Editorial

Restructure Health Systems to Address Equity, Responsiveness, Accountability and Community Engagement

Running Title: Restructure Health Systems

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Abstract

Eighty years since Bhore committee report, country has underwent many reforms. But the basic structure of Primary Health Care as per Bhore Committee was retained throughout, although it could never deliver comprehensive health care as envisaged. Till date, country is nowhere near the recommendations of Bhore committee. Health Systems Problems need a re-analysis. Solutions need refocus to promote network building by involving public health experts, find managerial solutions to the problems for performance improvement and motivation of staff, create centres of excellence in the medical colleges, promotion of information technology, redesign of the health systems by diluting the Primary Heath Centers and strengthen the Health and Wellness Centres and CHCs with ensured medicines, supplies, laboratory tests, functional equipment linked with Telemedicine and ambulances and mobile camps and community engagement. There is need to redefine the role of health care staff at various levels.

Keywords: Health Systems Strengthening; Health Systems Reforms; Equity; Community Empowerment; Information Technology; Financial Protection; Universal Health Coverage; Primary Health Care;; Medicines and supplies; Leadership; Governance; Health Service Delivery

Inadequate public healthcare financing and the lack of skilled human resources are considered major barriers to UHC in India. The National Health Protection Scheme – "Ayushman Bharat", that targets low-income households, and focuses on upgradation of primary health-care and expansion of the health work-force, had created a hope to fulfil India's UHC goals. Programs have been launched in mission mode to improve holistic health, sanitation, nutrition, gender equity, drug accessibility and affordability. There are innovative initiatives under the ambit of national health programs for reduction in maternal deaths, tuberculosis and HIV

burden, and the utilization of information technology in healthcare provision of the underserved and marginalized [1].

Lately however, the COVID-19 pandemic has displaced Universal Health Coverage on the global health agenda. Disparities in COVID-19 outcomes have exposed huge gaps in equity, access, quality, and financial risk protection. Realisation to build–rebuild–restructure health systems has become stronger with this pandemic.

Health systems strengthening (HSS) has been in focus since 2005, when it was realised that health-related Millennium Development Goals are difficult to achieve with weak health systems. However, the concept of HSS remained vague [2]. Some authors proposed that key 'systems thinking' tools and strategies with three overarching themes: collaboration across disciplines, sectors and organizations; ongoing, iterative learning; and transformational leadership, have the potential for transformational change in the health systems [3].

To understand what India should do to make its health system meet the needs of the community and how can India deliver within the existing restrained resources, we reviewed the literature to document key health systems problems and possible solutions that other researchers have suggested.

Bhore Committee versus Verticalization of Programs

The journey to provide integrated equitable health care started with the classical Bhore Committee report. The committee had made comprehensive recommendations for remodelling of health services in India. In a short term, the committee envisaged a primary health centre each, for a population of 40,000. Each PHC was to be manned by two doctors, one nurse, four public health nurses, four midwives, four trained dais, two sanitary inspectors, two health assistants, one pharmacist and fifteen other class IV employees. Primary health centres were to be supported by a secondary health centre. In the long term, the committee proposed to set-up primary health units with 75-bedded hospitals for each 10,000 to 20,000 population and secondary units with 650-bedded hospital, again regionalised around district hospitals with 2500 beds. The committee also recommended a 3-month training in preventive and social medicine to prepare "social physicians" [4].

Some authors believe that continuance of this colonial governance paradigm even after 1947 is the biggest threat to development and implementation of a health policy framework to address the interests of the poor [5]. However, others argue that the Bhore Committee was assisted by a group of international advisers from divergent backgrounds and they believed that universal and free access to medical care was imperative and an essential political right of the people of India [6].

Eighty years down the line, we still have not achieved the minimum health workforce as recommended in the short term plan of the Bhore Committee. Allocation of health budget and priority to the health sector has remained abysmally low. As per various policy documents, the Government of India aims to achieve doctor population ratio of 1:1000 at all levels. The projection is to have 1.2 million doctors, and establish 200 new medical colleges in the next 10 years to meet a projected shortage of 600,000 doctors. It is estimated that the targeted doctor population ratio of 1:1000 could be achieved by 2027 as per High-Level Expert Group (HLEG) and by 2031 as per Medical Council of India (MCI) Vision 2015 [7].

Achievement of the ambitious 1:1000 target by 2027 or even 2031 seems nearly impossible. Therefore, though Bhore

Committee recommendations are technically flawless even today, it seems these guidelines are not implementable. Even if we believe that targets will be achieved by 2031, the country cannot afford that long to deliver the health care to the masses. There is thus a need to rethink, innovate and restructure the health systems with creativity.

Low health budget, and the resultantly poor infrastructure and inadequate human resources are well documented as reasons of health systems failures. Unarguably, there is a need to increase public funding for health care. However, at the same time there is need to introspect: Are there other factors that have potential to improve the systems even at the same level of resources.

We thus explored such factors that might have contributed to the failure of health systems. Some authors attribute this failure to shift in the policy focus from comprehensive primary healthcare to selective primary care modelled on vertical disease-based programs under the guidance of international development agencies. They suggest to dismantle the vertical programs [8]. Chronic underfunding and verticalization were attributed as reasons for underperformance of health centres by some other authors [9]. As per another school of thought, some authors believe that various national programmes were implemented successfully at PHCs [10]. In a large qualitative study conducted in six states in 2009 and 2010, authors found that disease-specific programmes contribute to strengthen some components of the health system, share human and material resources, increase demand for health services, improve public perceptions of service quality, encourage civil society involvement in service delivery, and share disease specific information with local health system managers. These synergies were observed more frequently in the Revised National Tuberculosis Control Program (RNTCP) and National Vector Borne Disease Control Programme (NVBDCP), as compared to the National AIDS Control Programme (NACP). Thus, disease-specific programmes in India are widely regarded as having made a substantial contribution in disease control. They can have both positive and negative effects on health systems. Certain conditions are necessary for them to have a positive influence on the health systems – the programme needs to have an explicit policy to strengthen local health systems, and should also be embedded within the health system administration [11].

Disinterest in Primary Health Care Roles and Responsibilities: Inappropriate Policies or Lack of Managerial Skills?

Inadequate utilisation of Primary Health Care facilities for curative care is well documented. In a qualitative study authors concluded that due to chronic underfunding and verticalization there is growing disinterest among doctors in primary care roles. Primary health centres do not meet community expectations in terms of services, drugs and attention provided; and hence, private practitioners are preferred. Thus, primary health centres today, despite having the structure of a primary-level care unit, no longer embody PHC ideals [9]. Authors further found that these services are not designed to address the "felt" needs of communities [12]. Same authors reported that constraints faced by the doctors and the top-down imposition of programs restrict doctors for core professional responsibility of curative care. The doctors felt that involvement in public health programs and administrative roles was against their professional identity. These constraints forced the doctors to underperform and adopt non-responsive behaviour [13].

Non-availability and poor quality of medicines is not only frustrating for the doctors and public but is also a major

obstacle for Universal Health Coverage (UHC). There are five key barriers to medicine quality assurance: low political priority, weak regulatory systems capacity, poor access to accredited facilities and licensed outlets, medicine manufacturing and other supply-chain challenges, and lack of public awareness. Therefore, in addition to raising political commitment and capacity building initiatives there is a need for licensing of medicine outlets and expansion of pharmacovigilance, strengthening the supply-chain, and raising public awareness and participation. Quality assurance of medicines should be incorporated within procurement practices [14].

Poor management skills can also explain underperformance and dissatisfaction among doctors. It is often observed that the lack of medicines, and medical supplies and equipment is due to poor indenting and equipment upkeep practices. Doctors don't know how to monitor the inventory, what is buffer stock, and when to indent? The health systems grossly lack in urgency for communication and action if some item is getting out of stock. They lack human resource management capabilities and don't know how to motivate and how to supervise in supportive way. This may be due to poor induction training.

Other authors also consider management as a key ingredient of high-performing health systems and that it has received much less attention for strengthening health systems. The field of health management as part of global health system strengthening efforts holds promise as a fundamental leverage point for achieving health system performance goals with existing human, technical, and financial resources [15].

On one hand, doctors currently in position attribute low performance to lack of medicines and supplies and their involvement in activities that are not considered useful by them; on the other hand, there is gross scarcity of rural doctors that has undermined the ability of health systems in low- and middle-income countries like India to provide quality services to rural populations.

In 2010, a Discrete Choice Experiment was conducted in India. Authors found that for both doctors and nurses, the usual strategies of moderate salary hike, good facility infrastructure, and housing will not prove effective. Non-physician clinicians like nurse-practitioners offer an affordable alternative for delivering rural health care [16].

Human Resources for Health Action Framework identifies six interlinked main action fields in health workforce management: leadership; finance; policy; education; partnership; and human resources management systems that depend on effective stewardship of health workforce policy. An analysis of the policy and governance environment and of mechanisms for health workforce policy development and implementation should guide the identification of the most relevant and appropriate levels and interventions [17].

Networking and Collaborations

To have more coverage of quality services, include more services in the health delivery kit, and have better financial protection, one cannot wait for a decade to have required workforce for implementation. There is need to find solutions beyond the boundaries that have been implemented by others.

The Singapore government developed primary care services to address the increasing needs of the aging population and non-communicable diseases and to achieve the goal of universal health care. They built the links, established networks between hospitals and local primary care providers, including dental and allied health professionals. They took several

initiatives to support professional development, provide financial safety nets, and integrate community clinics to provide family-oriented care. Social support was improved for isolated elderly through formalized networks linking government agencies, health providers, and community welfare groups.[18]

In South Africa, authors did an intervention to understand governance issues at the local level and delineate the organisational conflicts between different agencies working at local level. Local managers in two organizations came to understand how the higher level misalignment of organizational structures and processes imposed governance constraints on them, and to see the impact this had on their organizational relationships. By re-framing the conflict as organizational, they were then able to create opportunities for staff to understand their context and participate in negotiating principles for communication and collaborative work. This reduced conflict between staff in the two organizations, leading to improved implementation of programme support. Strengthening relationships among those working at local level by building collaborative norms and values is an important part of local health system governance for improved service delivery by multiple actors [19].

In India also there is a conflict among various agencies that work at grassroot, such as ASHA workers, ICDS workers and other health workers. Additionally, there is role of Panchayati Raj Institutions, Education Department, Water and Sanitation Department, Block Development Agencies, Police, other regulatory authorities, etc. There is less of collaboration, than the conflict seen among them.

Networking and collaboration is important to deliver the services at grass root level. To substantiate, malnutrition is a big problem in the country. It needs multisectoral actions at the ground level, as demonstrated through a successful case study [20]. We involved local Panchayat, education department, health department and local politicians for successful organisation of a cancer camp, that led to inclusion of cervical cancer screening in the local health post- a step towards UHC [21].

Networks of Care lexicon and framework has the potential for the development of leadership, responsibility, intra- and inter-facility cooperation, and dynamic cycles of quality improvement. Increase in poverty, food insecurity, and deleterious impact on the status of women secondary to the COVID-19 pandemic add urgency to Universal Health Coverage, while the economic impact of pandemic mitigation may reduce availability of resources for years to come [22].

Financial reforms and external funding may help, but is it sustainable?

In central Asia, reforms were introduced in five countries in alignment with the health needs. These reforms were based on external investments to strengthen primary care, benefit packages, and institutional capacity. Authors identified three implementation factors: sustained and coordinated external support; early and frequent investment in national ownership; and utilization of a sequenced, pragmatic approach [23]. This showed that financial reforms and external funding helped to deliver need based Primary Health Care.

Such programs of improvement dependent on external donor funding are not sustainable and wither away when the funding is withdrawn.

On the other hand, there are quality improvement efforts that seem to be sustainable within the given resources. Quality improvement [QI] is a problem-solving approach in which stakeholders identify context-specific problems, and create and implement strategies to address

these problems. It is an approach that is increasingly used to support health system strengthening, which is widely promoted in Sub-Saharan Africa. Authors propose empowerment theory for Quality Improvement [QI]. It self-reinforces. The more it is implemented, the more improvements result, further empowering people to use it. Opportunities that support skill- and confidence-strengthening are essential to optimize QI [24].

In a small experiment done in Haryana, authors found that at PHC level, some medical officers were disinterested in learning routine data use for program improvement. They projected that they were overtly busy with OPD and other national programs. However, with one to one mentorship, when they gradually learnt about the power of data, they became interested [25]. This reinforces the empowerment theory as well as supports the theory that people underperform when they are not confident. However, they do not project their lack of confidence or lack of skill. They assign non-performance to external factors such as lack of drugs, inappropriate government policies, vertical programs, etc.

Health Equity and Health Information Systems

Good quality and timely data from health information systems are the foundation of all health systems. Data is not sufficiently used for policy and program development, improvement, strategic planning, and advocacy. In a review article, authors suggested that the logic model can be used to improve data demand and use in decision making [26]. Health equity is often presented as the overarching goal of HSS. Often, the equity lens is restricted to the provision of healthcare services. Some authors propose that the equity lens for HSS -should be broadened to include the structural political, social and economic drivers of health and health inequities, as well as the broader contexts of care and complex socio-political mechanisms through which health systems are strengthened.[27]

New Zealand also chose to build and strengthen the health systems to address health equity and reach disadvantaged populations. Literature review informed that among the African minorities, there was inequity in accessibility of health services, a non-ethnic inclusive health workforce, lack of leadership, governance and political will towards migrant health, and an under-performing health information system which hampered resource allocation. Authors concluded that an improved and well-functioning health information system is pivotal to capture the unmet needs of the African population. [28].

With the exponential increase in mobile phone users in India, a large number of public health initiatives are leveraging information technology and mobile devices for health care delivery. Through a review, authors concluded that the primary focus of most of the articles was on service delivery and health workforce. Initiatives commonly used client education as a tool for improving the health system. Authors also recommended inclusion of an implementation research component into the existing and proposed digital health initiatives and generate the evidence for health systems strengthening [29].

As UHC is to be achieved while respecting the PHC approach, existing routine health information systems need to incorporate the requirements of new systems that support the use of new technologies and associated work processes that UHC entails. Authors identified the contradictions when new systems clash with existing ones. There are implications for system design, work processes, and institutions. Universal health coverage health information system design and implementation is inherently complex [30].

In a small rural health post we demonstrated that mobile phones can be linked with SMART technology for follow-up of patients with chronic diseases. It helps to improve the compliance [unpublished]. In another study, we used a simple mobile phone, for follow-up calls to anaemic pregnant women. We were able to improve compliance and make substantial change even in the prescription of right dose and drug by empowering the pregnant woman. [31]

Health System Transformation and Community Involvement

Universal health coverage has become a major health priority. In 2011, South Africa chose National Health Insurance (NHI) and primary healthcare (PHC) re-engineering to reach UHC over a 14-year period (2012–2026). In a qualitative study, authors concluded that a third great transition seems to be sweeping the globe, changing how health systems are organised. Actors in the study identified the need for health system transformation rather than strengthening, to make UHC a reality[32].

In Morocco, authors pointed out the need to go beyond the building-blocks framework to include other analytical frameworks including temporality, such that health system is more responsive and accountable to satisfy discontented citizens and health staff. The Moroccan experience suggests that it is possible to strengthen health systems by opening up the analysis of temporalities, which affects both decision-making processes and the dynamics of functioning of health systems [33].

Definitions of health systems strengthening have been limited in their inclusion of communities, despite evidence that community involvement improves program effectiveness for many health interventions. Communities can engage with HSS in four different areas –planning and priority-setting; program implementation; monitoring, evaluation, and quality improvement; and advocacy [34].

There are limited success stories of community involvement. It sounds very good on paper that community should be involved. However, it is practically very difficult. It requires a strong mentorship to bring out the community issues on planning board. Even if the issues are delineated, it requires sensitivity of the decision makers to respect and incorporate the community issues. While making decentralised plans, we had experienced that whatever be the community issues, ultimate plan is what decision makers want. If community is involved in monitoring, then it becomes uncomfortable for the health system to be responsive as they are not able to take actions for the community's problems.

Way Forward

There is a need to move away from classical PHC approach, not because it is conceptually wrong, but because it is non implementable given the current trend of healthcare budget allocation. Recent initiatives like the Health and Wellness Centre (HWC) are a step in the right direction. The community needs OPD service close to the homes, where they can go for day to day problems, monitoring and treatment of chronic diseases. It is currently dependent on local village level practitioners, who may be registered or unregistered and work as quacks. These practitioners are currently fulfilling the community needs. There is need to replace this level of service with authentic HWCs that can be managed by Nurse Practitioners (Non-Obstetric), Pharmacists or AYUSH doctors. These HWC should be open and accessible 24x7 so that need to visit quacks is averted. However, it is important to ensure that these HWCs have adequate drugs and supplies, functional basic equipment, and laboratory tests.

Each HWC should be able to do basic tests of Haemoglobin assessment with a valid haemoglobinometer, haemogram, blood sugar assessment, and urine test. They should be able to measure blood pressure and conduct an ECG. For interpretation, they should be linked with MOs at larger community health center (CHC) level. These HWCs should maintain electronic health database of the population. As per the Thailand Health Service Delivery model, these HWCs may be provided additional funding per family registered with them for health care. IT based monitoring and supervision of HWCs through linked CHCs may be planned. Logistics management should be IT enabled at all levels of health systems.

Role of existing Primary Health Centres should be changed. Regular posting of staff at PHCs should be abolished as practically most centres are not able to deliver. This staff should be posted to CHCs and subdistrict hospitals to strengthen these levels which should function without any compromise. HWCs should be linked to CHCs and sub-district hospital through telemedicine. Availability of ambulances should be enhanced. PHC buildings should be used to organise health camps and health education activities.

A huge public health workforce which is grossly underused in the departments of Community Medicine, Preventive and Social Medicines and Schools of Public Health should be utilized to improve management and leadership skills. Furthermore, these departments can be delegated public health program management functions. States should consider a ‘public health cadre’. Till the time this cadre is formally approved, states can delegate one medical officer per district as a Public Health Officer. This assignment could be on an annual rotation basis. The mentoring medical colleges should be made resource hubs for all HMIS related tasks. Complete transparency should be maintained in data sharing. Medical colleges can generate ‘data products’ for action at various levels. States and districts should prepare Program Implementation Plans (PIPs) based on the local data, under the mentorship of medical colleges. The COVID-19 pandemic has exposed this gap in health systems’ management. For crisis management, Community Medicine experts from few national institutes were inducted in the National Teams and were deputed to the states with high case load to understand and suggest remedial measures. Now, is the time to act on the lessons learnt. Teams from all medical colleges of the country should be drawn and trained as a rapid response team, to respond to any future public health emergency.

There is an urgent need for information technology, not only to reach out the population for services and education but for various management issues. IT can be harnessed to monitor stockouts of the medicine and supplies, help the health facilities to maintain buffer stock and indent in time. In case of stockout, it can signal the health facility about availability of stock in neighbouring facilities that can be contacted for supplies. IT can also be used to improve communication with the patients and to improve patient satisfaction. IT based grievance redressal mechanisms should be devised not only for the public but also for the medical officers and health staff who can voice their grievance bypassing the routine hierarchy.

There is a need to invest in the generation of quality data with more granularity. To address equity issues, it is important to have granular data so that equity analysis can be done from various perspectives. Health systems and political systems are reluctant to share data as it has the potential to be misused by the opposition to malign them. It is thus important to work on suitable data sharing and trust building strategies.

Thus, we believe that country do not need to wait for decades. We need to move away from current rhetoric and take bold steps to restructure, recreate and rejuvenate the health systems.

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