) Changes in the psychological contract and lost sense of trust Prolonged stress with physiological and psychological signs	Higher rates of occupational injury and disease than workers with full-time stable employment High level of stress, low job satisfaction and other negative health and well-being factors More common in distributive and personal service sub-sectors where people in general have lower educational attainment and low skill levels Low entitlement to workers' compensation and low level of claims by those who are covered Increased occupational health hazards due to work intensification motivated by economic pressures Inadequate training and poor communication caused by institutional disorganization and inadequate regulatory control Inability of workers to organize their own protection Cumulative trauma claims are difficult to show due to mobility of workers Reduced ability to improve life conditions due to inability to obtain credit, find housing, make pension arrangements, and possibility for training Fewer concerns for environmental issues and health and safety at work

on improving the policies of other sectors, but on instrumentalizing their resources: mobilizing teachers to contribute to the distribution of bednets, police officers to trace tuberculosis treatment defaulters, or using the transport of the department of agriculture for the emergency evacuation of sick patients.

A "whole-of-government approach", aiming for "health in all policies" follows a different logic[41,42]. It does not start from a specific health problem and look at how other sectors can contribute to solving them – as would be the case, for example, for tobacco-related disease. It starts by looking at the effects of agricultural, educational, environmental, fiscal, housing, transport and other policies on health. It then seeks to work with these other sectors to ensure that, while contributing to well-being and wealth, these policies also contribute to health[5].

Other sector's public policies, as well as private sector policies, can be important to health in two ways.

- Some may lead to adverse consequences for health (Table 4.1). Often such adverse consequences are identified retrospectively, as in the case of the negative health effects of air pollution or industrial contamination. Yet, it is also often possible to foresee them or detect them at an early stage. Decision-makers in other sectors may be unaware of the consequences

of the choices they are making, in which case engagement, with due consideration for the other sectors' goals and objectives, may then be the first step in minimizing the adverse health effects.

- Public policies developed by other sectors – education, gender equality and social inclusion – may positively contribute to health in ways that these other sectors are equally unaware of. They may be further enhanced by more purposefully pursuing these positive health outcomes, as an integral part of the policy. For example, a gender equality policy, developed in its own right, may produce health benefits, often to a degree that the proponents of the policy underestimate. By collaborating to give more formal recognition to these outcomes, the gender equality policy itself is reinforced, and the synergies enhance the health outcomes. In that case, the objective of intersectoral collaboration is to reinforce the synergies.

Failing to collaborate with other sectors is not without its consequences. It affects the performance of health systems and, particularly, primary care. For example, Morocco's trachoma programme relied both on high levels of community mobilization and on effective collaboration with the ministries of education, interior and local affairs. That collaboration has been the key to the successful elimination of trachoma[43]. In contrast, the same country's tuberculosis control programme failed to link up with urban development and poverty reduction efforts and, as a result, its performance has been disappointing[44]. Both were administered by the same Ministry of Health, by staff with similar capacities working under similar resource constraints, but with different strategies.

Failing to collaborate with other sectors has another consequence, which is that avoidable ill-health is not avoided. In the NGagne Diaw quarter of Thiaroye-sur-Mer, Dakar, Senegal, people make a living from the informal recycling of lead batteries. This was of little concern to the authorities until an unexplained cluster of child deaths prompted an investigation. The area was found to be contaminated with lead, and the siblings and mothers of the dead children were found to have extremely high concentrations of lead in their blood. Now, major investments are required to deal with the health and social consequences and to decontaminate the affected area, including people's homes. Before the cluster of deaths occurred, the health sector had, unfortunately, not considered it a priority to work with other sectors to help to avoid this situation[45].

Where intersectoral collaboration is successful, the health benefits can be considerable, although deaths avoided are less readily noticed than lives lost. For example, pressure from civil society and professionals led to the development, in France, of a multi-pronged, high-profile strategy to improve road safety as a social and political issue that had to be confronted (and not primarily as a health sector issue). Various sectors worked together in a sustained effort, with high-level political endorsement, to reduce road-traffic accidents, with highly publicized monitoring of progress and a reduction in fatalities of up to 21% per year[46]. The health and health equity benefits of working towards health in all policies have become apparent in programmes such as "Healthy Cities and Municipalities", "Sustainable Cities", and "Cities Without Slums", with integrated approaches that range from engagement in budget hearings and social accountability mechanisms to data gathering and environmental intervention[47].

In contemporary societies, health tends to become fragmented into various sub-institutions dealing with particular aspects of health or health systems, while the capacity to assemble the various aspects of public policy that jointly determine health is underdeveloped. Even in the well-resourced context of, for example, the European Union, the institutional basis for doing this remains poorly developed[48]. Ministries of health have a vital role to play in creating such a basis, which is among the key strategies for making headway in tackling the socioeconomic determinants of ill-health[49].

Understanding the under-investment

Despite the benefits and low relative cost of better public policies, their potential remains largely underutilized across the world. One high-profile example is that only 5% of the world's population live in countries with comprehensive tobacco

advertising, promotion and sponsorship bans, despite their proven efficacy in reducing health threats, which are projected to claim one billion lives this century[50].

The health sector's approach to improving public policies has been singularly unsystematic and guided by patchy evidence and muddled decision-making – not least because the health community has put so little effort into collating and communicating these facts. For all the progress that has been made in recent years, information on the effectiveness of interventions to redress, for example, health inequities is still hard to come by and, when it is available, it is confined to a privileged circle of concerned experts. A lack of information and evidence is, thus, one of the explanations for under-investment.

Box 4.3 How to make unpopular public policy decisions[51]

The Seventh Futures Forum of senior health executives organized by the World Health Organization's Regional Office for Europe in 2004 discussed the difficulties decision-makers can have in tackling unpopular policy decisions. A popular decision is usually one that results from broad public demand; an unpopular decision does not often respond to clearly expressed public expectations, but is made because the minister or the chief medical officer knows it is the right action to bring health gains and improve quality. Thus, a potentially unpopular decision should not seek popularity but, rather, efforts must be made to render it understandable and, therefore, acceptable. Making decisions more popular is not an academic exercise but one that deals with actual endorsement. When a decision is likely to be unpopular, participants in the Forum agreed that it is advisable for health executives to apply some of the following approaches.

Talk about health and quality improvement. Health is the core area of expertise and competence, and the explanations of how the decision will improve the quality of health and health services should therefore come first. Avoiding non-health arguments that are difficult to promote may be useful – for instance, in the case of hospital closures, it is much better to talk about improving quality of care than about containing costs.

Offer compensation. Explain what people will receive to balance what they will have to give up. Offer some gains in other sectors or in other services; work to make a win-win interpretation of the coming decision by balancing good and bad news.

Be strong on implementation. If health authorities are not ready to implement the decision, they should refrain from introducing it until they are ready to do so.

Be transparent. Explain who is taking the decision and the stakes of those involved and those who are affected. Enumerate all the stakeholders and whether they [are] involved negatively.

Avoid one-shot decisions. Design and propose the decisions as part of an overall plan or strategy.

Ensure good timing. Before making a decision, it is essential to take enough time to prepare and develop a good plan. When the plan is ready, the best choice may be to act quickly for implementation.

Involve all groups. Bring into the discussion both the disadvantaged groups and the ones who will benefit from the decision. Diversify the approach.

Do not expect mass-media support solely because the decision is the right one from the viewpoint of health gains. The mass media cannot be expected to be always neutral or positive; they may often be brought into the debate by the opponents of the decision. Be prepared to face problems with the press.

Be modest. Acceptability of the decision is more likely when decision-makers acknowledge in public that there is some uncertainty about the result and they commit openly to monitoring and evaluating the outcomes. This leaves the door open for adjustments during the process of implementation.

Be ready for quick changes. Sometimes the feelings of the public change quickly and what was perceived as opposition can turn into acceptance.

Be ready for crisis and unexpected side-effects. Certain groups of populations can be especially affected by a decision (such as general practitioners in the case of hospital closures). Public-health decision-makers have to cope with reactions that were not planned.

Stick to good evidence. Public acceptance may be low without being based on any objective grounds. Having good facts is a good way to shape the debate and avoid resistance.

Use examples from other countries. Decision-makers may look at what is being done elsewhere and explain why other countries deal with a problem differently; they can use such arguments to make decisions more acceptable in their own country.

Involve health professionals and, above all, *be courageous*.

The fact is, however, that even for well-informed political decision-makers, many public policy issues have a huge potential for unpopularity: whether it is reducing the number of hospital beds, imposing seatbelts, culling poultry or taxing alcohol, resistance is to be expected and controversy an everyday occurrence. Other decisions have so little visibility, e.g. measures that ensure a safe food production chain, that they offer little political mileage. Consensus on stern measures may be easy to obtain at a moment of crisis, but public opinion has a notoriously short attention span. Politicians often pay more attention to policies that produce benefits within electoral cycles of two to four years and, therefore, undervalue efforts where benefits, such as those of environmental protection or early child development, accrue over a time span of 20 to 40 years. If unpopularity is one intractable disincentive to political commitment, active opposition from well-resourced lobbies is another. An obvious example is the tobacco industry's efforts to limit tobacco control. Similar opposition is seen to the regulation of industrial waste and to the marketing of food to children. These obstacles to steering public policy are real and need to be dealt with in a systematic way (Box 4.3).

Compounding these disincentives to political commitment is the difficulty of coordinating operations across multiple institutions and sectors. Many countries have limited institutional capacity to do so and, very often, do not have enough capable professionals to cope with the work involved. Crisis management, short-term planning horizons, lack of understandable evidence, unclear intersectoral arrangements, vested interests and inadequate modes of governing the health sector reinforce the need for comprehensive policy reforms to realize the potential of public-health action. Fortunately, there are promising opportunities to build upon.

Opportunities for better public policies

Better information and evidence

Although there are strong indications that the potential gains from better public policies are enormous, the evidence base on their outcomes and on their cost-effectiveness is surprisingly weak[52]. We know much about the relationship between certain behaviours – smoking, diet, exercise, etc. – and health outcomes, but much less about how to effect behavioural change in a systematic and sustainable way at population levels. Even in well-resourced contexts, the obstacles are many: the time-scale in achieving outcomes; the complexity of multifactorial disease causation and intervention effects; the lack of data; the methodological problems, including the difficulties in applying the well-accepted criteria used in the evaluation of clinical methods; and the different perspectives of the multiple stakeholders involved. Infectious disease surveillance is improving, but information on chronic diseases and their determinants or on health inequities is patchy and often lacks systematic focus. Even the elementary foundations for work on population health and the collection of statistics on births and deaths or diseases are deficient in many countries (Box 4.4)[53].

Over the last 30 years, however, there has been a quantum leap in the production of evidence for clinical medicine through collaborative efforts such as the Cochrane Collaboration and the International Clinical Epidemiology Network[56,57]. A similar advance is possible in the production of evidence on public policies, although such efforts are still too tentative compared to the enormous resources available for research in other areas of health, e.g. diagnostic and therapeutic medical technologies. There are, however, signs of progress in the increasing use of systematic reviews by policy-makers[58,59].

Two tracks offer potential for significantly strengthening the knowledge base.

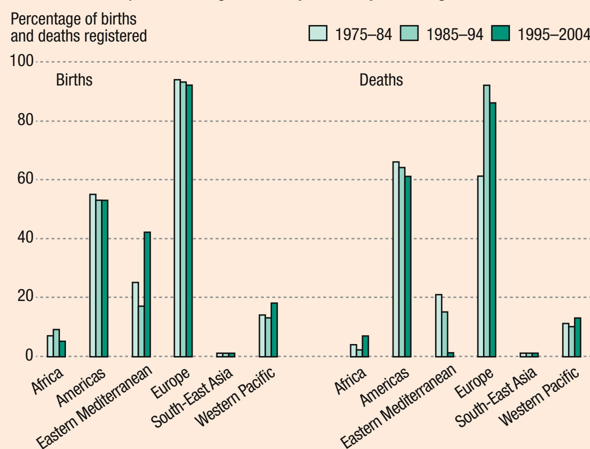
- Speeding up the organization of systematic reviews of critical interventions and their economic evaluation. One way of doing this is by expanding the remit of existing health technology assessment agencies to include the assessment of public-health interventions and delivery modes, since this would make use of existing institutional capacities with ring-fenced resources. The emerging collaborative networks, such as the Campbell Collaboration[60], can play a catalyzing role, exploiting

Box 4.4 The scandal of invisibility: where births and deaths are not counted

Civil registration is both a product of economic and social development, and a condition for modernization. There has been little improvement in coverage of vital registration (official recording of births and deaths) over recent decades (see Figure 4.3). Almost 40% (48 million) of 128 million global births each year go uncounted because of the lack of civil[53] registration systems. The situation is even worse for deaths registration. Globally, two thirds (38 million) of 57 million annual deaths are not registered. WHO receives reliable cause-of-death statistics from only 31 of its 193 Member States.

International efforts to improve vital statistics infrastructure in developing countries have been too limited in size and scope[54]. Neither, the global health community nor the countries have given the development of health statistics and civil registration systems the same priority as health interventions. Within the UN system, civil registration development has no identifiable home. There are no coordination mechanisms to tackle the problem and respond to requests for technical support for mobilizing the necessary financial and technical resources. Establishing the infrastructure of civil registration systems to ensure all births and deaths are counted requires collaboration between different partners in different sectors. It needs sustained advocacy, the nurturing of public trust, supportive legal frameworks, incentives, financial support, human resources and modernized data management systems[55]. Where it functions well, vital statistics provide basic information for priority setting. The lack of progress in the registration of births and deaths is a major concern for the design and implementation of PHC reforms.

Figure 4.3 Percentage of births and deaths recorded in countries with complete civil registration systems, by WHO region, 1975–2004[a]



[a] Source: adapted from [54].

the comparative advantage of scale efficiency and international comparisons.

- Accelerating the documentation and assessment of whole-of-government approaches using techniques that build on the initial experience with "health impact assessment" or "health equity impact assessment" tools[61,62,63]. Although these tools are still in development, there is growing demand from local to supra-national policy-makers for such analyses (Box 4.5). Evidence of their utility in influencing public policies is building up[64,65,66], and they constitute a strategic way of organizing more thoughtful cross-sector discussions. That in itself is an inroad into one of the more intractable aspects of the use of the available evidence base: the clear need for more systematic communication on the potential health gains to be derived from better public policies. Decision-makers, particularly in other sectors, are insufficiently aware of the health consequences of their policies, and of the potential benefits that could be derived from them. Communication beyond the realm of the specialist is as important as the production of evidence and requires far more effective approaches to the dissemination of evidence among policy-makers[67]. Framing population health evidence in terms of the health impact of policies, rather than in the classical modes of communication among health specialists, has the potential to change radically the type and quality of policy dialogue.

A changing institutional landscape

Along with lack of evidence, the area where new opportunities are appearing is in the institutional capacity for developing public policies that are aligned with PHC goals. Despite the reluctance, including from donors, to commit substantial funds to National Institutes of Public Health (NIPHs)[69], policy-makers rely heavily on them or

Box 4.5 European Union impact assessment guidelines[68]

European Union guidelines suggest that the answers to the following questions can form the basis of an assessment of the impact of proposed public-health interventions.

Public health and safety

Does the proposed option:

- affect the health and safety of individuals or populations, including life expectancy, mortality and morbidity through impacts on the socioeconomic environment, e.g. working environment, income, education, occupation or nutrition?
- increase or decrease the likelihood of bioterrorism?
- increase or decrease the likelihood of health risks attributable to substances that are harmful to the natural environment?
- affect health because of changes in the amount of noise or air, water or soil quality in populated areas?
- affect health because of changes in energy use or waste disposal?
- affect lifestyle-related determinants of health such as the consumption of tobacco or alcohol, or physical activity?
- produce specific effects on particular risk groups (determined by age, sex, disability, social group, mobility, region, etc.)?

Access to and effects on social protection, health and educational systems

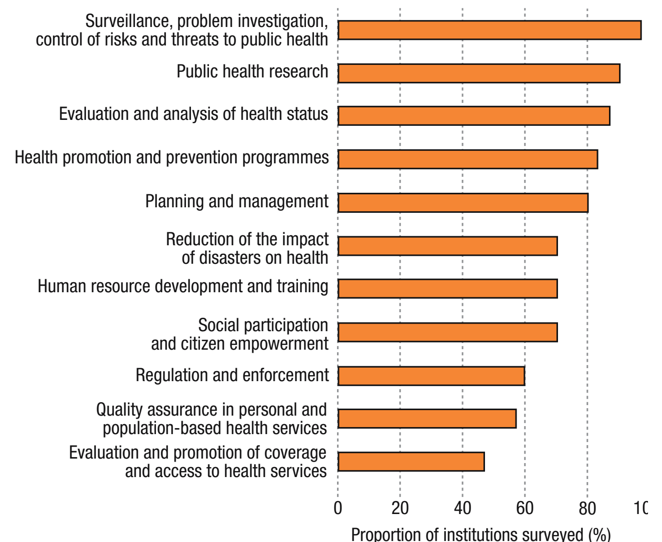
Does the proposed option:

- have an impact on services in terms of their quality and access to them?
- have an effect on the education and mobility of workers (health, education, etc.)?
- affect the access of individuals to public or private education or vocational and continuing training?
- affect the cross-border provision of services, referrals across borders and cooperation in border regions?
- affect the financing and organization of and access to social, health and education systems (including vocational training)?
- affect universities and academic freedom or self-governance?

on their functional equivalents. In many countries, NIPHs have been the primary repositories of independent technical expertise for public health, but also, more broadly, for public policies. Some have a prestigious track record: the Fiocruz in Brazil, the Instituto de Medicina Tropical "Pedro Kouri" in Cuba, Kansanterveyslaitos in Finland, the Centers for Disease Control and Prevention in the United States, or the National Institute of Hygiene and Epidemiology in Viet Nam. They testify to the importance that countries accord to being able to rely on such capacity[69]. Increasingly, however, this capacity is unable to cope with the multiple new demands for public policies to protect or promote health. This is leaving traditional national and global institutes of public health with an oversized, under-funded mandate, which poses problems of dispersion and difficulties in assembling the critical mass of diversified and specialized expertise (Figure 4.4).

In the meantime, the institutional landscape is changing as the capacity for public policy support is being spread over a multitude of national and supra-national institutions. The number of loci of expertise, often specialized in some aspect of public policy, has increased considerably, spanning a broad range of institutional forms including: research centres, foundations, academic units, independent consortia and think tanks, projects, technical agencies and assorted initiatives. Malaysia's Health Promotion Foundation Board, New Zealand's Alcohol Advisory

Figure 4.4 Essential public-health functions that 30 national public-health institutions view as being part of their portfolio[69]



Council and Estonia's Health Promotion Commission show that funding channels have diversified and may include research grants and contracts, government subsidies, endowments, or hypothecated taxes on tobacco and alcohol sales. This results in a more complex and diffuse, but also much richer, network of expertise.

There are important scale efficiencies to be obtained from cross-border collaboration on a variety of public policy issues. For example, the International Association of National Public Health Institutes (IANPHI) helps countries to set up strategies for institutional capacity development[70]. In this context, institution building will have to establish careful strategies for specialization and complementarity, paying attention to the challenge of leadership and coordination.

At the same time, this offers perspectives for transforming the production of the highly diverse and specialized workforce that better public policies require. Schools of public health, community medicine and community nursing have traditionally been the primary institutional reservoirs for generating that workforce. However, they produce too few professionals who are too often focused on disease control and classical epidemiology, and are usually ill-prepared for a career of flexibility, continuous learning and coordinated leadership.

The multi-centric institutional development provides opportunities for a fundamental rethink of curricula and of the institutional settings of pre-service education, with on-the-job training in close contact with the institutions where the expertise is located and developed[71]. There are promising signs of renewal in this regard in the WHO South-East Asian Region (SEARO) that should be drawn upon to stimulate similar thinking and action elsewhere[27]. The increasing cross-border exchange of experience and expertise, combined with a global interest in improving public policy-making capacity, is creating new opportunities – not just in order to prepare professionals in more adequate numbers but, above all, professionals with a broader outlook and who are better prepared to address complex public heath challenges of the future.

Equitable and efficient global health action

In many countries, responsibilities for health and social services are being delegated to local levels. At the same time, financial, trade, industrial and agricultural policies are shifting to international level: health outcomes have to be obtained locally, while health determinants are being influenced at international level. Countries increasingly align their public policies with those of a globalized world. This presents both opportunities and risks.

In adjusting to globalization, fragmented policy competencies in national governance systems are finding convergence. Various ministries, including health, agriculture, finance, trade and foreign affairs are now exploring together how they can best inform pre-negotiation trade positions, provide input during negotiations, and weigh the costs and benefits of alternative policy options on health, the economy and the future of their people. This growing global health "interdependence" is accompanied by a mushrooming of activities expressed at the global level. The challenge is, therefore, to ensure that emerging networks of governance are adequately inclusive of all actors and sectors, responsive to local needs and demands, accountable, and oriented towards social justice[72]. The recent emergence of a global food crisis provides further legitimacy to an input from the health sector into the evolving global response. Gradually, a space is opening for the consideration of health in the trade agreements negotiated through the World Trade Organization (WTO). Although implementation has proved problematic, the flexibilities agreed at Doha for provision in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)[73] of compulsory licencing of pharmaceuticals are examples of emerging global policies to protect health.

There is a growing demand for global norms and standards as health threats are being shifted from areas where safety measures are being tightened to places where they barely exist. Assembling the required expertise and processes is complex and expensive. Increasingly, countries are relying on global mechanisms and collaboration[74]. This trend started over 40 years ago with the creation of the Codex Alimentarius Commission in 1963

by the Food and Agriculture Organization (FAO) and the WHO to coordinate international food standards and consumer protection. Another long-standing example is the International Programme on Chemical Safety, established in 1980 as a joint programme of the WHO, the International Labour Organization (ILO) and the United Nations Environment Programme (UNEP). In the European Union, the construction of health protection standards is shared between agencies and applied across Europe. Given the expense and complexity of drug safety monitoring, many countries adapt and use the standards of the United States Food and Drug Administration (FDA). WHO sets global standards for tolerable levels of many contaminants. In the meantime, countries must either undertake these processes themselves or ensure access to standards from other countries or international agencies, adapted to their own context.

The imperative for global public-health action, thus, places further demands on the capacity and strength of health leadership to respond to the need to protect the health of their communities. Local action needs to be accompanied by the coordination of different stakeholders and sectors within countries. It also needs to manage global health challenges through global collaboration and negotiation. As the next chapter shows, this is a key responsibility of the state.

References

1. Sen A. *Development as freedom.* Oxford, Oxford University Press, 1999.
2. Fegan GW et al. Effect of expanded insecticide-treated bednet coverage on child survival in rural Kenya: a longitudinal study. *Lancet,* 2007, 370:1035–1039.
3. Liu Y. China's public health-care system: facing the challenges. *Bulletin of the World Health Organization*, 2004, 82:532–538.
4. Kaufman JA. China's heath care system and avian influenza preparedness. *Journal of Infectious Diseases*, 2008, 197(Suppl. 1):S7–S13.
5. Ståhl T et al, eds. *Health in all policies: prospects and potentials.* Helsinki, Ministry of Social Affairs and Health, 2006.
6. Berer M. National laws and unsafe abortion: the parameters of change. Reproductive Health Matters, 2004, 12:1–8.
7. Grimes DA et al. Unsafe abortion: the preventable pandemic. *Lancet*, 2006, 368:1908–1919.
8. Sommer A, Mosley WH. East Bengal cyclone of November 1970: epidemiological approach to disaster assessment. *Lancet*, 1972, 1:1029–1036.
9. Bern C et al. Risk factors for mortality in the Bangladesh cyclone of 1991. *Bulletin of the World Health Organization*, 1993, 71:73–78.
10. Chowdhury AM. Personal communication, 2008.
11. Asaria P et al. Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use. *Lancet*, 2007, 370:2044–2053.
12. *World abortion policies 2007.* New York NY, United Nations, Department of Economic and Social Affairs, Population Division, 2007 (ST/ESA/SER.A/264, Wallchart).
13. *Unsafe abortion. Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2003,* 5th ed. Geneva, World Health Organization, 2007.
14. *Maternal health and early childhood development in Cuba.* Ottawa, Committee on Social Affairs, Science and Technology, 2007 (Second Report of the Subcommittee on Population Health of the Standing Senate).
15. Evans RG. Thomas McKeown, meet Fidel Castro: physicians, population health and the Cuban paradox. *Healthcare Policy*, 2008, 3:21–32.
16. Spiegel JM, Yassi A. Lessons from the margins of globalization: appreciating the Cuban health paradox. *Journal of Public Health Policy*, 2004, 25:85–110.
17. *The World Health Report – Health systems: improving performance.* Geneva, World Health Organization, 2000.
18. Everybody's business – strengthening health systems to improve health outcomes. Geneva, World Health Organization, Health Systems Services, 2007.
19. Hogerzeil HV. The concept of essential medicines: lessons for rich countries. *BMJ*, 2004, 329:1169–1172.
20. *Measuring medicine prices, availability, affordability and price components*, 2nd ed. Geneva, Health Action International and World Health Organization, 2008 (http://www.haiweb.org/medicineprices/, accessed 20 August 2008).
21. Black RE, Morris SS, Bryce J. Where and why are 10 million children dying every year? *Lancet*, 2003, 361:2226–2234.
22. *Supply annual report 2007.* Copenhagen, United Nations Children's Fund Supply Division, 2008.
23. Tambini G et al. Regional immunization programs as a model for strengthening cooperation among nations. *Revista panamericana de salud pública*, 2006, 20:54–59.
24. EPI Revolving Fund: quality vaccines at low cost. *EPI Newsletter*, 1997, 19:6–7.
25. Matiru R, Ryan T. The global drug facility: a unique, holistic and pioneering approach to drug procurement and management. *Bulletin of the World Health Organization*, 2007, 85:348–353.
26. *Annual Report.* Wellington, Pharmaceutical Management Agency, 2007.
27. *The World Health Report 2006 - Working together for health.* Geneva, World Health Organization, 2006.
28. Victora CG et al. Achieving universal coverage with health interventions. *Lancet*, 2004, 364:1555–1556.
29. Freitas do Amaral JJ et al. Multi-country evaluation of IMCI, Brazil study. Ceará, Federal University of Ceará, ND.
30. Sontag S. *AIDS and its metaphors.* New York, NY, Farrar, Straus & Giroux, 1988.
31. Mann JM et al, eds. *Health and human rights: a reader.* New York NY, Routledge, 1999.
32. Friedman S, Mottiar S. A rewarding engagement? The treatment action campaign and the politics of HIV/AIDS. *Politics and Society*, 2005, 33:511–565.
33. Ottawa Charter for Health Promotion. In: *First International Conference on Health Promotion, Ottawa, 21 November 1986.* Geneva, World Health Organization, Department of Human Resources for Health, 1986 (WHO/HPR/HEP/95.1; http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf, accessed 2 July 2008).
34. Ezzati M et al. Comparative risk assessment collaborating group. Estimates of global and regional potential health gains from reducing multiple major risk factors. *Lancet*, 2003, 362:271–280..
35. Friel S, Chopra M, Satcher D. Unequal weight: equity oriented policy responses to the global obesity epidemic. *BMJ*, 2007, 335:1241–1243.
36. Satcher D, Higginbotham EJ. The public health approach to eliminating disparities in health. *American Journal of Public Health*, 2008, 98:400–403.

37. Commission on Social Determinants of Health. *Closing the gap in a generation: health equity through action on the social determinants of health. Final report*. Geneva, World Health Organization, 2008.
38. *The World Health Report 2007 – A safer future: global public health security in the 21st century*. Geneva, World Health Organization, 2007
39. Satterthwaite D. In pursuit of a healthy urban environment. In: Marcotullkio PJ, McGranahan G, eds. *Scaling urban environmental challenges: from local to global and back*. London, Earthscan, 2007.
40. Taylor CE, Taylor HG. Scaling up community-based primary health care. In: Rohde J, Wyon J, eds. *Community-based health care: lessons from Bangladesh to Boston*. Boston, Management Sciences for Health, 2002.
41. WHO/Public Health Agency Canada Collaborative Project. *Improving health equity through intersectoral action*. Geneva, World Health Organization, 2008 (in press).
42. Puska P. Health in all policies. *European Journal of Public Health*, 2007, 17:328.
43. Chami Y, Hammou J, Mahjour J. Lessons from the Moroccan national trachoma control programme. *Community Eye Health*, 2004, 17:59.
44. Dye C et al. The decline of tuberculosis epidemics under chemotherapy: a case study in Morocco. *International Journal of Tuberculosis and Lung Disease*, 2007, 11:1225–1231.
45. *Senegal: outbreak of lead intoxication in Thiaroye sur Mer 20 June 2008*. Geneva, World Health Organization, 2008 (http://www.who.int/environmental_health_emergencies/events/Senegal2008/en/index.html, accessed 21 July 2008).
46. Muhlrad N. *Road safety management in France: political leadership as a path to sustainable progress*. Paper presented at: Gambit 2004 Road Safety Conference, Gdansk, April 2004.
47. *Our cities, our health, our future: acting on social determinants for health equity in urban settings*. Geneva, World Health Organization, 2007.
48. Koivusalo M. Moving health higher up the European agenda. In: Ståhl T et al, eds. *Health in all policies: prospects and potentials*. Helsinki, Ministry of Social Affairs and Health, 2006:21–40.
49. Gilson L et al. *Challenging health inequity through health systems*. Geneva, World Health Organization, 2007.
50. *WHO report on the global tobacco epidemic, 2008: the MPOWER package*. Geneva, World Health Organization, 2008.
51. Anaudova A. *Seventh Futures Forum on Unpopular Decisions in Public Health*. Copenhagen, World Health Organization Regional Office for Europe, 2005.
52. Allin S et al. *Making decisions on public health: a review of eight countries*. Geneva, World Health Organization, European Observatory on Health Systems and Policies, 2004.
53. Setel PW et al. on behalf of the Monitoring of Vital Events (MoVE) writing group. A scandal of invisibility: making everyone count by counting everyone. *Lancet*, 2007 (published online: DOI: 10.1016/S0140-6736(07)61307-5).
54. Mahapatra P et al. on behalf of the Monitoring of Vital Events (MoVE) writing group. Civil registration systems and vital statistics: successes and missed opportunities. *Lancet*, 2007 (published online: DOI: 10.1016/S0140-6736(07)61308-7).
55. AbouZahr C et al. on behalf of the Monitoring of Vital Events (MoVE) writing group. The way forward. *Lancet*, 2007 (published online: DOI: 10.1016/S0140-6736(07)61310-5).
56. Volmink J et al. AM. Research synthesis and dissemination as a bridge to knowledge management: the Cochrane Collaboration. *Bulletin of the World Health Organization*, 2004, 82:778–783.
57. Halstead SB, Tugwell P, Bennett K. The International Clinical Epidemiology Network (INCLEN): a progress report. *Journal of Clinical Epidemiology*, 1991, 44:579–589.
58. Waters E et al. Cochrane Collaboration. Evaluating the effectiveness of public health interventions: the role and activities of the Cochrane Collaboration. *Journal of Epidemiology and Community Health*, 2006, 60:285–289.
59. Sweet M, Moynihan R. *Improving population health: the uses of systematic reviews*. New York NY, Milbank Memorial Fund, 2007.
60. Davies P, Boruch R. The Campbell Collaboration does for public policy what Cochrane does for health. *BMJ*, 2001, 323:294–295.
61. *An idea whose time has come: New opportunities for HIA in New Zealand public policy and planning*. Wellington, Public Health Advisory Committee, 2007.
62. Harris P et al. *Health impact assessment: a practical guide*. Sydney, University of New South Wales, 2007.
63. Wismar M et al. Implementing and institutionalizing health impact assessment in Europe. In: Ståhl T et al, eds. *Health in all policies: prospects and potentials*. Helsinki, Ministry of Social Affairs and Health, 2006.
64. Blau J et al. The use of health impact assessment across Europe. In: Ståhl T et al, eds. *Health in all policies: prospects and potentials*. Helsinki, Ministry of Social Affairs and Health, 2006.
65. Dannenberg AL et al. Use of health impact assessment in the US: 27 case studies, 1999–2007. *American Journal of Preventive Medicine*, 2008, 34:241–256.
66. Wismar M et al, eds. *The effectiveness of health impact assessment: scope and limitations of supporting decision-making in Europe*. Geneva, World Health Organization, 2007.
67. Jewell CJ, Bero LA. Developing good taste in evidence: facilitators of and hindrances to evidence-informed health policymaking in state government. *The Milbank Quarterly*, 2008, 86:177–208.
68. *Communication from the Commission on Better Regulation for Growth and Jobs in the European Union*. Brussels, European Commission, 2005 (COM (2005) 97 final).
69. Binder S et al. National public health institutes: contributing to the public good. *Journal of Public Health Policy*, 2008, 29:3–21.
70. *Framework for the creation and development of national public health institutes*. Helsinki, International Association of National Public Health Institutes, 2007.
71. Khaleghian P, Das Gupta M. *Public management and the essential public health functions*. Washington DC, The World Bank, 2004 (World Bank Policy Research Working Paper 3220).
72. Kickbusch I. A new agenda for health. *Perspectives in Health*, 2004, 9:8–13.
73. *World Trade Organization Declaration on the TRIPS Agreement and Public Health. Ministerial Conference, 4th Session, Doha, 9–14 November 2001*. 2001 (WT/MIN(01)/DEC/2).
74. Wilk EA van der et al. *Learning from our neighbours – cross-national inspiration for Dutch public health polices: smoking, alcohol, overweight, depression, health inequalities, youth screening*. Bilthoven, National Institute for Public Health and the Environment, 2008 (RIVM Rapport 270626001; http://www.rivm.nl/bibliotheek/rapporten/270626001.pdf, accessed 30 July 2008).