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Physician Shortages in the Indian Public Sector

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A Look at the Problem

India was one of the few countries in 2006 that was estimated to have a "critical" shortage of health workers and was therefore unlikely to be able to provide essential health interventions to its people (WHO 2006). Almost a decade later the situation is unchanged, and it is evident that India will not be able to meet the targets for most MDGs.

833 million
rural Indians had just 44,000 public sector doctors providing them health care in 2013

As the current discourse on Universal Health Care debates the means of providing universal coverage, the one aspect that all stakeholders agree upon is the persistent challenge that a shortage of health workforce in the public sector poses, and the pressing need to address this gap. Whether care is to be provided only by the public sector, or by both the public and private sectors in complementary roles, it is unquestionable that doctors providing quality service are integral to improving India's health outcomes, especially in the under-served rural areas of the nation.

With a new National Health Policy and the National Health Assurance Mission in the offing, it is important to critically examine the reasons for the shortage of doctors in the public sector and the options available to policy makers for rectifying the situation.

3.3 %
of India's population falls into poverty each year, because of out-of-pocket expenditure on health care

The Crux of the Problem

Almost 69% of India's population lives in its villages while only about 26% of its doctors serve here. Of these, the majority are in the private sector, which is economically beyond the reach of a large proportion of the population. With only about 44,000 doctors for over 833 million people, the shortage of doctors in the public sector in rural regions is so severe that each doctor here serves a community averaging close to 19,000 people (RHS 2014).

This severe shortage of public sector doctors is leading to ever-increasing personal expenditures on health, and impoverishing 3.3% of India's population every year. While the quality of care provided is extremely important, positive health outcomes have to begin with making a viable health workforce available to the populations. Rao et al (2012) have emphasized the impact of the availability of trained human resources on the health services and the health outcomes in a population. The scarcity of doctors in the Indian public sector is thus both a threat to the health of the population and its economic well-being.

Why Don't Doctors Serve In the Public Sector? What Does Research Show?

Research across both developed and developing countries indicates there are common factors that motivate or de-motivate physicians from service in rural areas or the public sector. Some of these include competition from the private sector, lower comparative salaries, unsatisfactory management structure, and poor working and living conditions (Abdel-Rahman et al 2008, Hossain et al 2007, Warren et al 1998). On the other hand, professional autonomy, a positive relationship with colleagues,

*Indian doctors **ARE** willing to serve in the public sector and rural areas given better conditions, pay, job autonomy, and continued training.*

and professional support have been found to be important incentives for doctors to join or continue in public service (Hossain et al 2007, Stoddard et al 2001, Warren et al 1998).

Research in India has also highlighted issues of monetary compensation, working and living conditions, and relationships with colleagues as significant deciding factors for doctors to serve in rural areas (Peters et al 2010, Rao et al 2010). Autonomy at work, job responsibility, and professional training and recognition have also been found to be important for job satisfaction of personnel serving in large tertiary hospitals (Sharma et al 2014, Yafe 2011).

What Does International Experience Recommend?

Generally, the strategies tested to attract and retain physicians in the public sector, and rural areas in particular, have been similar across the developing world. Their success however has varied. WHO in its 2010 Global Policy Recommendations summed up these strategies under four major categories:

1. ***Educational Recommendations***
WHO recommends encouraging greater inclusion of students with a rural background in medical colleges. It also suggests locating medical colleges in non-urban settings to provide an orientation to rural health needs.

2. ***Regulatory Interventions***
These include improving pathways to career enhancement, training different types/cadres of health workers and compulsory rural service. The last, although successful in some countries such as Thailand, may not be workable or even possible for other countries.

3. ***Financial Incentives***
These have been suggested as measures best used along with other non-financial incentives.

4. ***Personal and Professional Support Plans***
Professional support networks, career development pathways and rewards for good performance are recommended.

What Has India Attempted So Far?

Health being a state subject under India's federal structure, policies to address the shortages of human resources in the public

Table 1: Summation of the different strategies and the States adopting them.

	Strategy	States
Educational incentives	Quota for PG (Post Graduate) admission after rural service	Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Nagaland, Tripura
	Additional marks in PG entrance examination after rural service	Kerala, Mizoram, Uttarakhand
	Rural service compulsory before or after PG admission/ completion	Arunachal Pradesh, Haryana, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Manipur, Nagaland, Odisha, Sikkim, Tamil Nadu, Tripura
Disincentives	Bond for rural service when graduating from a government medical college	Assam, Arunachal Pradesh, Chhattisgarh, Gujarat, Kerala, Manipur, Meghalaya, Nagaland, Odisha, Tamil Nadu, West Bengal
Financial incentives	Financial incentives for service in difficult area Often graded according to the degree of difficulty of the location	Andhra Pradesh, Andaman & Nicobar, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tripura, Uttarakhand
Regulatory interventions	Management reforms – shorter recruitment procedures, transparent posting mechanisms and rotational postings in difficult areas	Haryana, Kerala, Tamil Nadu
	Employing retired doctors	Gujarat, Manipur, Maharashtra, Nagaland, Odisha, Sikkim, Tamil Nadu, Tripura
	New cadres of intermediate skilled health worker	Chhattisgarh, Assam
Personal and Professional support	Group housing for staff	Chhattisgarh, Uttarakhand, West Bengal

Source: Adapted from Rao et al 2011 and Sundararaman & Gupta 2011 (Bull WHO)

sector have varied across different states. Most states have attempted a mix of strategies to attract physicians to the public sector (Table 1).

What Is the Way Forward?

It is important to recognize that the right mix of financial and management strategies is critical to attract and retain physicians in the public sector. As this review highlights though, policies adopted by Indian states have focused most commonly on educational and monetary incentives only. The educational incentives too have been limited to admission into PG seats, ignoring in-service continued education and skill development. Management reforms such as transparency in promotions and transfers, which are more effective but difficult to implement administratively and politically, have been attempted by very few states.
Going forward, there are four main priorities that should be focused upon in order to address the physician shortages.

1. A comprehensive national healthcare human resource policy needs to be developed. This policy should lay down guidelines for states to implement strategies to address the shortages, and must increase focus on those human resource management tools that have so far been overlooked by many states. These would include in-service continued education and training, and major administrative reforms showing transparency in promotions and transfers, both areas that are critical to motivation of public sector workers.

2. Increase public healthcare spending substantially from the current 1% of GDP, including spending more on human resources in health. Healthcare provision is a human-resource-intensive service, and no improvement in population health indicators can be achieved without adequate investment in the human resources. The investment for the physician cadres can be in many forms, including:

- Increased salaries
- Higher financial incentives for difficult postings
- Investing in education and training during service
- Specialized "Public health cadre" of physicians for management

3. Institute systemic changes that provide for greater autonomy and authority for public sector doctors. Both international and Indian research has highlighted the significance of these factors in professional satisfaction and motivation of physicians (Stoddard et al 2001, Warren et al 1998, Peters et al 2010). In the Indian context, the authority in the health department of any state lies with a professional administrator from the Indian Administrative Service rather than a senior physician. A re-examination of these hierarchical roles is essential for adequate career advancement and motivation of physicians in the public sector.

4. Increase emphasis and spending on evidence building.There is very little Indian research on factors that affect physician motivation and satisfaction, especially in rural public sector settings, where the greatest scarcity and needs lie. It is important to base policies on credible evidence of the determinants of job satisfaction. Operational research must therefore form a central pillar of the government's national policy for human resources.

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