



## Rural Training of Medical Interns or Post Graduates to Address Medical Manpower Deficiency in India: A Dilemma

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### Abstract

India with one-sixth of the global population has probably, the lowest doctor to population ratio. Not only the numbers of trained doctors are low, there is skewed distribution of health manpower. Most of the physicians are based in cities where there is opportunity to earn more. In rural areas, it is difficult to find a trained physician. The health care delivery in rural areas is done mostly by Government. The doctors posted at the rural health centres feel frustrated and try their best to get out of the villages. The infrastructure of the villages is so poor that even the medical interns are not willing to go there. The lack of infrastructure, entertainment and safety issues are the main hindering factors for the willingness of doctors to work in a remote rural area. Many innovations has been suggested and acted upon by the Government of India in the past, but of no avail. This article tries to find ways of putting doctors in the rural areas. Compulsory posting of interns and post graduate residents in the rural hospitals is one such way.

**Keywords:** Rural Training, Manpower deficiency, Doctors, Post Graduate training, Interns, Internship, Deficiency.

**JEL Classification:** I11, I18

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### Introduction

According to Census 2011, 68.84% of the India's population still resides in the rural areas. Despite constituting majority of the population, the health status of rural people in India continues to be much below the expected level. The erstwhile National Rural Health Mission which was an amalgamation of various existing national health programmes running in the country provided integrated health care services to rural masses. Though it has caused a paradigm shift in the rural healthcare delivery system, much needs to be done for India. This can be attributed to continuous

poor health status of the population in rural areas. Thus, the challenges that the public health sector faces in rural areas largely relate to access to health care which in turn relates to the crisis in human resources for health care.

The human resources in health care of India is very poor even if compared with low income countries. As per the Central Bureau of Health Intelligence (CBHI) Annual Report 2010, total number of doctors registered in the country by the year 2010 were 8, 16,629 which comes to a doctor to population ratio of 1 per 1600 persons. The nurse to population ratio in India according to the same report is 1:1205. The international norm is 2.28 skilled health worker (doctors, nurses and midwives) per 1000 population. The National Sample Survey Organization (NSSO) data for the year 2004-05 and the Census 2001 estimates of total health workers is around 2.2 million health workers in India, which gives an adjusted density of only 20 workers per 10,000 population. The crisis of trained doctors in modern medicine is more in rural areas as majority of them are based in urban areas. This urban rural differential in distribution of health manpower accounts for disparity in health status of urban and rural people. Therefore, there is a need to address this critical component of health policy. The current paper is an attempt to describe the strategy of utilizing the medical interns or post graduate residents to address health manpower shortage particularly in public health sector in rural areas of India.

### **Medical Manpower in India: An Overview**

India produces about 52,000 allopathic doctors in a year from around 410 Medical Council of India (MCI) recognized or permitted medical colleges. But the number of registered doctors and population coverage per doctor varies across states. States with low health workforce density, which are present in the bottom density quartile (10 -16 workers per 10,000 population), tend to cluster in the belt running across north-central and north-eastern India. This spans the states of Rajasthan, Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, Chhattisgarh, Assam and Meghalaya.

Primary Health Center (PHC) is the first contact point between village community and the medical officer. As on March, 2011, 4.6% of the PHCs were without a doctor. With the latest guideline to post 2 doctors at each PHC, this shortfall is bound to increase considerably. Considering the fact, that MBBS course today has become more of theoretical course, there is a rush among the medical graduates to pursue the post-graduation. Currently, India has over 22000 post graduate degree medical and surgical courses seats and 3040 super-specialty medical and surgical seats across the country. Yet, there is an acute shortage of specialist manpower in rural areas and small towns. The percentage short fall of specialist doctors in rural areas, such as surgeon, obstetrician & gynecologist, physician and pediatrician were 75%, 65.9%, 80.1% and 74.4% respectively in the year 2011, as compared to requirement based on existing infrastructure. Some of the tentative figures of some other specialist doctors practicing in India are as follows: ophthalmologists 10,000, ENT surgeons 5500, psychiatrists 3000 and dermatologists 2000.

Overall, India has .9 million medical practitioners with the number of allopathic doctors per 10000 population in urban areas (13.3) more than three times larger than rural areas (3.9). The possible reasons for such a skewed distribution of health care professionals is both monetary and non-monetary benefits available to them in urban areas.<sup>4</sup> This hamstrings the functioning of rural primary and secondary health centres and hospitals. Thus, in this respect medical interns and postgraduate students seem to be potential human resources which could be utilized for meeting up this challenge.

## **Initiatives Undertaken to Overcome Shortage of Medical Manpower in India**

The Union Health Ministry has taken some steps to tide over healthcare worker shortage crisis. The health ministry has modified regulations under the Indian Medical Council Act, 1956 that would relax operating, staffing and land norms so as to ease establishing of medical colleges in India. Addressing the manpower crisis further, the Union Government of India has set up six All India Institute of Medicine Sciences (AIIMS) like institutions and plans to upgrade 13 existing medical institutes, besides establishing 60 new medical colleges as per the 11th five-year-plan. The Health Ministry has also given assurance to set up more medical colleges in Bihar, Uttar Pradesh and Madhya Pradesh; states that face an acute dearth of specialized doctors. The Medical Council of India (MCI) has allowed existing medical colleges to open new campuses in underserved states with poor college to population ratio in order to correct the imbalance. These are the most underserved states in so far as the availability of medical colleges and MBBS and PG seats are concerned and the new norms will help these states produce more doctors and help improve medical healthcare facilities. The Ministry also recently announced that Indian doctors having their post-graduate degrees in medicine from the UK, the US, Canada, Australia and New Zealand will be allowed to practice and teach in India. Almost 60,000 Indian physicians are estimated to be working in countries like the US, the UK, Canada, and Australia alone. By this step, the Government intends not only to address a shortage, but also has given a fillip to the reverse tide of Indian doctors returning to their home land. Besides, the move would help to tap Indian doctors in the UK who are jobless because of new immigration laws.

To meet the increased demand of specialist allopathic doctors, MCI has recently modified the norms for intake of medical graduates in various specialties. This will increase the number of post graduate degrees awarded to medical graduates from existing 3500 to 5500 annually. Another 5000 post-graduate seats were increased in the month of February 2010. In 2011-12, a total number of 2350 PG seats and 4542 MBBS seats have also been added to the existing capacity. Further there is a proposal by Union Health Ministry, of rural posting of one year before the doctors get their degrees. According to Vision 2015 document of Medical Council of India, additional weightage (5% or more) will be given to a candidate, appearing in post graduate entrance test, who has put in two years of rural service.

## **Training of Medical Interns and Postgraduates in Rural Areas: Current Status**

It is generally accepted that the tertiary hospital- based model of medical education in an urban setting provides limited exposure to the future doctors about health needs and infrastructures of the rural areas. Medical graduates thus develop a preference to work in urban areas as compared to rural or remote areas.

The World Health Organization has too recommended in its Global Policy 2010, a strong positive rural regulatory approach. Based on this, the educational and regulatory reforms at the national and state level have been modified. Other measures take advantage of the strong desire among medical graduates for post-graduate (PG) specialization by linking this with rural service. Three forms of these linkages exist: compulsory rural service for admission to PG programs (Pre-PG Compulsion), giving incentives to in-service public sector doctors in PG admission or towards the cost of a PG degree (in-service PG incentive), and compulsory rural service for all post graduate degree holders (Post-PG Compulsion).

Eleven states namely Assam, Arunachal Pradesh, Chhattisgarh, Gujarat, Kerala, Manipur, Meghalaya, Nagaland, Orissa, Tamil Nadu and West Bengal have made it compulsory for all the medical graduates to serve in rural areas for a duration varying from 1 to 5 years. Usually

a bond is signed and the doctor can opt out of the rural service by paying a penalty equivalent to the bond amount.<sup>20</sup> The bond amount is as low as Rs.1,00,000 in Chhattisgarh and as high as Rs. 1 million in the state of Meghalaya. 10% to 30 % of the PG seats are reserved for in-service candidates in Jammu and Kashmir, Nagaland, Orissa and Tamil Nadu. In-service doctors take the entrance exams but compete for the reserved seats which increase their chances of getting a PG seat. In several states like Kerala, Mizoram and Uttarakhand preferences to in-service doctors are given in the forms of additional marks which can be added to the total attained by the candidate in the qualifying PG exam. In Arunachal Pradesh, Medical Officers on completion of two years of rural service are eligible to be sponsored by the State, which would cover all expenses of their PG training. Tripura also sponsors in-service doctors for PG courses after they complete five years (with 3 years serving in rural areas) of service. In the states of Tamil Nadu and Kerala compulsory rural service is being implemented for students graduating from PG courses. In Tamil Nadu specialists graduating from Government PG Colleges have to sign a bond to serve in rural areas for five years while specialists from private colleges have to serve for three years against a bond of Rupees half a million. Similar conditions exist in Kerala and Jharkhand (1 year rural service against a bond of Rs. 5, 00,000).

### **Issues in Posting of Medical Graduates and Post-Graduates to Rural Areas**

According to the report of taskforce on Medical Education, 2006, a fresh medical graduate is, incapable for performing in a setting where there is no multidisciplinary support. Hence, the need to have a posting in a setting where they could be able to learn and deliver a primary healthcare becomes a mandate. Further, orientation to six week rural package during under-graduation could enable them to develop sensitivity and knowledge pertaining to rural health issues. However, to accommodate for this additional posting already prolongs the duration of the course, thereby exaggerating the financial and familial burden which the student is already exposed to. Even if the course is not prolonged as could be seen in AIIMS, Delhi where MBBS students are posted for 6 weeks in rural areas during their second professional year, one needs to have infrastructure like proper rural health training center and hostels for making this possible.

Posting of medical graduates in rural areas have achieved little success so far. The young graduates are averse to rural stint and have been continuously putting pressure on bureaucratic and political executive not to enforce it. However, regulatory interventions such as providing better opportunities of doing post-graduation or skill up gradation opportunities when offered as incentive to medical professional serving in rural areas has shown better results. The posting of post graduates particularly of clinical specialty could also serve as suitable alternative. Rural posting on rotational basis, of post graduate students pursuing PG degree in pediatrics, internal medicine, obstetrics & gynecology and surgery along with anesthesiology could help to at least meet the shortage of specialists at Community Health Centre. Linking of each medical college with a district and block hospital would ease this process. Post graduates from para-clinical subjects such as pathology, microbiology and bio-chemistry could manage the laboratory services at the PHC and CHC level. The Indian Public Health Standard (IPHS) 2010 has created a post of public health manager at the Community Health Centers level, which at present is vacant at most of the places. A medical graduate pursuing PG in Community Medicine or Family Medicine could be posted to not only manage the CHC but also get the exposure for managerial skills and understanding of healthcare delivery system in the country. Rotational posting for a finite time could also increase their willingness to accept such roles. While no such reform is being proposed by MCI, posting of PG and super-specialist medical students could serve as suitable alternative to fulfill the shortage of specialist manpower.

## Conclusion

Meeting the challenge of human resource shortage in health sector should be the immediate priority of the government. The issues regarding medical human resources need to be rigorously examined. For a sound primary health care system, quality and availability of health workers is mandate. Thus, critical examination of medical education reforms in both undergraduate and postgraduate medical training is required. Such an innovative strategy of posting of post graduate students will help to meet the deficiency of specialist manpower at least for the time being. The problem in the parts of country where tribal population forms a majority of the inhabitants is more serious. Though, the study could not find out the number of doctors serving exclusively tribal population, the number is bound to be very low. A holistic approach is required to place more qualified doctors in tribal zones of the country. Moreover a doctor cannot work in isolation. S/he needs the crucial help of para-medical and non-medical staff. There is perennial shortfall of these staff.

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