Human Resources for Health

Pragmatic solutions for a new India

Primary health care

India was one of the first countries to recognise the merits of the primary health care approach. The deliberations between 1944-1946 of a Committee headed by Sir Joseph Bhore formed the basis of national health planning and had a lasting effect on the development of the Indian health system. As an early practitioner, India attempted to put in place a health service delivery system that would provide primary health care at the 'doorsteps of the people'. Universal and affordable health care has since then been central to the planning of the country's health system. Substantial government effort and resources have been devoted to the creation of a wide network of public health facilities at which qualified health workers can provide services. The approach was re-emphasised by the Declaration of Alma-Ata in 1978, which formally adopted primary health care as the means for providing a comprehensive, universal, equitable and affordable healthcare service. India responded to the call by redoubling its efforts to realise the vision that Sir Bhore had set out in 1946. Most recently, in 2005 the Government of India launched the National Rural Health Mission, with the goal of improving the availability and access to quality health care by people, particularly in rural areas.

However socio-economic, cultural and geographical inequities have hindered efforts to put fair access to health care in place. Many Indians, especially those living in rural areas, do not receive health care from qualified providers. Many of the resulting inequitable health outcomes have been linked directly to human resources for health their availability, their quality and their distribution.

Health workers and health

Health workers are service providers who link people to technology, information, and knowledge. The World Health Organisation defines health workers as “all people primarily engaged in actions with the primary intent of enhancing health”.

There is ample evidence that number and quality of workers are positively associated with immunisation coverage, outreach of primary care, and infant, child and maternal survival. The correlation between the availability of health workers and coverage of health interventions suggests that the health of general population suffers when health workers are scarce. It is now common wisdom that the dire shortage of health workers in many places is among the most significant constraints to achieving the three health-related Millennium Development Goals to reduce child mortality, improve maternal health, and combat HIV/AIDS and other diseases such as tuberculosis and malaria.

A changing India

The context in which the Bhore Committee visualised the health system of the country was that of one composed of quite dissimilar states, a community divided by wide social distance and poor communication links, with scarce management and technical capacity, and a small allopathic medical resource base. At the time of free India's first census in 1951, it was a rural country, with 82.7 per cent of its approximately 340 million population living in widely separated villages. There were 557,409 villages and 2845 towns in 1951 and only 17.3 per cent of India's population was urbanised. It was in this context, that the Bhore committee painted a bold canvas, promising the delivery of comprehensive

health care at the doorsteps of the people, incorporating and integrating both preventive and curative care through a vast network of health workers and health care facilities.

India's population has since grown to over 1100 million. India's urban population has grown more than 4 times to represent 27.3 per cent of the entire population. The number of towns in India is now 5161 and there are 35 cities of over one million population each. India has grown into its federal nature and state capacity has expanded tremendously. Communications, both physical as well as through telecommunication networks, have improved greatly and social distance within and between communities, significantly diminished.

It is clear that the context within which the country is now attempting to put primary health care in place is vastly different from that of 60 years ago. What considerations should guide decision making in respect of allocations of human resource within public health systems? Should all areas be treated alike? Should decisions about categories of staff be made based upon disease profile? How is staff allocation linked to scope of service?

Considerations in decision making

A major issue that exercises the planners of India's health system is the availability of doctors to man India's network of 23,458 Primary Health Centres (PHC). In its present design, India's rural health infrastructure consists of a subcentre with an auxiliary nurse midwife who provides simple natal care and care for infants and young children. The PHC has at least one doctor and is responsible for the first level basic health care. The system then provides for specialised care of increasing sophistication at the Community Health Centres and Tertiary level hospitals. We believe that the considerations that must drive decisions have to do with what we wish to accomplish and the context within which it is to be done.

Consideration 1 :: Scope of Services

PHC have a preventative and promotive role and some might argue that this role is paramount. Doctors are seen as central to the ability of these institutions to deliver the curative care that is to be provided at this level. A careful look at the Indian Public Health Standards makes it evident that most tasks to be carried out at this level do not require a medical degree.

The Indian Public Health Standards for Primary Health Care

The objectives of IPHS for PHCs are:

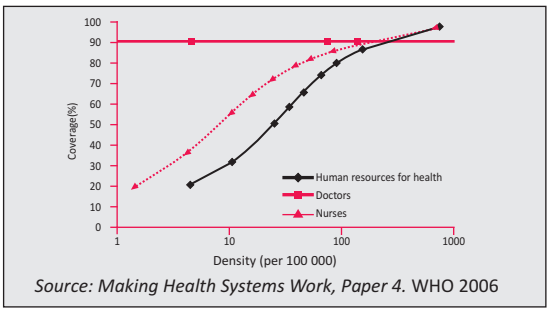
I. To provide comprehensive primary health care to the community through the Primary Health Centres.
II. To achieve and maintain an acceptable standard of quality of care.
III. To make the services more responsive and sensitive to the needs of the community.

Minimum Requirements at the Primary Health Centre for meeting the IPHS:

1. Medical care
2. Maternal and Child Health Care including family planning:
3. Medical Termination of Pregnancies using Manual Vacuum Aspiration technique (wherever trained personnel and facility exists)
4. Management of Reproductive Tract Infections / Sexually Transmitted Infections
5. Nutrition Services (coordinated with ICDS)
6. School Health: Regular check-ups, appropriate treatment including deworming, referral and follow-ups.
7. Adolescent Health Care: Life style education, counseling, treatment.
8. Promotion of Safe Drinking Water and Basic Sanitation
9. Prevention and control of locally endemic diseases such as malaria, kala azar, Japanese encephalitis, etc.
10. Disease Surveillance and Control of Epidemics.
11. Collection and reporting of vital events
12. Education about health / Behaviour Change Communication
13. National Health Programmes including Reproductive and Child Health Programme, HIV/AIDS control programme, Non communicable disease control programme, Revised National Tuberculosis Control Programme
14. Referral Services: Appropriate and prompt referral of cases needing specialist care.
15. Training
16. Basic Laboratory Services
17. Monitoring and Supervision
18. AYUSH services as per local people's preference.
19. Rehabilitation: Disability prevention, early detection, intervention and referral.
20. Selected Surgical Procedures: Vasectomy, tubectomy (including laparoscopic tubectomy), medical termination of pregnancy, hydrocelectomy and cataract surgeries as a camp/fixed day approach have to be carried out in a PHC having facilities of O.T.
21. Record of Vital Events and Reporting.

Source: Government of India, MoHFW (2006). *Guidelines for IPHS for Primary Health Care*. Directorate General of Health Services.

Interestingly, the 42nd round of the National Sample Survey on health care utilisation found that of all routine ailments treated in rural areas, only 5% were treated in PHC by doctors. The remainder either went to city public hospitals and dispensaries (20%) or to private practitioners (59%) and private hospitals (16%). Thus even with the existing emphasis on curative care, only a negligible percentage of patients are being treated by PHC doctors. Absenteeism among medical staff is high and anecdotal evidence suggests that most doctors do not spend the expected number of hours in the PHC. As can be seen from the accompanying graph, immunisation rates are much more consonant with density of nurses than with that of doctors.



Source: Making Health Systems Work, Paper 4. WHO 2006

Tamil Nadu has achieved great success in increasing the institutional deliveries primarily by providing additional services at PHC level, posting of additional staff nurses and providing round the clock delivery services in all the PHC currently. There was a remarkable increase in number of institutional deliveries mainly at PHC level, after taking these measures from 64.7 per cent in 1996 to 98.1 per cent in 2008.

Consideration 2 :: Disease Profile

A high proportion of the population continues to suffer and die from preventable diseases, child-birth related complications and under-nutrition. At the same time, new health threats of non-communicable diseases have emerged and pose quite a different set of demands on the medical abilities of the health system. A responsive health system would require the capacity to effectively fight the 'unfinished agenda' of existing health problems as well as meet emerging challenges.

Many of the existing health problems have, by definition, been around for a long time. Several of these are communicable in nature, and many of these are caused by bacteria or higher order organisms for which curative agents have been developed.

Both these and other existing conditions linked to pregnancy, childbirth and nutrition have been studied in much detail at primary level and standardised responses were developed. Most are short term in nature and cure can be effective with the use of 'dose by weight' treatment. Often, the patient sees the treating physician only once in the course of the illness.

On the other hand, many of the emerging problems are either viral in causation (for which cures are yet to be found), or are chronic disease caused from aberrations in individuals' internal environments. Most viral conditions require symptomatic treatment which is individualised to the course of the disease of the patient. Further many of the lifestyle disease such as diabetes and hypertension require titration of the treatment to the individual response to treating agents and close monitoring over the life of the patient.

This basic dissimilarity places remarkably different demands on the health system. As the public health system upgrades itself to respond to emerging lifestyle diseases and new public health challenges, individualised curative services that doctors can provide will be at a premium. Decisions will need to be taken about the optimum use of physicians and the value that the system must place on their skills.

Consideration 3 :: Connectivity

Consistent with the Bhore recommendations, the 'basic' medical doctor at the PHC provides the first level of comprehensive outpatient care for village communities. However, with only 23,458 PHC and 4276 community health centres, this infrastructure is less than adequate to address the health needs of India's rural population of more than 700 million. Villages are scattered and each village may have smaller hamlets at a distance from each other.

This represents a huge requirement for doctors at the PHC within the present structure of the public health system. It seems unlikely, however, that this can be met substantially or cost effectively.

Urban centres with dense populations provide vibrant markets for health providers. These centres also act as magnets for the development of other services such as tertiary medical facilities and allied pharmaceutical and diagnostic services. This leads to a concentration of medical services in urban locations sucking the rural areas dry of resources. The usual argument is that this

represents an inequitable situation with rural communities at the losing end. But the data informs us that rural communities travel to urban centres to seek health care, often even when government facilities are in place.

Urban agglomerations not only provide a concentration of resources, they also represent a concentration of demand. Doctors seek to practice there because urban markets provide larger number of patients, greater diagnostic facilities, and greater possibility of referral when their skills cannot suffice. For patients too, urban centres offer a one stop shop for a choice of physicians, diagnostic facilities and a supply to match their purse. With improved connectivity of rural communities with nearby urban centres and the increasing urbanisation of India, the distance between rural India and urban centres is diminishing except in remote and more backward parts of the country. Added to that are the increasing reach of private health care and telemedicine.

Lessons for a new world

Healing and healers have been a part of all societies. And they have used all the resources and technologies at their disposal to provide health care. Today, there is need to take stock of the resources and alternatives that exist to devise a system that takes into account the nature of disease and prevention options; placement of highly sophisticated responses among concentrated populations while ensuring that less sophisticated and effective triage methods are available to all; and that distribution of medical personnel reflects the most efficient use of scarce resources available to the public system at decentralised levels.

The nurse-doctor ratio in the country is particularly poor. There are approximately 1.6 nurses and midwifes per allopathic doctors in India, whereas similar numbers for Brazil stand at 3.1. Although no gold standard exists for a nurse-doctor ratio, a higher ratio is desirable because nurses can deliver basic clinical care and public health services at a lower cost than can a doctor. Task-shifting is not a new concept in India. The National Health Policy-2002 had suggested that some public health functions might be allocated to nurses, paramedics and other personnel from the extended health sector after imparting adequate training to them. There has also been experience of this in various parts of the world, such as the use of clinical officers and medical assistants in Africa and various types of nurse and non-nurse practitioners; and studies suggest that their performance and outcomes are in no way inferior to that of conventionally trained doctors. The recent Lancet Series on Universal Health Coverage in India also makes practical suggestions for task shifting to empower other health cadres. It is time we explore pragmatic solutions for a new India.

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