Viewpoint

Public health in the new era: improving health through collective action

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The world is entering a new era in which, paradoxically, improvements in some health indicators and major reversals in other indicators are occurring simultaneously. Rapid changes in an already complex global health situation[1,2] are taking place in a context in which the global public-health workforce is unprepared to confront these challenges. This lack of preparation is partly because the challenges are large and complex,[3] the public-health workforce and infrastructure have been neglected, and training programmes are inadequate. These problems are exacerbated by the concentration of funding on biomedical research and the failure to confront and work with vested interests, which promote and sustain unhealthy behaviour patterns.

If public-health practitioners are to address national and global health challenges effectively, the way they work and make their work relevant to these challenges[4] will require a major reorientation. A clear vision of what public health is, and what it can offer, is required. To be achievable, the vision must then be communicated not only to its practitioners, but also to the wider policy community, whose actions are necessary to improve the health of the public. Here, we propose a reformulation of public health appropriate for the global and national health challenges in this new era.

The practice of public health

Approaches to the practice of public health are contingent on time and place. They are distinguished mainly by the amount of authority vested in the state and their main disciplinary base. In terms of state involvement and responsibility, there are two extreme approaches: the state medicine model and the market model. The practice of public health in the USA is an example of the market approach. The aim of this model is to limit government responsibility for public health and to encourage individual responsibility for health improvement, on the assumption that the market will respond to individuals' demands for goods that promote health.[5] The state medicine model, by contrast, envisages a strong role for the state, encroaching in many areas that some might consider private life. A particular version was transposed to the Soviet Union, where public health became a central part of state policy, summarised by Lenin's comment that "if communism does not destroy the louse, the louse will destroy communism".[6] Another version was seen in China for several decades after the revolution of 1949.[7]

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The disciplinary base of public health can be narrow—mainly the medical sciences—or broad and inclusive, bringing together a wide range of disciplines including the political sciences. The medical model has traditionally been identified with the UK, where public health was, until recently, regarded as a specialist branch of clinical medicine.[8] The broad multi-disciplinary approach to public health, sometimes referred to as the social justice model, has a long tradition in several European countries, beginning with Virchow in Prussia at the end of the 19th century, with a brief reappearance in some universities in England in the middle of the last century.[9] This approach to public health has been especially strong in Latin America since the middle of the last century,[10] and has echoes in both the Alma-Ata model of primary health care and the new public health of the 1980s. The practice of social medicine has focused on the social and environmental determinants of health and disease and the effects of social and economic policies on health status; this approach has rarely been able to bridge the divide between rhetoric and policy.

Defining public health

The definition of public health has changed as public health has evolved.[11] Common to most definitions is a sense of the general public interest, a focus on the broader determinants of health, and a desire to improve the health of the entire population. Earlier definitions also made explicit reference to the administration of health-care services. The plethora of definitions suggests that a short and succinct definition of public health is needed that is both broad in scope and of wide appeal.

We suggest that a suitable definition of public health is:

> "Collective action for sustained population-wide health improvement"

This definition emphasises the hallmarks of public-health practice: the focus on actions and interventions that need collective (or collaborative or organised) actions; sustainability (ie, the need to embed policies within supportive systems); and the goals of public health (population-wide health improvement and the reduction of health inequalities).

The ethical underpinning of public health is of equal importance to its definition,[12] but ethical frameworks for public health are new.[13,14] Our view of the ethical basis for public health stems from knowledge of the pervasive effect of the environmental and socioeconomic circumstances that constrain the decisions individuals make about health. This position affirms the positive obligations by governments and communities to protect and improve the health of all their citizens and is based on the assumption that all lives are of equal worth.

The public-health response to the global health challenges

To tackle the major global health challenges effectively, the practice of public health will need to change. It is not sufficient to focus only on urgent health priorities, for example, HIV/AIDS, tuberculosis, and malaria in subSaharan Africa, or the narrowly focused Millennium Development Goals.[15] Programmes and policies are required that respond to poverty—the basic cause of much of the global burden of disease—prevent the emerging epidemics of non-communicable disease, and address global environmental change, natural, and man-made disasters, and the need for sustainable health development. The justification for action is that health is both an end in itself—a human right—as well as a prerequisite for human development.[16]

Public health as practised now is not in a position to respond effectively to these challenges, mostly because the capacity of the public-health workforce has not kept pace with changing needs. The neglect of the public-health infrastructure and the weakness of many health systems have compounded this problem. In most developed countries, public health has narrowed in focus and, to a large extent, is driven by the research agenda of academic epidemiologists and biomedical scientists.[17] Its focus has often been on what can be measured easily, such as cholesterol or blood pressure, rather than on the immensely more complex issues of the broader social forces that also affect health, directly or indirectly, such as economic transitions. The schism between research and health policy has widened and the focus of health reforms on clinical services has further marginalised public health.[18] The combination of increased attention to bioterrorism and slowing economic growth, with their inevitable squeeze on public-health research in favour of biomedical research,[19] has further reduced public-health capacity.

The global health challenges require a workforce with a broad view of public health, an ability to work collaboratively across disciplines and sectors, and with skills to influence policy-making at the local, national, and global levels. In view of the importance of politics to the development of public-health policy, public-health practitioners should be closely connected with the communities they serve to build the long-term support necessary to respond to global challenges. The enormity of these challenges means that it will be necessary for all members of the health workforce to adopt a public-health perspective in their daily activities.

Key themes of modern public-health theory and practice

Modern public health has five key themes (panel), each of which is an essential feature of modern public-health practice. Regrettably themes are rarely reflected in the reality of public-health practice or in public-health educational activities.

Health systems leadership

This oversight function is a central feature of efforts to improve the performance of health systems.[20] It requires a long-term perspective and involves several specific activities, the most important of which is defining strategic directions for health systems. Defining these directions is a central public-health responsibility, as is the monitoring of progress towards the designated goals and targets of the system. This function requires strong determination from the government to act. Although many other sectors play a part, responsibility for the legislative and regulatory framework for public health rests with governments. Neglected aspects of health system leadership include failures of advocacy or accountability for improving the health of entire populations, with most ministries of health continuing to focus on immediate issues pertaining to health care.[21]

Key themes of modern public-health practice

- Leadership of the entire health system
- Collaborative actions across all sectors
- Multidisciplinary approach to all determinants of health
- Political engagement in development of public-health policy
- Partnership with the populations served

Collaborative actions

Collaboration in partnership with a wide range of groups from many sectors has been the central feature of public-health practice since the mid 19th century. At first, collaborative action was justified as a way of keeping to a minimum the effect of poverty and its associated ill health on early welfare systems. Collaboration across sectors is even more crucial now. In the absence of strong and effective collaborative actions, the benefits of public-health science will continue to be more fully taken up by the already advantaged sections of society, as has happened with tobacco control.[22]

Governments are key to ensuring collaborative actions to promote population-wide health improvement because they are ultimately responsible for the health of their populations. When the state downplays this part in favour of individualism and market forces, the practice of public health is inevitably weakened, slowing progress towards health goals. The public-health workforce, because of its broad mandate and skills base, is uniquely placed to improve health through formation of policy-led strategies and delivery of interventions that embrace collective actions.[23]

Multidisciplinary approach

On the basis of the technical developments in epidemiology from the middle of the last century, public health has been dominated by the quantitative sciences at the expense of other public health sciences.[17] It is now recognised that many disciplines are needed to understand the links between the underlying and proximal determinants of health, as well as to provide the evidence base for health-policy making by use of appropriate methods to answer appropriate questions to inform policy.[24] Public-health training programmes should include opportunities to study the full range of quantitative and qualitative sciences as well as related sciences such as public-health law,[25] demography, anthropology, and ethnography. Regrettably, only a few institutions, mostly in developed countries, can offer the relevant courses.

A major neglected area of research has been the translation of evidence into effective policies and programmes. This neglect is exemplified by the failure to capitalise on the compelling evidence that the epidemics of cardiovascular disease are mostly preventable.[26] It is rarely appreciated that every year an estimated 6·3 million adults younger than 70 years die prematurely from cardiovascular disease—compared with 5·6 million deaths from AIDS, malaria, and tuberculosis combined (all age-groups).[3] Scientific knowledge is clearly only one of the essential ingredients of effective public-health practice; knowledge must be combined with engagement with civil society and social movements to compel effective action by all those who can make a difference if we are to achieve sustained improvements in population health.[27]

Political engagement in public-health policy

Public-health practitioners need to understand the political nature of the process of developing health policy and act accordingly. Despite the exhortation by Virchow in 1848 for medicine to become political, public-health practitioners have long neglected, or even rejected, this crucial connection. The reasons for such exclusion include the medical dominance of public-health practice, the prevailing conservative neoliberal ideology and its effect on health reforms, insufficient attention to the politics of public health in training programmes, insufficient research into the determinants of effective policies and programmes, the power of commercial interests, and above all, the lack of confidence of many public-health practitioners. Of course, what is politically feasible is often constrained, but strong public-health science and leadership together with close civil engagement—including working with the media—can shift the boundaries of what is feasible.[28]

Community partnerships

Working with and in close association to the many communities being served is the most important of all partnerships for public-health practitioners.[29] This partnership is essential for building the long-term community and political support for effective health policies. At the same time it provides an opportunity for population groups to negotiate their inclusion in health systems and to demand the full range of public-health and health services. This partnership has long been neglected, although it did flourish briefly—at least rhetorically—under the Health For All banner; it might again make an impression under the influence of the People's Health Movement.[30]

Public health for the new era

Strengthening public-health practice requires that the main themes be acknowledged and acted on, and that they be taught both to new students and to the existing workforce. A supportive framework for public health requires strong and responsive government leadership and adequate resources for personnel and infrastructure, complemented by public-health research, teaching, and services that use the full range of public-health sciences.

The reinvigoration of the public-health workforce will require commitment to its fundamental philosophical underpinning and clearly defined competencies for each of the main themes. It will then be in a better position to advocate for new resources for public-health practice, including attracting a share of the extra resources for promoting health security and from the new global health funds. Some of these extra resources should be directed into building the necessary public-health infrastructure. Assessing public-health training programmes and ensuring that new graduates are equipped in the necessary competencies for all thematic areas are the responsibility of public-health academics. Only a strong public-health workforce will be able to respond to the global and national health challenges. Finally, strengthening public health on an explicit ethical basis and a sound evidence base will promote the role of the state and contribute to building democracy worldwide. Health protection of the workers of the Soviet Union. Moscow, Medgiz, 1947).

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