



Valuing Health Systems: A Framework for Low and Middle Income Countries. Charles Collins and Andrew Green. SAGE Publication India Pvt Ltd, B1/I-1 Mohan Cooperative Industrial Area, Mathura Road, New Delhi 110 044. 2014. xv + 339 pp. Price: Rs 895. ISBN: 978-81-321-0724-8.

Diverse historical influences have fused together to shape the health systems of different countries. In the case of low and middle income countries (LMICs), their experience with colonialism, followed by the influential 1978 Alma Ata Conference-led primary healthcare (PHC) approach, which dominated health thinking in the early 1980s, and thereafter the turn towards neo-liberalism in the early 1990s, with the World Bank (WB) championing the cause of greater private sector participation in the health sector, all helped shape their health systems. The failure of the WB-led approach to cure the ills of either the health sector or to improve the health of populations led to the focus on a variety of other initiatives and finally lent recognition to the social determinants of health approach (endorsed by the World Health Organisation in 2005 through the establishment of the Commission on Social Determinants of Health) – a premise that had lost recognition in the sheen of biomedical triumphs, which dominated the 20th century. These disparate influences have frequently resulted in fragmented health systems in many LMICs which have developed in response to differing social, economic and political influences rather than emerge from a cohesive and sustained policy base.

The authors of this book, Charles Collins and Andrew Green, both senior

academicians in the UK, have decades of experience working in the health systems of various low and middle-income countries in Asia and Africa. While Collins' work is primarily related to health management, Green's expertise has been on health planning and policy. In this collaborative attempt, they jointly seek to assess an often under-explored theme of health systems – values underpinning them. A clear avowal of values by the national health systems is seen by the authors as an essential basis for restructuring a health system and for creating a system which is dictated by the needs of the population and serves the people in an equitable manner.

The need for developing such systems is particularly acute in LMIC settings, where resources are often scarce and disease burden high. Recognizing the constraints in resources for LMICs, the authors define a good health system as 'one that has access to a level of resources commensurate with the national level of income and uses these resources in the most efficient way to ensure an equitable and maximised level of health which is sustainable over the long term and which empowers the health system members in areas concerning their health and contributes towards wider social cohesion and mores' (p. 312). Thus values of equity, efficiency, participative and accountable decision-making and long-term perspective are key to setting up a system which responds to the health needs of the population and enmeshes the disparate strands of current health systems which have emerged as a result of the various historical influences that they have seen.

While chapters 1 and 2 set the tone for the book by an explicit articulation of the value-base for setting up an equitable health system, from chapter 3 onwards the authors focus on calibrating the health system to values that they profess. By delineating the various processes which are central to the functioning of a health system, they concentrate on deliberate changes that need to be made to move towards the desired goal.

Chapter 3 deals with the health system. Here the authors make a pitch for a strong state which takes the lead in service provision and regulation of the health system. Good governance is the first step in developing a high-quality health system. The current situation in which governments in most LMICs

either play a dormant role or exhibit significant dependency upon foreign donor institutions or powerful advocacy groups in the field of health, or even leave health and healthcare delivery to the device of the market, is viewed as fostering inequality in healthcare access. The book asserts that by inculcating the values of accountability, decentralization, participatory decision-making, inter-sectoral action for health (IAH), ethical conduct, regulation, transparency and ease of accessibility of information into a health system, which is led by a pro-active public sector, governance can be significantly improved.

Chapter 4 focuses on financing. Not only is finance the resource which serves as the basis for all other resources in the health system, but even decisions made on raising finances have important implications for ensuring the equitable nature of the health system. A tax-based collectivist form of financing the health system is seen as ideal for it from the point of view of equity and long-term sustainability. In contrast, a predominantly privately funded system, wherein funds are raised through user fees or through private insurance schemes, militates not just against the concept of equity in healthcare access, but is also seen as being inefficient, since efficiency is understood as the maximum health gain at the population level for the resources available. The irony for LMICs, as the authors point out, is that about 50% of their health expenditure is raised through regressive user charges, thus highlighting the magnitude of the task for such countries in attuning their health financing systems in accord with the values propounded by the authors.

Apart from internal sources, external funding too, in recent times, has come to constitute an important source of health financing. However, such funding has not been entirely beneficial for recipient countries since it has not only encouraged fragmentation of the health sector through its support to vertical disease-control programmes, but has been blamed for its lack of accountability to local populations. The authors highlight the need for national governments to negotiate with funders to direct such external support to general health system strengthening rather than allowing foreign vested interests and priorities to gain precedence over the needs of the local population.

Chapter 5 speaks about health planning and policy making. It defines policy as expressions of intent of the government for the health system, while plans are seen as the means for achieving identified goals. Through adherence to the values of equity, transparency and participative governance, policies can be formulated which best cater to the health needs of the population. Policy formulation and planning is considered to be an essential aspect of health systems, since the alternative to long-term planning by the state is the market mechanism, which is deemed responsible for not only buttressing inequalities in the social structure of a society, but also in creating inequalities in access to the healthcare system.

While discussing the essentially value-driven and political nature of decision-making and resource prioritization in policy-making and planning, the authors lay special focus on formulating evidence-based policies. Health information systems are often a weak spot for LMICs and while this needs to be improved, they also mention the need to incorporate data on health and disease distribution within a population so as to facilitate implementing health policies with an equity focus.

Chapter 6 on management in the health system speaks against the conventional belief that management processes are universalistic and automated. While social, economic, political and geo-spatial realities play an important role in influencing the style of management, the authors argue that even the process needs to be infused with values of equity, participative governance and accountability, among others. A poorly designed and managed organization can be a major constraint on the health system. For example, excessive top-down authority can be both inequitable and inefficient. While some of the major issues for managers relate to marrying financial resources with human resource and supplies management and balancing issues of equity with professional autonomy of medical personnel, the authors also emphasize the need for managers to develop a proactive and outward-looking management style. This is to ensure that decision-making does not remain closeted to a small clique of vested interests, but is open to other health system actors who may have been hitherto under-represented.

While the previous chapters mention the constituent processes of a health system, chapter 7 talks about how to unify those processes in a coherent whole through the IAH. It also focuses on health service delivery, the culmination of the working of these processes. Health status of a population is a product of the social, economic and political realities of a society. The inter-sectoral nature of health necessitates a wide-ranging approach. The book asserts that the Ministry of Health (MoH) should take a leadership role in coordinating the diverse actions of all those sectors whose working impinges upon the health of populations. In the process, special focus should be given to the role of advocacy to build support for such a comprehensive policy initiative.

In the section on health service delivery, while talking about the different elements of a healthcare system, including health programmes, health projects, scaling up of services and public-private providers among others, the authors lay emphasis on moving towards an integrated approach to health service delivery. While they envisage a dominant role for the public sector in provisioning, the authors also accept a role for the private sector in service delivery, but only if such a role is aimed at forwarding the overall goals of the system and not in fostering competition among providers. Allowing a dominant role for the market in healthcare delivery is questioned since markets often tend to reproduce the existing societal inequality in access to healthcare, whether the form of payment is through user fees or private or social health insurance. Further, Collins and Green point out that the lure of profit has often been observed to have resulted in providers giving unnecessary and excessive care to patients. The concept of choice too is critiqued since user choice is often a misnomer; it is only effectively exercised by the relatively well-off who can access information about the existence of better quality facilities and also have the resources to travel and use such services, largely irrespective of the costs of such care. However, an important distinction that the book makes is between user choice and user participation in health system decision-making. The latter is part of a more community-based approach to decision-making.

Another important issue addressed herein vis-à-vis the markets and private

sector in health service delivery relates to the increasing trend of contracting services to them. While development of the capacity and skills of the public sector to permit effectual contracting should be an essential first step in the process, the book also clarifies that the private sector should not be unquestioningly considered as a panacea for all the woes of the public sector. There exists lack of evidence to suggest that the private sector is more efficient than its public sector counterpart. The authors state that costs in the latter may escalate since they usually tend to treat the more poor and sick people who need greater attention and may not have the means for proper recovery from treatment. While an improved methodology is required for reasonable comparison between the two sectors, the book concludes that weaknesses of the public sector are not insurmountable and through effective regulation, monitoring and capacity development of healthcare staff, among others, public institutions can be improved.

The final chapter of the book enunciates the way forward for health system strengthening. While there is no set manner in which change can be fashioned, the authors underline the importance of context in determining the way forward. Only after a prior assessment of the existing context, can strategies for change be devised. Change also may not be necessarily linear. For instance, particularly in emergency conditions, short-term projects and plans have to be given precedence over long-term sustainable development, but the need to gradually assimilate such projects into the larger health system in the long-term is underscored. With strong political backing and the presence of support coalitions and advocacy groups, a good health system can be created, conclude the authors.

Thus it can be said that while putting forward a broad framework for action for creating an equitable health system and providing universal health coverage to the population, the book does not strait-jacket the process of change. It emphasizes the importance of context in deciding action for different health systems. Furthermore, by comprehensively delineating the ways in which values of equity, efficiency, sustainability and participatory governance can permeate the different processes of health system functioning, the book provides a concrete pathway for action, one which can help

produce change not only in the health system, but also in the social fabric of our society.

Though this book is primarily aimed at health system professionals, managers and policy advocates, the lucidity of the writing style and its well-structured layout ensure that it can act as an able guide to any person hoping to gain an in-depth understanding of the major challenges and influences facing health systems today in LMICs. The authors frequently enrich the content with real-life illustrations of health system problems and also success stories in different LMICs. These examples not only help bring greater clarity to the well-researched text, but also help to bridge the divide between the theoretical content of the book and the practical realities of health system functioning.

The book is particularly significant for India. The country has one of the lowest health budgets in the world, with just 1.04% of the total gross domestic product being spent on healthcare by the Government¹. The country, already dubbed a dormant state by the book for its long-standing inattention to the health sector, is in the midst of further reducing financial allocation to it². Poor state of public health institutions from years of neglect has led to the private sector gaining ground. Rao³ states that 80% of all outpatient care is provided by the private sector. Extensive dependence upon the private sector has resulted in high out-of-pocket (OOP) expenditure, with 71% of the total expenditure incurred on healthcare being in the form of OOP expenditure. This in turn has led to an increasing impoverishment of the poorest sections of the population⁴. It has been estimated in 2004 that 6.2% of the total households in the country fell below the poverty line (BPL) due to high healthcare-related OOP payments⁵. Thus the contention by the authors that a commercialized healthcare sector is inherently inequitable is unmistakably evident in the Indian context.

The worrying scenario of financial constraints hindering healthcare access prompted the national government to implement the Rashtriya Swasthya Bima Yojana (RSBY) or the national health insurance scheme in 2008 for the BPL population of the country. Both the public and private sector were tasked with service provision under this government-funded programme. Yet as different stud-

ies report, OOP expenditure continues and there is also an increase in catastrophic expenditure among BPL families despite the implementation of RSBY^{6,7}. As forewarned by the authors, problems of inequitable access, corruption and lack of accountability will continue to plague the healthcare system of a country if private sector contracting is allowed without the existence of a proper regulatory framework and a strong public healthcare infrastructure which best serves the healthcare needs of the country. India would thus be well-served if some of the country's politicians and health service planners paid heed to the values propounded by the book for the creation of an equitable health system.

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Annual Review of Analytical Chemistry, 2014. R. Graham Cooks and Jeanne E. Pemberton (eds). Annual Reviews, 4139 El Camino Way, P.O. Box 10139, Palo Alto, CA94303-0139, USA. Vol. 7. ix + 575 pp. Price: US\$ 101.

Analytical chemistry occupies a central place among almost all branches of chemical sciences. Development of newer and better analytical methods paves the way for better understanding of the chemical processes in smaller and more complex systems. A compilation of almost all the latest techniques of modern analytical chemistry in one volume provides the readers with a comprehensive landscape of the wide horizon of this rapidly expanding area of science. Analytical chemistry indeed has become a truly interdisciplinary subject bringing together sophisticated, high-precision, high throughput technology for the detection and characterization of species in complex materials, in biological systems and at a single-molecule level, or at a high spatial resolution in the presence of a large number of interfering factors.

Electrochemistry is recognized as a major tool of analytical chemistry. Modern electrochemical techniques go beyond the conventional methods to depict molecular-level understanding of the outer and inner sphere electron transfer processes in organic as well as inorganic molecules, and develop specific sensors and actuators to characterize ultra-low concentrations of compounds in a complex milieu such as in a biological environment. The novel electrochemical processes such as electro-generated chemiluminescence, photoelectrochemistry and electrochemical imaging techniques have taken this technique to a new dimension. The contributions of Alan J. Bard in modern electrochemistry are well recognized, and an autobiographic sketch by him provides a brief history of the recent developments of modern electroanalytical techniques, which is extremely informative and interesting for persons working in this area. Development of novel electrode systems is essential for achieving newer dimensions of electroanalytical chemistry. O'Riordan and Dawson describe the development of state-of-the-art silicon chip-based nanoelectrochemical devices. The on-chip nanoelectrodes could provide a method for designing biosensors at nano-scale