Commentary

Viewpoint: Re-instating a 'public health' system under universal health care in India

Mathew George

School of Health Systems Studies, Tata Institute of Social Sciences, V.N. Purav Marg, Deonar, Mumbai, Maharashtra 400088, India.
E-mail: mathewg@tiss.edu

Abstract I examine possibilities for strengthening essential public health functions in the context of India's drive to implement universal health care. In a country where population health outcomes are rooted in social, political, economic, cultural, and ecological conditions, it is important to have a state mediated public health system that can modify the causes of the major public health problems. This calls for strengthening the social epidemiological approach in public health by demarcating public health functions distinct from medical care. This will be a prerequisite for the growth of the public health profession in the country, because it can offer avenues for newly trained professionals within the country to work in 'core' public health.
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Introduction

Public health systems across nations have developed largely in response to public health problems faced in the region. Public health systems have an implicit mandate to reduce causes of public health problems.

Globally, at least two policy proposals or strategies exist for developing nations to improve population health. First is a proposal for individual disease control programmes to be coordinated by the World Health Organization (WHO) across its regions.[1] Second is an initiative to establish a public health system sufficiently competent to organise essential public health functions in countries.[2] Can the latter succeed in India in the context of adopting Universal Health Care? I ask this question because the current health services system in India either fails to deliver essential public health functions or does it with dismal focus.[3,4]

I briefly introduce the Indian health services system, emphasising its focus on public health. In this context, I analyse the scope of essential public health functions for the country. Based on my analysis of the public health problems of the country, I propose a model public health system that can be built in the context of universal health care.

Indian Situation

Historically, the Indian health services system has been responsible for public health functions, curative care, and implementation of disease control programmes. Public health functions used to include provision of safe water and sanitation, vaccination, and health education. The government shifted the mandate to provide water and sanitation to the Ministry of Rural Development during the fifth five-year plan,[5,6] that became a separate ministry in 2011. Despite these institutional changes, provision of drinking water across the country remains inadequate and harms population health. In its 12th plan report, the Ministry of Water Supply and Sanitation has acknowledged the problem and proposed to assign the responsibility of ensuring quality of drinking water to the Health Department, but without necessarily giving up control of provisioning.[7]

Authorities saw the need for sanitation as more of an aesthetic issue than a health function and failed to identify it as a determinant of population health.[8] Food, nutrition supplementation, and growth monitoring together comprise another important determinant of population health. Since 1975, *Anganwadi workers* (rural health workers) of the Integrated Child Development Services (ICDS) programme under the Ministry of Women and Child Development bear responsibility for these issues.

Like other national health systems, India had envisioned a health services system competent from the start to address essential public health functions. Initially, the vertical disease control programmes were the face of 'public health' in India. Prevention and control of epidemics was their mandate. Later, *primary health care* drove the country to reinvent public health, but this effort was diluted by 'selective' approaches. Several efforts to strengthen public health, both within and outside the Indian health services system, have been in vain: neither a call for intersectoral coordination between health and other closely related sectors, such as water supply and sanitation and the ICDS programme,

nor a focus on the social determinants of health has improved the health of the population.

The health system has never acknowledged social determinants; thus, it failed to achieve results it might have delivered. Gradually the mandate of the Indian health service system narrowed, providing curative care. To this day, the trend continues to confine to curative care for health and health services, even as universal health care becomes policy. The Indian public sector continues to withdraw from an active role in health-care delivery, leading to growth of private sector health care. Unregulated growth of private care has resulted in a call from policy makers to protect the public health system, meaning *public sector 'health care system'* not the system for *public health*. The former implies extending the authority and role of the public sector into health care, without regard for public, or population health activities and outcomes. The latter implies a system that can ensure the health of the public–population health.

Recently, the National Rural Health Mission (NRHM), too, has attempted to address public health by strengthening public sector health services and by integrating various disease-specific control programmes. This strategy has some advantages, as it reduces threats historically posed by the disease-specific vertical programmes to the general health services system.[9] An unintended consequence has been its overemphasis on providing quality medical care with dilution of public health functions at the grassroots level. Vaccination and health education, traditional public health components, continue to be the responsibility of the health services system.

Priorities can affect performance. The dominant polio drive has subverted other programmes for vaccine preventable diseases, like measles – a serious concern within the country. We in India have seen a decline in the measles coverage despite several initiatives to increase it.[10] A recent approach to control chronic diseases also follows a vertical approach, showing India is failing to learn from earlier experiences with vertical programmes for infectious disease control.[11]

The discourses on public health revolve around whether public health implies only entitlement through health service insurance schemes, that generally cover only care in hospitals, or whether private sector health care has any role in ensuring universal health care. Moreover, supply of drinking water and sanitation, and food supplementation that target central causes of India's major public health problems remain outside the

health services system. Perhaps more worrisome is that the ministries responsible for these basic services fail to link and assure effective coordination with health authorities for public health. No mandate exists in statute. Strategies adopted by short-term vertical programmes proved inadequate where a techno-centric approach offered only 'magic bullets' for complex public health problems. They failed to acknowledge the social contexts.[12] Surely, the nature of the public health system and the essential public health functions of a country need to be examined, and strengthened to reduce prevalence of public health problems.

Interpreting Essential Public Health Functions for India

WHO defined "essential public health functions" as "the indispensable set of actions, under the primary responsibility of the state, that are fundamental for achieving the goal of public health which is to improve, promote, protect and restore the health of the population through collective action".[13] Originally, WHO identified 11 essential public health functions, including

- monitoring of health status, disease surveillance, and control of the risks and threats to public health, health promotion, public health regulations;
- community partnerships, development of policies and planning, access to and quality of services, human resource development, and reducing the impact of emergencies on health.[13]

In India this translates to a state-mediated system with potential to identify determinants of major public health problems, a system that can devise ways to modify those determinants by organising the community to reduce the problems. For example, to address major public health problems such as under-nutrition, ensuring the public health function would mean ensuring safe drinking water and food supplementation to the vulnerable.

The Current Scenario: Indian Context of Universal Health Care (UHC)

A high-level expert group (HLEG) recently recommended universal access to health care, a progressive move by the Government of India

that acknowledges the country's ailing health services system and need to improve it. The implications are mixed: the positive element is an additional focus on otherwise neglected areas like access to health services, catastrophic expenditures, drug pricing, and financing. On the negative side, added attention to health largely revolves around alternative financing mechanisms and the need to make health coverage universal, with or without the participation of the private sector. Both deflect from a focus on building a much-needed, stable public health system.

How did India arrive here? Perhaps ambiguity exists when health professionals try to distinguish between public health functions and medical care functions.[14] A *public health system* is different from a *public sector health services system* even though these are mistakenly used interchangeably in many policy circles. The latter only implies that ownership of service provision is with the government, irrespective of its capacity to improve population health.

I would argue that success of public health as a profession with its set of well-prepared practitioners demands clarity. The classic public health interventions of John Snow on Cholera or Chadwick's intervention on improving working conditions point to approaches that take into account the important roles of social and environmental factors. The decline in infectious diseases in industrial countries reflects the distinct role of public health movements that helped create public health systems long before the introduction of medical care.[15,16]

Confronting India's Public Health Problems

The major public health problems in the country demonstrate the need for a multidimensional approach. Major problems, like malnutrition, tuberculosis (TB), malaria, and diarrhoeal diseases reveal the need for a combination of social, environmental, and medical care approaches to combat them. Causes of childhood malnutrition, for example, include inadequate food availability, increased onset of infections, and maternal health. Globally, half of the malnutrition load is due to infections caused by poor water supply and sanitation.[17] India cannot be any different, as water supply systems are poor and inadequate in the country, and diarrhoea is still one of the leading causes of infant mortality.

The 2013–2014 union budget allocated Rs 300 crore (about US$65 million) for a 'multi-sectoral' programme to solve malnutrition, through the ICDS programme. Under the Ministry of Women and Child

Development, the current programme has neither the mandate nor the machinery to address the prevention of infection among children or even to treat illnesses, a major contributory factor for malnutrition.[18] On the contrary, the Ministry of Health and the health services system are repeatedly accused of not being able to reduce the problem of childhood malnutrition despite having expertise and knowledge.

The case of TB is not too different. TB is linked to poor living standards, especially nutrition. The national programme for the control of TB has focused primarily on treating those affected; thus, programme modifications revolve around treatment modalities.[19] It is disheartening to see that whenever the problem of TB is discussed among experts, it is confined to multidrug-resistant TB and HIV-induced TB, as if the regular form were already under control.

Experience with chronic diseases testifies even more pronouncedly to the role of social and environmental factors.[20] For malaria and diarrhoeal diseases, the environment plays an important role in incidence, whereas the existing health services system offers only treatment for those affected, thus failing to prevent their occurrence. Vector control measures, part of National Vector Borne Disease Control Programme (NVBDCP), call for modifying the environment, but they are never put in place. Why? Because the health ministry considered modifying the environment beyond the scope of the health services system.

Opportunities in Social Determinants of Health

The recent impetus from WHO and the HLEG report on universal health care that recognise social determinants of health is a great opportunity for India to redirect the focus of public health away from medical solutions to social ones.[21,22] The social determinants of health approach need to be examined cautiously, while suggesting possible interventions in public health from a state-directed public health system. The first and foremost targets for change are social inequalities in health and health services. Because of societal inequalities like caste, class, and gender, opportunities for improving living, including access to health services (in its minimal form) are limited for the most vulnerable.[23,24] In other words, population health for a nation is a result of its prevalent socioeconomic and cultural inequalities.

Thus, India needs to emphasise the role of public health and its practitioners. According to E.C. Hughes (1963, p. 655), "professions

deliver esoteric services – advice or action or both – to individuals, organisations, or government; to whole classes or groups of people or to the public at large".[25] To strengthen the role of the public health profession, there should be opportunities to act where social inequalities perpetrate ill health. Government must provide this opportunity through its public health system, equipping it to address essential public health functions. A mere call to make existing health services more responsive to the class, caste, gender, and rural-urban differentials is not sufficient. The health services system in its current form has very few essential public health functions in its mandate. The way we address the social and environmental causes of major public health problems remains inadequate, be it unsafe water, inadequate food supplementation, or inadequate coverage of vaccination, plus treatment of minor ailments. Many have resorted to a call for intersectoral coordination by the health services system as a way to address these determinants of health, but failed consistently at the grassroots level. Recent evidence from evaluations of Village Health and Sanitation Committees (VHSC) under NRHM points to failure to work with the members of the panchayat – the local bodies – that are meant to take on new responsibility as central authority and responsibility are diluted in pursuit of decentralisation. It has been difficult to sustain efforts to improve water supplies and sanitation without proper infrastructural support.[9] Thus we must strengthen public health because it has a unique focus and priorities distinctly different from the existing health services system that is dominated by medical care.

Social Epidemiological Approach to Revive 'Public Health' System

Consider what one might call an *architectural correction* within the existing health services system to distinguish between the *public health functions* and *medical care functions*. If needed, create a separate Department of Public Health within the health services system with a primary intention to prevent diseases by addressing relevant causes. The purpose of a public health system is to ensure essential public health functions. In a country like India, where population health is strongly rooted in its social and environmental conditions, efforts should be made to create a public health system sensitive to the environmental and social needs of the population, along with medical care functions.

This strategy implies bringing together structures for providing drinking water supply and sanitation, the ICDS centres responsible for nutrition of mother and child, and the Sub-Centre of the existing health services system under a single umbrella, namely the Public Health System. The essential mission of this system shall be to deliver essential public health functions. In this way, protecting the health of the public, as well as the health service system can advance. The scope of the public health profession in the country and its contribution to solving public health problems ultimately depends on the nature of public health system with an explicit mandate to prevent the occurrence of illness through organised community efforts. Newly created public health educational institutions need to sharpen the public health focus by exploring new ways of solving public health problems. This will boost the newly trained 'public health cadre' giving them many ways to work in 'core' public health and in the government system to improve the public health status of the nation. It will also help the existing health services system focus on providing quality medical care with adequate coverage, and relieve it of the responsibility of ensuring public health functions. Most importantly, improvements in public health status of a country occur only when there exists a public health system with a primary intent to prevent diseases.

About the Author

Dr Mathew George is a faculty at the Centre for Public Health, School of Health Systems Studies, Tata Institute of Social Sciences, Mumbai. He is trained in Public Health with a doctorate in Social Medicine and Community Health from the School of Social Sciences, Jawaharlal Nehru University (JNU), New Delhi.

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