

## Editorial

We now know that nearly *one quarter* of the global disease burden, and up to *one third* in developing countries, is due to modifiable environmental risks. Water, sanitation and hygiene contribute a large proportion of this.

Enormous costs arise to individuals and to society at large because of these environmental risks, whether through the remorseless burden of water-related disease in poor households or the spectacular costs to rich and poor nations alike of environmental measures to delay the emergence of an epidemic strain of influenza. These costs are borne by the health sector and society at large quietly and often unknowingly – exerting little influence on critical ‘upstream’ causes themselves – environmental pollution, environmental degradation and inadequate environmental health services.

This burden of disease is almost entirely preventable – recall the *British Medical Journal's* recent recognition of the primary role of sanitation as a health intervention.

Powerful drivers and pressures from non-health sector forces are impacting more and more on public health in general – in both developing and developed countries. These drivers range from underlying driving forces such as water scarcity, population growth, industrialisation and global climate change, through issues of poverty and lack of access to even the most basic water and sanitation; through new and emerging vectors and pathogens and artificial hazards; to combined pressures and opportunities provided by globalized economies, and fast-evolving technologies.

A common theme among these underlying causes of ill health is the need to secure actions in sectors other than health in order to advance health and wellbeing. While the health sector (be it health services or public health more broadly) has important roles to play it is rarely the direct manager of the ‘causes’. Rather it must engage with others – in finance, productive industry, agriculture, municipal services, tourism and recreation and so on – to secure the necessary changes to advance health. To achieve this the health sector must move outside its traditional domains, and other sectors must actively engage with the health consequences of their actions – both positive and negative.

In effect ‘environmental health’ must be repositioned as a key ‘preventive arm’ of public health policy.

What is more, the mechanisms used to influence decisions need to be magnified many times over to respond to the real scale of the challenge. In some cases doing more of what we already do will not be enough and we need to explore new strategies, proactive policies, and concrete interventions – from household and communal levels, to national/regional and transboundary levels.

At household and communal levels, many of the most dangerous environmental health risks, like inadequate and unsafe drinking water and sanitation, vector-borne disease, chemical exposures and indoor air pollution, can already be addressed by scaling up simple interventions. These include new methods for safe household water storage and management to partner progressive extension of services at steadily improving levels of service, safe chemical use and integrated vector management. They also include the increasingly recognised health burden arising from inadequate management of health care waste and hygiene in health care facilities and provision of basic services in small work places. Other interventions need action by other sectors. To ensure their impact the health sector needs to act outside its traditional boundaries – to advocate the actions that will yield real health gains. Some of these are in service provision (water, sanitation, solid waste); others with the sectors that generate pollution and wastes hazardous to health.

In order to be able to leverage the change needed at national, regional and transboundary levels, we need to train and position a ‘new cadre’ of health sector policy-makers, analysts and economists to do economic analysis, burden of disease analysis, and impact assessment in a cross-sectoral context, and then plan, along with economic development actors, for the next stages of development. Health impact assessment, burden of disease and economic assessment provide the tools for identifying ‘win-win’ investments and strategies. Most importantly, their use at national level needs to be scaled up dramatically.

We need to extend the motto ‘prevention is better than cure’ from the dimension of personal patient care, to the broader drivers of health and disease. Health sector leadership is needed to support a healthier environment and influence public policies in all sectors so as to address the root causes of environmental threats to health – both at the level of primary health, and, in closer cross-sectoral collaborations. New and expanded alliances are needed – with development banks and actors, the environment sector and civil society to influence the decisions that generate large environmental risks, achieve prevention, and stimulate sustainable development.

Only in this manner, can health actors leverage the resources and policies necessary to address age-old environmental health risks such as unsafe water, and preempt the emergence of new and even more dangerous risks, in an era of rapid global change.

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