Decoding and Delivering Public Health

by

Prof. K. Srinath Reddy

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ABOUT CSD

CSD began its journey as an informal study group at the India International Centre in 1962 by a few prominent social workers and social scientists, under the leadership of the legendary freedom fighter and social worker Durgabai Deshmukh. It was registered as a society in 1970, with C.D. Deshmukh as President and Durgabai Deshmukh as Executive Chairperson and Honorary Director. A Southern Regional Centre (SRC) of CSD was set up in Hyderabad in 1967 by Durgabai Deshmukh which is currently funded by the Indian Council of Social Science Research (ICSSR) and the government of Telangana. Eminent Educationists and representatives of public institutions constitute the CSD society which guides its programmes.

For over five decades, the Council for Social Development (CSD) has functioned as a non-profit, non-partisan, vibrant research and advocacy institutions, engaged in the issues of social development, especially the welfare of the marginalised. Through its programmes of research, seminars, publications, capacity-building and other initiatives, CSD actively participates in policy discourses on social development in India. It pursues its vision by undertaking studies and advocacy activities in key areas such as development education, health, rural development, governance, human rights, and social justice. Its pioneering efforts have helped shape planning, policy and programme implementation and foster critical ideas approaches and strategies designed to bring about social change.
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K. Srinath Reddy

Council for Social Development
New Delhi
Durgabai Deshmukh

Freedom fighter, social reformer, an indefatigable institution builder, member of the Constituent Assembly, the first woman-member of the Planning Commission, Durgabai Deshmukh's life was one of leadership and true empowerment. Born on July 15, 1909 in Rajahmundry in Andhra Pradesh, she was initiated into a life of politics and social reform early. At 12, she left school to protest against the imposition of English language education and later started the Balika Hindi Paathshala in Rajahmundry to promote Hindi education for girls. This was to be the nucleus of the future Andhra Mahila Sabha, the large social service organisation which laid the foundation of numerous educational institutions at the primary, secondary and tertiary levels. A follower of Mahatma Gandhi, she joined the khadi movement, and participated in the Salt Satyagraha as part of the Civil Disobedience Movement for which she was imprisoned. After her release, she went on to acquire a law degree and practiced at the Madras Bar for a few years in 1952, she married C.D. Deshmukh, then the finance minister of India, who earlier served as the Governor of the Reserve Bank of India.

In 1958, she headed the National Committee on Women's Education, and formed the Andhra Women's Association. As member of the Planning Commission, she mustered support for a national policy on social welfare which resulted in the establishment of the Central Social Welfare Board. As the Board's first chairperson, she mobilised a large number of voluntary organisations to carry out its programmes aimed at the education, training and rehabilitation of needy women, children and the handicapped. Alongside, she compiled the Encyclopaedia of Social Work in India, still an indispensable reference tool for researchers.

Durgabai Deshmukh was instrumental in setting up the Council for Social Development, Durgabai Deshmukh Hospital, Sri Venkateshwara College, among the other institutions. In recognition of her outstanding efforts to spread literacy and social change she was awarded the Paul G. Hoffman Award, the Nehru Literacy Award and the UNESCO Peace Award. Along with her husband, she received the Padma Vibhushan in 1975 for contribution to public affairs and social work. But beyond the accolades, Durgabai Deshmukh's true legacy lies in her spirit of sacrifice and unwavering commitment to social change.
Decoding and Delivering Public Health

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Abstract

Health is an essential requirement for the development and welfare of individuals as well as populations. Health is often viewed as a domain which is distinctively divided into two separate worlds: clinical medicine and public health. Fundamentally, clinical medicine operates with the individual as the unit of observation and intervention, while public health has the population as the unit of study and service. While the health system is charged with the prime responsibility for delivering care, it is also necessary to recognise and respect the role of the community, not merely as beneficiaries but as active contributors to agenda setting, implementation and monitoring. For ensuring that a wide range of health services reach all of the entitled in the population, we need to design and deliver a strong programme of universal health coverage (UHC), which is best delivered when public financing accounts for a major portion of the health expenditure. Since health is profoundly influenced by social, economic, environmental and commercial determinants, it is imperative that those determinants are shaped to enable rather than erode health. Public health has emerged from the communion of medicine and social sciences. It is now a multi-disciplinary confluence of life sciences, quantitative sciences, social sciences and management sciences.
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Why Does Health Matter?

Health is an essential requirement for the development and welfare of individuals as well as populations. At the individual level, it has both an intrinsic value and an instrumental value. The intrinsic value manifests as: wellbeing; self-care; physical functionality; cognition and mental agility; sexual and reproductive functions; ability to undertake leisure time activities; enjoyment of art and culture, and congenial interactions with family and friends.

The instrumental value of health is reflected in the ability to access, participate in and benefit from: education; acquisition and upgrading of skills; employment; income; travel; competitive sports; performing arts and social networks. Without physical or mental health, a person will find it difficult to access and utilise many of these and live life to its full potential.

At the level of the population too, health is an investment for economic development and social stability. A sick population is less productive, consumes a high level of economic resources for healthcare, and leads to social disharmony due to inequitable or inefficient delivery of health services to different population groups.
Pandemic threats result in disruption of trade, travel and supply chains. Often, they also spawn xenophobia and strain international relations.

Public Health and Clinical Medicine Are Not Two Separate Worlds

Since health is a vital component of a society’s development and an individual’s productive wellbeing, it is essential to promote health, prevent disease and restore health, and relieve suffering or preserve functionality when diseases do occur. A society that accords importance to health of its people, implements policies and operates systems to serve these objectives. In doing so, it has to consider the requirements of health at the individual level as well as the measures needed at the population level.

Health is often viewed as a domain which is distinctively divided into two separate worlds: clinical medicine and public health. Clinical medicine serves to diagnose, treat, cure or provide relief from disease or injury, through attention to the needs of affected individuals. Public health provides the pathways for promoting and protecting health at the population level. Both constitute a continuum of commitment to the goal of increasing disability free and healthy life expectancy among all members of a society.
Fundamentally, clinical medicine operates with the individual as the unit of observation and intervention, while public health has the population as the unit of study and service. To put it simply, clinical medicine delivers health in retail, while public health delivers health in wholesale. However, these are not separated by a clear divide. Any individual is part of a population and what affects the society impacts on the health of individuals who are its constituents. Similarly, illness of individuals can disturb social dynamics.

When an ill person interacts with a care provider, in any type of healthcare setting, clinical medicine offers its expertise. However, what made the person sick in the first place? Could the illness or injury have been prevented through policies and programmes? Were preventive services adequate? Was the ailment detected and cared for early, at home or close to home? Was a need for referral to advanced care recognised early and acted on promptly, by the health system functionaries? At the place of clinical evaluation and care (healthcare facility), were the required staff available, skilled and motivated for providing the needed service? Was the facility suitably equipped to meet the diagnostic and therapeutic needs? After that evaluation and initial care, is follow-up care available when the person leaves the facility? Are the prescribed drugs available and affordable? Is nutrition needed for recuperation from the illness affordable? Are there support systems available for rehabilitation and, where needed, for palliative care? These are questions that are
addressed by public health. So, even for efficient clinical care to be
delivered to individuals, system design has to be done by public
health.

**What Is Public Health?**

In the minds of public and policy makers, there are varied
interpretations of what the term public health conveys. In his book
*What Makes Health Public?*, John Coggan describes seven faces of
public health: as a political tool; as a government business; as the
social infrastructure; as a professional enterprise; as a blind
benefit/harm; as conjoined beneficiaries and as the population’s
health. Each of these is an incomplete and inaccurate descriptor by
itself.²

The US National Academy of Medicine (earlier called the Institute of
Medicine) defined public health as “what we, as a society, do
collectively to assure the conditions in which people can be
healthy”.³,⁴While this captures the essence of public health, it
idealistically assumes that society as a whole collectively identifies
and augments the promoters of health and works in unison to
contribute to that social good. Unfortunately, that is not true in the
real world where many sections of society work at cross purposes.
For example, corporate interests that market tobacco, unhealthy
ultra-processed foods or fossil fuels act counter to public health
interests, despite incontrovertible evidence of the harm their products do to human health.

In my view, the mandate of public health is to ‘identify and influence the determinants of health which act at the population level, to impact on health and disease at the individual level’. For this, public health has to act on proximate ‘risk factors’ that protect or damage health as well as upstream ‘determinants’ which drive those factors. It does so through policy interventions which promote and protect health, systems for coordinated delivery of health friendly services across several sectors, programmes which are specifically configured to meet some identified needs through focused delivery of services and active community engagement which helps to shape and deliver the agenda of public health.

In recent years, public health has expanded its domain to ‘One Health’ and ‘Planetary Health’ which overlap while connecting to environmental health. One health is especially focused on linking microbial spillovers to animal and human health along with their ecosystems, while planetary health has connected the health, wellbeing and survival of all life forms on earth to planetary boundaries and climate change.\textsuperscript{5,6} Despite these different terms, there is a need to recognise, respect and repair the close connections that exist between public health and the integrity of our collective living system on the planet.
How Can Public Health Promote A Healthy Society?

While the health system is charged with the prime responsibility for delivering care, it is important to acknowledge and act on the fact that health of populations as well as individuals is profoundly influenced by factors lying outside the conventionally defined domain of that system. It is also necessary to recognise and respect the role of the community, not merely as beneficiaries but as active contributors to agenda setting, implementation and monitoring. For ensuring that a wide range of health services reach all of the entitled in the population, we need to design and deliver a strong programme of universal health coverage (UHC). This is the responsibility of public health system. However, this is incomplete by itself, in delivering health to society. Health also requires policies and programmes in other sectors to be sensitive and responsive to public health needs and aligned to the objectives of public health goals. The community too needs to be well connected to these initiatives, in health and other sectors, from articulating needs to asserting accountability.

Universal Health Coverage (UHC)

The World Health Organisation (WHO) says that UHC is achieved “when all people receive the quality health services they need
without suffering financial hardship.”

Target 3.8 of the UN Sustainable Development Goals (SDGs) exhorts countries to “achieve universal health coverage, including financial risk protection, access to quality and affordable essential medicines and vaccines for all” by 2030. The WHO clarifies that UHC encompasses promotive, preventive, therapeutic, rehabilitative and palliative services. While diagnostic services are not explicitly mentioned (as they should be), their inclusion is implied.

All countries do not presently have the resources required to deliver UHC in full measure. Recognising that UHC is not immediately attainable for all services to all persons everywhere without any of them suffering financial hardship, the WHO has proposed a path of ‘progressive universalisation’. It has presented a UHC cube, with three dimensions: population coverage, service coverage and cost coverage. The cube has to be progressively filled, based on the resources that are initially available and progressively accrue. So, a ‘benefit package’ is designed at each stage of the evolution of UHC. While burden of disease, cost-effectiveness of interventions and capacity of the health system to deliver services are prime considerations in designing this package, equity too has to play an important role. Equity has to be addressed in two dimensions: ‘horizontal equity’, where all the services included in the benefit package are available to every person, and ‘vertical equity’ where additional services or additional resources are available to vulnerable
groups in the population where pre-existing health equity gaps need to be bridged.\textsuperscript{7}

Models for implementation of UHC vary across countries, with different levels of public and private financing for purchase of healthcare and varying roles played by public and private sectors in the provision of services. Across the world, some lessons have emerged.\textsuperscript{10} UHC is best delivered when public financing accounts for a major portion of the health expenditure. Private insurance alone is an unreliable vehicle for delivering UHC. Public sector health services must play a major role in delivering UHC, even if the private sector is engaged as a partner as per need and opportunity. Primary healthcare is pivotal for the success of UHC, covering all the dimensions of the UHC cube. It is utilised by all persons, provides the broadest range of services and is most cost-efficient and resource optimising. ‘Fee for service’ model of purchasing health care is inefficient, while a ‘capitation fee’ model promotes disease prevention and risk reduction through early care.

**Health in All Policies**

Since health is profoundly influenced by social, economic, environmental and commercial determinants, it is imperative that those determinants are shaped to enable rather than erode health. Very often, these determinants interact with and influence each
other. Poverty, for example, leads to malnutrition, impedes education, limits opportunities for good education, deprives healthy nutrition, stalls health literacy, increases vulnerability to addictive behaviours, limits health seeking behaviours and becomes a barrier to accessing needed healthcare. Climate change triggers epidemics, causes extreme weather events and also endangers agriculture and food systems, apart from disrupting health services.  

Economic status is associated with health, both at population and individual levels. As the Preston curve demonstrates, there is a rise in health expectancy of the population as per capita income rises, though the effect plateaus at higher levels. A healthy population boosts economic growth. Equity matters, since countries with lower levels of income inequalities among population groups (indicated by the Gini index) have better health status than countries which are at the same level of per capita income but have greater inequality. Poverty and ill health too have a bidirectional relationship.

Education has a positive relationship with health, with a stronger effect than even income. Gender is an important factor, as women often suffer neglect of their health needs, receive less support for promoting their health or accessing healthcare. Nutrition is determined by agricultural and food systems while physical activity is conditioned by the nature of urban design and transport. The physical environment is playing an increasing role through air
pollution and climate change. Many dangers to life, health and well-being are caused by climate change. Commercial determinants of health are driving many of the risk behaviours and biological risk factors which are endangering health.\textsuperscript{15} Conflict and forced migration are threats to human safety, health and wellbeing.

Policies and programmes in each of these domains need to be influenced by public health through measured or modelled health impact assessment. In cases where non-natural, potentially harmful products are being promoted, the ‘precautionary principle’ should be applied. Public policy is an especially powerful instrument for advancing health through many sectors. Policy interventions have population wide impact, are effective in a short time frame, ‘nudge’ adoption of healthy behaviours, are relatively easy to implement and have an inter-generational benefit. Tobacco control, actions against air pollution, promotion of healthy diets and curbing of ultra-processed foods, development of clean and physical activity friendly urban design and transport systems are among the examples of potent public policy interventions which weigh in favour of health.

‘Health Assurance’ goes beyond UHC. In my book ‘\textit{Make Health In India: Reaching a Billion Plus}’ I have pictured health assurance as having three concentric circles.\textsuperscript{16} Health Financing for health care (public; private; employer), the innermost circle, provides resources and proposes entitlements under a defined benefit package. An
efficient, equitable and health system, in the next circle, enables the entitlements in the benefit package to be effectively delivered. These two circles constitute the mechanism for providing UHC. The third circle comprises action on the social, economic, environmental and commercial determinants of health. With this addition, UHC is enhanced to become holistic health which extends beyond healthcare.

Community Engagement

The main mission of public health is to improve the health of the community. To this aim, public health must actively engage with, and enable, assist and advocate for the community. Unfortunately, many public health institutions are too strongly focused on upstream education, research and policy development to play the role of a trusted partner of the community. This deprives public health of the ability to serve its social mission, while also depleting its ability to bring the knowledge of community experience into its education, research and policy shaping endeavours.

While community engagement is often left to non-governmental organisations (NGOs), especially community based voluntary groups, a strong community connect has also been institutionalised through formal processes in the public health architecture of some countries.
In Thailand, there is commitment to the ‘triangle that moves the mountain’ concept, wherein the government, academia and the civil society (which includes NGOs, private sector and community leaders) are seen as the troika that lead change in development processes. This is particularly evident in health, where an annual National Health Assembly provides a platform for key stakeholders to review progress in health programmes and plan for future initiatives. In Brazil too, citizen engagement has been strengthened through constitutional provisions. Empowered municipal, provincial and national councils regularly review performance, monitor expenditures and direct changes in planning and implementation.

In India, the National Health Mission has configured mechanisms for citizen engagement through: village level health, sanitation and nutrition committees; Jan Arogya Samitis; Rogi KalyanSamitis in hospitals; and annual or bi-annual public hearings. These forums should be strengthened and better utilised than they are now. In 2002, Nagaland enacted the Communitisation of Public Institutions and Services Act. Under this, Health Communionisation Committees were set up. These include representatives of the Gram Buras (Village Councils) and other citizen groups. The directive from the Fifteenth Finance Commission, to stream funds for primary healthcare to rural and urban local bodies, provides an opportunity to amplify community engagement.
Enhancing Public Health Capacity

Public health has emerged from the communion of medicine and social sciences. It is now a multi-disciplinary confluence of life sciences, quantitative sciences, social sciences and management sciences. Public health engineering and public health law are close partners. The aim of public health education should be to create researchers, teachers and practitioners all of who are T shaped in the profile of competencies- with in-depth expertise in a chosen area but a breadth of awareness, respect for and readiness to engage with other allied disciplines and sectors.

In the nineteenth century, Rudolph Virchow envisioned the evolution of medicine into a broader discipline:

“Should medicine ever fulfill its great ends, it must enter into the larger political and social life of our time; it must indicate the barriers which obstruct the normal completion of the life cycle and remove them. Should this ever come to pass, Medicine, whatever it may then be, will become the common good of all”

Virchow’s prophecy has been fulfilled. In the twenty first century, medicine has evolved to become public health.
References


5. https://www.who.int/health-topics/one-health


20 https://nagahealth.nagaland.gov.in/programmes_details?id=MTQw

## DURGABAI DESHMUKH MEMORIAL LECTURE SERIES

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Prof. K. Srinath Reddy is Founder (Past) President of the Public Health Foundation of India, where he now is an Honorary Distinguished Professor. He formerly headed the Department of Cardiology at All India Institute of Medical Sciences, New Delhi. Under his leadership, PHFI has established five Indian Institutes of Public Health (IIPHs) to advance multi-disciplinary public health education, research, health technologies and implementation support for strengthening health systems. He was appointed as the First Bernard Lown Visiting Professor of Cardiovascular Health at the Harvard School of Public Health in (2009-13) and presently serves as an Adjunct Professor at Harvard (2014-2023), Emory, Sydney Universities and Perelman School of Medicine at the University of Pennsylvania. He has over 570 scientific publications and published a book 'Make Health in India: Reaching A Billion Plus'. He was President of the World Heart Federation (2013-15). He is also an Advisor to the Governments of Odisha and Andhra Pradesh on Health with the rank of a Cabinet Minister.

Prof. Reddy chaired the High level Expert Group on Universal Health Coverage constituted by the Planning Commission of India (2010-11) and is Co-Chair of the Health Thematic Group of the UN Sustainable Development Solutions Network. He has served on several Technical Committees of the World Health Organisation and the Indian Council of Medical Research and had edited the National Medical Journal of India for 10 years.

He has received several awards and honours. They include: WHO Director General’s Award for Outstanding Global Leadership in Tobacco Control (World Health Assembly, 2003), Padma Bhushan (Presidential Honour, India, 2005), Queen Elizabeth Medal (Royal Society for Health Promotion, UK, 2005), Luther Terry Medal for Leadership in Tobacco Control (American Cancer Society, 2009), Membership of the US National Academies (Institute of Medicine, 2005), Fellowship of the London School of Hygiene and Tropical Medicine (2009), Fellowship of the Faculty of Public Health, UK (2009).

He was awarded Doctor of Science (Honoris Causa) by University of Aberdeen, Scotland (2011), Dr. NTR Medical University, India (2011), University of Lausanne, Switzerland (2012), and University of Glasgow, Scotland (2013) and Doctor of Literature (Honoris Causa) conferred by the Jodhpur National University, India (2013), Doctor of Science (Medicine), Honoris Causa, University of London, UK (2014), Doctor of Science, ILBS University, India (2019) and Doctor of Sciences awarded by the Maulana Azad University (2022). He was the first Indian to be elected as International Member of the National Academy of Medicine, USA.