View Point

Human Resources for Health in India: Need to go Beyond Numbers

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Abstract

India's commitment to achieve the goal of Universal Health Coverage is evidenced by the launch of Ayushman Bharat and the transformation of Sub-Centres into Health and Wellness Centre to provide secondary and comprehensive primary healthcare to the vast majority of its population. Successful implementation of these initiatives requires adequate and skilled human resources for health and a conducive work environment. There exists a deficiency of doctors and paramedical professionals in different parts of the country. The vacancies in different categories of health functionaries have increased after 2005 despite the National Rural Health Mission/National Health Mission initiatives to strengthen the health system. The distribution of doctors and paraprofessionals in health is skewed, favoring urban areas. Properly oriented, trained, and skilled health workforce and informed public participation are critical to provide quality services for achieving national health goals. Therefore, it is necessary to establish public health cadre in all states of India and ensure appropriately skilled workforce to meet the functional requirements of health-care delivery system at different levels. This will also help to move forward on the way to reach the Sustainable Development Goals.

Keywords: Health and wellness center, human resources, private sector and professional bodies, public health cader

Introduction

Ayushman Bharat is India's bold step toward Universal Health Coverage (UHC). Alma Ata conference (1978) recommended Primary Health Care (PHC) approach to achieve Health for All. However, this focus was lost by global leaders in health for many decades, and after 40 years of Astana Declaration, attempts to shift the focus again on PHC. India has always prioritized PHC approach and has now adopted the Comprehensive Primary Care approach through Health and Wellness Centres (H and WC) to achieve UHC. This, however, requires a thorough overhaul of the existing state of Human Resources for Health (HRH) in the country.

India is now committed to achieve ambitious Sustainable Development Goals Goal No. 3, "*Ensuring healthy lives and promoting the well-being for all at all ages.*"[1] This goal is more holistic and even more ambitious compared to the Millennium Development Goals. It calls for action to financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all (target 3.8).[2] Unless we have the required numbers and skilled workforce in place, even increased allocation of finances will not serve the purpose. The issues related to human resources have not been comprehensively addressed to fulfill the needs of both the public and private sectors.

The main reasons for nonavailability of the workforce in India include cumbersome recruitment processes, unjust postings and transfers, and the unwillingness of health frontline worker to work in rural areas. The large number of HRH recruited on contract under the National Health Mission did not improve

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the situation due to the lack of coordination and integration with regular staff, and vacancy rates in all categories of health functionaries increased over a period of time or stagnated [Table 1].

Economic Advisory Committee to Prime Minister has set up Sub-Group: one to look into "Trend Analysis of Resources Investment in Health and Health Research." This article is based on the data analyses for this report with following specific objectives: (a) to delineate HRH needs for public and private sectors and identify trends in vacancy situation of HRH in public health facilities in India and ways to address the same, and (b) to highlight the need for establishing public health cadre in states and way forward.

Address Human Resources for Health Needs for both Public and Private Sectors

The recent decision is to upgrade of Sub-Centers (SCs) to H and WC to provide comprehensive primary healthcare including preventive, promotive, rehabilitative, and curative care including Mother and Child Health, Communicable diseases, noncommunicable diseases, geriatric, dental, and palliative care.[3] According to Rural Health Statistics 2018, a total of 195,959 Auxiliary Nurse Midwifery (ANMs) are working in 158,417 SCs in India. 24,760 (13%) ANMs posts are vacant, mostly in Karnataka, Maharashtra, Rajasthan, Uttar Pradesh, and Rajasthan. Seven states and two UTs (Chhattisgarh, Haryana, Kerala, Mizoram, Nagaland, Odisha, Tripura, D and N Haveli, and Lakshadweep) have reported surplus ANMs against sanctioned posts.[4] There is a shortage of male health worker (HWM) in most states with the exception of Goa, Kerala, Meghalaya, and Puducherry. Uttar Pradesh records the highest shortage, followed by West Bengal, Maharashtra, Jharkhand, and Andhra Pradesh. 7504 (4.7%) SCs are working without ANMs and 75,907 (47.91%) SCs are functioning without HW (M) and 5089 (3.21%) SCs are working without both (ANM and HW [M]).

The primary care team at the H and WCs comprises ANM, Second ANM, HWM, and Mid-Level Care Provider (MLCP) (CHO/Nurse/AYUSH) along with Accredited Social Health Activists (ASHAs). Eventually, a pharmacist, laboratory technician, and counselors or a multipurpose health functionary may join the team to strengthen the services. Till then, multi-skilling of the existing staff will be used to deliver these functions– after appropriate training. A total of 7504 ANM, 75,907 MPW (Male) and 158,417 Counselors and 158,417 MLCPs are required at HWCs. The Counselor and MLCP are new cadres introduced at the H and WC.

Private Sector

The National Sample Survey (NSS) 2014 revealed that more than 70% (72% in rural and 79% in urban) spells of ailment were treated in the private sector (consisting of private doctors, nursing homes, private hospitals, charitable institutions, and individual owned enterprises, etc.,).[5] Only 10% of doctors join the public sector after their education.[6] There is a need to include HR requirements in the private sector to comprehensively address HRH issues in the country. It is estimated that 93% of all hospitals, 64% of beds, 80%–85% of doctors, and 80% of outpatient and 57% of inpatient services are catered to by the private sector.[7] However, the government only looks at the availability of HR in the public sector. The public seeks healthcare wherever available-public or private. National Health Protection Scheme or the Pradhan Mantri Jan Arogya Yojana is also relying on private sector hospitals.

Need for Coordination among Different Professional Bodies

Health service delivery is a teamwork. There is a need to look at all the health functionaries at a health facility to promote quality healthcare. A large number of regulatory bodies have been functioning in a fragmented manner to regulate the education of medical and allied health professionals. The National Health Policy 2017 has recommended strengthening of six professional councils (Medical, Ayurveda, Unani and Siddha, Homeopathy, Nursing, Dental, and Pharmacy) and setting up of National Allied Professional Councils to regulate and streamline all allied health professionals. India should have an overarching coordination mechanism to identify and regulate the training of existing health professionals in the health system. Thirty-one healthcare-related jobs under National Skill Development Council do not fall under any regulatory authority. There is a need to bring all health-related regulatory and oversight bodies under one umbrella

Table 1: Vacancies at health facilities in 2005 and 2018

Positions	2005, *n* (%)	2010, *n* (%)	2015, *n* (%)	2018, *n* (%)
Specialists at CHC (surgeons, OBGY, physicians and pediatricians)	3538 (46.6)	4146 (41.2)	7881 (67.5)	10,051 (73.7)
Doctors at PHCs	4282 (17.4)	6148 (20.7)	9389 (27)	8572 (24.9)
ANM at sub-centers and PHCs	6640 (4.7)	10,214 (6.3)	20,492 (10.5)	27,964 (12.9)
Radiographers at CHCs	332 (19.8)	1260 (43.3)	2032 (48.8)	2069 (49.5)
Pharmacists at PHCs and CHCs	3380 (16)	4653 (19.9)	5456 (19.3)	4825 (14.7)
Laboratory technicians at PHCs and CHCs	2287 (15.6)	5183 (29)	6139 (35.8)	6214 (25.1)
Nursing staff at PHCs and CHCs	5280 (15.5)	10,289 (18.1)	11,757 (15.8)	13,098 (14.3)

Sources: Rural Health Statistics 2005, 2010, 2015 and 2018. *Vacancy position calculated with number of vacancies against sanctioned post in that period. PHCs: Primary health cares, ANM: Auxiliary Nurse Midwife, CHCs: Community Health Centers, OBGY: Obstetrics and Gynaecology

coordination mechanism for integrated planning, monitoring, and regulation of HRH in the country.

The World Health Organization recommends the use of health worker density (per 10,000 population) rather than individual functionary to assess the adequacy of HRH. The global average is 45.6, and India's health worker density is 20.9 ranging from 31.3 (Kerala) to 1.5 (Bihar). (68th Round of the NSS, 2011–2012). This indicator needs regular monitoring at the local level.

Beyond Numbers

Conventionally, the workforce availability is limited to the availability of HRH and the vacancy rates. However, the effectiveness of HRH goes beyond numbers and also includes the skills and work environment of the available workforce to deliver the services and accessibility and acceptability of services provided by the HRH to the public, as reflected in Figure 1.

The impact on the health outcome of the population served is a product of these factors. There is also a need to revise the job description periodically according to the healthy demand and changed epidemiology of diseases. The work environment, the skill of the health-care providers, and an adequate number should be assessed from time to time.

The health workforce with proper skill mix is critical to achieving UHC. This requires concerted action on several elements of the health sector and public policy, including effective intersectoral coordination among HRH stakeholders. Fundamental changes related to training and management of HRH is needed. Furthermore, we need to highlight the role of the public sector in shaping health workforce market.

Urgent need to set up Public Health Cadre to Oversee, Manage, and Identify Skills Needed for New Cadres for Managers and Professionals

There is a need to expedite the establishment of a dedicated, efficient, and adequately resourced public health cadre in the center and across states as recommended by various national committees and expert groups since 1946. The Health Survey and Development Committee (Bhore Committee, 1946), the Mudaliar Committee, the High-Level Expert Group on UHC (2012), the Steering committee on the 12th 5-year plan (2012), Health Secretaries Meeting (October 9, 2014) and the National Health Policy (2017).[8] Public Health cadres have a greater role in terms of value for money, epidemic/outbreak control, and disaster management. A national secretariat set up by the Ministry of Health and Family Welfare in 2015 to support states with cadre formation laid down guiding principles for their establishment. The process of cadre establishment will be led by individual states. The cadre should be developed at three levels – block, district, and state. Some states may also add a component at the divisional level. This process should involve minimal restructuring and disruption of existing administrative and service delivery structures. However, some new positions may need to be created. There will be four critical components in the public health workforce: (a) Public health administrative and leadership posts (to be headed by doctors with public health training), (b) technical staff (epidemiologists, entomologists, health informatics/surveillance officers, and sanitary engineers), (c) trained public health management staff, and (d) grass root frontline public health workers (female and male health workers). States may wish to adopt a strategy whereby doctors joining public service choose to enter either the clinical cadre (providing clinical care) or the public health cadre (with a predominant public health role). Building a public health cadre should involve a judicious mix of employing doctors with public health qualifications and/or providing in-service public health training to existing doctors. Initially, states may wish to sponsor in-service doctors interested in joining the public health cadre to public health training programs. In the medium and long-term, it should be a prerequisite for doctors joining public health services to possess a relevant higher qualification, for example, degree/diploma-MBA or postgraduate diploma in public health/health management or a Master's in Public Health. Priority should also be given to training other functionaries in the public health cadre (the technical, management staff, and frontline public health workers). States should adopt a comprehensive Public Health Act to provide regulatory powers for enforcement to its functionaries.

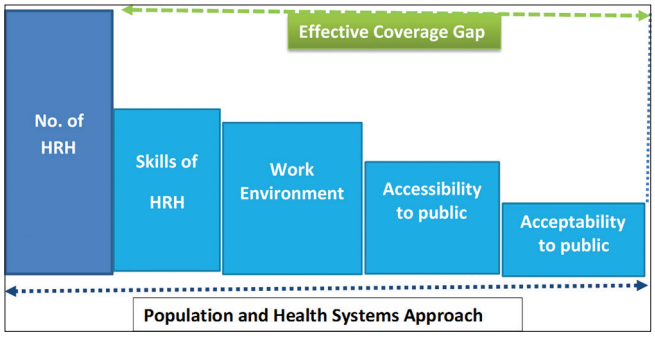

Figure 1: HR that delivers quality care going beyond numbers Source: Adapted from Cambell *et al*., 2013

The experience of Tamil Nadu has provided three important observations for other states interested in establishing their own public health cadre. (a) Public health cadres can be established with minimal restructuring and disruption at the block, district, and state level. (b) It is affordable: Only modest additional investments are required to train public health professionals. (c) It is effective and efficient: The state spends less than the national average on health and has one of the best health indicators. Furthermore, out-of-pocket private expenditure in Tamil Nadu is much lower than the national average. A large measure of their success has been attributed to the major efficiency gains from a public health cadre which is separate from the clinical cadre. NITI Aayog, under the

leadership of Dr. Vinod Paul, has set up a group to work out details of rolling out Public Health Cadre across states in India. The professionals bodies such as the Indian Association of Preventive and Social Medicine and the Indian Public Health Association are constantly engaged in advocating for the establishment of Public Health Cadre.

Conclusion

The situational analysis of human resources across states shows that the availability of doctors, specialists, and paramedical staff is inadequate. The situation has not improved since 2005.

i. The government needs to go beyond numbers and address the development of skills and provision of a conducive work environment. There is a need to adopt health worker density as an indicator because health-care delivery is teamwork
ii. Establish an overarching coordination mechanism for HRH: All the regulatory bodies of health and allied professions should come under one umbrella to coordinate the need of HR for the health sector and identify new cadres to be introduced
iii. There is a need for complete revamp of the HRH recruitment and managing them by adopting a life cycle approach for the development of health professionals. To expedite recruitment there is a need to start campus recruitments of health functionaries, improve opportunities for higher education, training, performance management, rewards, and transparent system of postings/transfer. And (IV) Introduce and Strengthen Public Health Cadre: the experiences of states in India have shown better public health outcome such as Tamil Nadu and Maharashtra, which would have establish public health cadre. Hence, there is an urgent need to establish public health cadre in all states.

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Conflicts of interest

There are no conflicts of interest.

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