Speaking for Ourselves

Overcoming shortage of doctors in rural areas: Lessons from Tamil Nadu

J.M.A. BRUNO MASCARENHAS

INTRODUCTION

While most states in India have the perennial problem of vacancies for the position of doctors in villages, it is not so in Tamil Nadu. Almost all posts of medical officers in 1529 primary health centres (PHCs), mobile medical units under the control of the Director of Public Health and Preventive Medicine, around 270 government hospitals (GHs) and 30-odd institutions under the control of the Director of Medical and Rural Health Services are always filled up. There is a long waiting list of doctors awaiting posting orders in such rural set-ups. Tamil Nadu has also had a variant of 'compulsory rural service' functioning successfully for the past 4 years.

In most other states in India, the health department officials try to find various means of recruiting doctors to work in PHCs. A few states have even started posting AYUSH (Ayurveda, yoga and naturopathy, siddha, unani and homoeopathy) graduates instead of MBBS graduates. The Tamil Nadu Public Service Commission (TNPSC) has selected and posted 756 MBBS doctors and 333 specialists through the General TNPSC 2009 examination to various institutions. Another 2107 doctors, already working in PHCs and GHs on a temporary basis, have cleared the Special TNPSC 2009 examination and are awaiting their regularization orders.

The transformation in Tamil Nadu was achieved neither by law, nor overnight. It is a series of rules and welfare measures by the state health department that have brought about this change.

FACTORS LEADING TO FILLING OF POSTS OF DOCTORS IN RURAL AREAS

Rules in Tamil Nadu postgraduation (MD/MS/Diploma) entrance examination

This is possibly the factor that played the most important role in bringing about the change. The Tamil Nadu postgraduate (PG) entrance examination question paper has 250 multiple choice questions and 90 marks are awarded for these questions. An additional 10 (maximum) marks are allotted based on the experience of the candidate in rural service. For each year of completed service after MBBS, the candidate is awarded 1 additional experience mark. Candidates working in PHCs also receive 1 mark for each completed year of service. Further, if the candidate is working in a 'difficult terrain' (including hilly areas), another additional mark is awarded for each completed year.

Tamil Nadu has about 1300 PG seats in various government medical colleges. Of these, 650 are allotted to the all-India quota by the Director General of Health Services on the basis of the competitive entrance examinations conducted by All India Institute of Medical Sciences (AIIMS) every year. Of the remaining 650 seats, which are allotted to candidates by the Selection Committee under the Director of Medical Education, 50% are reserved for 'in-service' candidates (selected by the TNPSC) who have served in any government institution for a minimum period of 2 years, excluding leave. These service candidates can also choose their seat through open competition.

At the time of enrolling in the PG course, these service candidates are supposed to execute a bond (for ₹5 lakh [0.5 million] in case of diploma seats and ₹10 lakh [1 million] in case of degree seats) stating that they will compulsorily serve the Government of Tamil Nadu until superannuation. This applies to all service candidates, irrespective of whether they opt for a seat under the open/service quota through Tamil Nadu PG entrance examinations or a seat through the all-India PG entrance examination.

While private candidates (i.e. all those who do not fulfil the criteria for 'in-service' candidature) get only a stipend (₹15 000 in the first year, ₹16 000 in the second and ₹17 000 in the third), 'in-service' candidates receive their full pay during postgraduation. The private candidates who join the Tamil Nadu Medical Services (TNMS) later are free to resign any time. However, once they take up the PG course and avail themselves of the above benefits, they have to work in the TNMS till their superannuation.

The Tamil Nadu 'rural service' model

As for private candidates, if they pursue PG in any Tamil Nadu government medical college, they have to work for a minimum of 2 years in government institutions after completing their course. This appears somewhat similar to the 'compulsory rural service' proposed for MBBS graduates a few years ago. However, there are important differences between the two. In the Tamil Nadu model, doctors are appointed under the regular time scale of pay ₹15 600–₹39 100 Grade pay ₹5400 (may receive a minimum pay of ₹30 000 per month) under Rule 10A 1 and are posted to a station for 2–3 years, where they can continue as long as they wish or opt for transfer to any other vacancy. They are eligible for increments and leave, such as medical leave and maternity leave, and once they clear the TNPSC examination, their services are regularized from the date of appointment and the period for which they serve is counted for 'PG eligibility'. A diploma/degree candidate who has joined post-PG rural service, worked for 2 years and cleared a TNPSC examination is considered an 'in-service' candidate in the subsequent PG/TN superspecialty entrance examination (see below).

In other government schemes, including the post-MBBS rural service scheme, doctors receive a salary of ₹8000 per month without increments. The duration of service is only one year, which includes 4 months each in villages, government hospitals and medical colleges. This limits his experience in a particular station to only 4 months. Moreover, the person is neither eligible for maternity leave, medical leave, etc. nor is the

2, Jeya Nagar, North High Ground Road, Tirunelveli 627011, Tamil Nadu, India; *spine.brain.surgeon@gmail.com*

period of service counted for service benefits (such as PG quota).

Because of the benefits attached to the Tamil Nadu model, most doctors who pursue PG as private candidates opt to work for 2 years in TNMS and also continue further by clearing the Special TNPSC, which is conducted regularly. Only a few pay the bond amount and opt out. In the latest Special TNPSC examination conducted in November 2009, 2107 doctors (who had been initially appointed on a temporary basis) opted to continue in government service.

Rules in Tamil Nadu superspecialty (DM/MCh) entrance examinations

There is an additional 50% quota for service candidates in the Tamil Nadu superspecialty entrance examinations. Medical officers selected by the TNPSC and appointed in the TNMS on a regular basis, who have put in a minimum of 3 years of continuous service, and medical officers who had been serving continuously for 3 years in local bodies of Tamil Nadu as on 30 June 2010 are only eligible to apply as service candidates.

Non-service candidates who have completed their qualifying PG degrees in Tamil Nadu government medical colleges under the state quota/all-India quota cannot apply automatically. They can apply only after the satisfactory completion of a 2-year bond period.

Publishing of results and criteria to be fulfilled while enrolling

Two merit lists, namely the open merit list and the service merit list, are published. The former (both for service and non-service) for each discipline of the higher specialty course is prepared by computing the entrance examination marks and experience marks (maximum of 100). The service merit list is published separately.

At the time of joining, all the selected service candidates execute a bond, with three sureties, for a sum of ₹10 lakh (₹1 million), undertaking that they will serve the government till the date of superannuation.

At the time of joining, all the non-service candidates selected for a higher specialty courses execute a bond for a sum of ₹10 lakh (₹1 million) undertaking that they will serve the Government of Tamil Nadu for a period of not less than 5 years.

Thus, the 50% reservation for service candidates and the additional marks available to them make it easy for a doctor in government service to pursue PG and the post-PG rural service makes it easy for a doctor who is pursuing PG to get a government job.

Medical Officer friendly initiatives

In addition to these entrance examination rules, there are other factors that influence young doctors to join government service in rural areas. These include the procurement of drugs through the Tamil Nadu Medical Service Corporation (TNMSC), the option of getting a job transfer to the same place where one's spouse is working, and the availability of National Rural Health Mission (NRHM) funds, which the medical officer can use to undertake minor repairs of buildings and run the institution more smoothly. Further, medical officers are permitted to enter into memorandums of understanding (MoU), forming public–private partnerships, to improve the quality of care in government centres. The doctors' duty timings in PHCs have been reduced to a realistic 9 a.m. to 4 p.m. The other factors that encourage doctors to join government service are a good referral system, increased manpower, the revival of the senior civil surgeon post at PHCs, and better promotional opportunities for those who wish to continue in PHCs.

Of the above factors, the TNMSC (*http://www.tnmsc.com/tnmsc/new/index.php*) deserves special mention. Before the advent of the TNMSC, a PHC used to have a supply of about 20 tablets, 10 injections and 5 syrups. This limited the scope of the prescription of drugs to patients and in case the medical officer needed any other drugs, he had to do a lot of paper work. Needless to say, not all young medical graduates, who are straight out of medical college and have no formal training in government protocols and office procedures, were comfortable with these procedures. Most doctors joining government services used to be warned by their seniors that 'if there is a problem in bills, you won't be relieved from your post to pursue your PG', and this sufficed to dampen the spirits of the young doctors. With the advent of the TNMSC, the doctor has more than 100 drugs to choose from. The district warehouse supplies these drugs directly to the PHC/GH. This makes procurement easier as well.

It is not uncommon to see a PHC doctor (typically someone who has just completed his/her undergraduation) quitting his/her job following marriage due to the wish to be with his/her spouse. This problem has been circumvented through an innovative scheme which permits the doctor to opt for a transfer to the same district as his/her spouse.

With the aim of facilitating public–private partnerships to improve health facilities in the state, the chief medical officers of PHCs and hospitals, hospital superintendents of district hospitals and deans of medical college hospitals have been empowered to enter into MoU with philanthropists, public trusts, public bodies, corporate institutions, non-governmental organizations (NGO), and other public-minded persons and institutions. The MoU can pertain to matters such as the improvement of the premises and hospital building area, provision of infrastructure/equipment, and general and equipment maintenance. No prior approval is needed and only a copy of the signed MoU has to be sent to the designated authority. This option of public–private partnerships has given doctors greater scope to augment the hardware and software infrastructure in PHCs/GHs and hence, there is an increased sense of ownership and commitment to service.

Private practice after duty hours

Doctors in the TNMS are legally permitted to pursue restricted private practice after duty hours. While the pros and cons of this merit wider discussion, it does increase the number of persons who are willing to work in a government set-up.

Other factors

The number of posts of medical officers in the PHCs and GHs has been increased (almost doubled) over the past decade due to various government schemes and programmes. The appointment of doctors to the Comprehensive Emergency Obstetric and Newborn Care (CEmONC) centres, appointment of doctors by the Tamil Nadu Health System Project (TNHSP) and rationalization of posts in secondary care hospitals have increased the number of posts of medical officers in the GHs. This has also increased in PHCs by

1. Creation of new PHCs
2. Upgradation of single-medical officer PHCs to two-medical officer PHCs
3. Revival of senior civil surgeon posts

4. Creation of 24-hour PHCs
5. Mobile medical units

While one would expect the percentage of vacancies to increase when new posts are created, surprisingly, in Tamil Nadu, the number of vacancies has decreased dramatically over the past decade and more and more young graduates are joining service. This unexpected trend could be attributed to the opportunity provided to medical officers to choose a job site near home and the creation of more medical colleges in the state.

CONCLUSION

In isolation, the factors mentioned above seem insignificant and trivial, but they have led to a substantial improvement in the health sector in Tamil Nadu. The problem of lack of availability of doctors for primary care in the government sector has been a perennial one for many health administrators. Other health administrators can study the government orders and rules mentioned above, most of which are available online, to modify them to suit the local needs and implement them to provide better care to patients through rural health set-ups.

India's health workforce: Current status and the way forward

S. GARG, R. SINGH, M. GROVER

INTRODUCTION

Manpower for health services has been described as 'the heart of the health system in any country'.[1] It is one of the most important aspects of healthcare systems and a critical component of health policies. In India, there is no reliable source giving the number of the members of the health workforce as more than half the healthcare professionals work in the unorganized private sector. It is uncertain how many specialist doctors are available in the country, which suffers from a shortage of such doctors. There is an imbalance in the urban–rural distribution of specialists, with more specialists being available in the urban areas. We have tried to compile the information available on the health workforce of India from different sources and suggest a plan to address the shortages in different cadres.

HEALTHCARE INFRASTRUCTURE IN RURAL AREAS

The healthcare infrastructure in the rural areas consists of a three-tier system based on population norms (Table I). A brief description of the health posts at different levels follows.

Subcentre

The subcentre is the most peripheral and first contact point between the public healthcare system and the community. Each subcentre is manned by at least one auxiliary nurse midwife (ANM)/female health worker and one male health worker. One health assistant (female) is entrusted with the task of supervising 6 subcentres. Subcentres are assigned tasks related to maternal and child health, family welfare, nutrition, immunization, diarrhoea and the control of communicable diseases. Subcentres are provided with basic drugs for minor ailments to meet the essential health needs of men, women and children. There were 148 124 subcentres functioning in the country in March 2011.[2]

Primary health centres (PHCs)

The PHC is the first contact point between the village community and the medical officer. PHCs provide integrated curative and preventive healthcare to the rural population, with an emphasis on the preventive and promotive aspects. A PHC is manned by a medical officer, supported by 14 paramedical and other staff. It acts as a referral unit for 6 subcentres. It has 4–6 beds for inpatient care. There were 23 887 PHCs functioning in March 2011. Of these, 8326 were providing 24-hour medical services.[3]

Community health centres (CHCs)

A CHC is supposed to be manned by 4 medical specialists (surgeon, physician, gynaecologist and paediatrician), supported by 21 paramedical and other staff. It has 30 inpatient beds. Minor and major surgical procedures can be performed in a CHC, which has provision for X-rays, a labour room and laboratory facilities. It serves as a referral centre for 4 PHCs, and provides facilities for obstetric care and specialist consultations. In March 2011, there were 4809 CHCs functioning. Of these, 906 were equipped with modern medical facilities.[4]

HEALTHCARE INFRASTRUCTURE IN URBAN AREAS

According to the 2011 Census, about 37.7 crore (377 million) people live in urban areas[5] and this population will increase to an estimated 43.2 crore (432 million) by 2021.[6] The spurt in urban growth has led to an increase in the number of the urban poor, especially those living in slums. Despite the proximity of the urban poor to urban health facilities, their access to these facilities is restricted. They are 'crowded out' because of an inadequate urban public health delivery system. About two-

TABLE I. Population norms for different health centres

Centre	Population norms	
	Plain area	Hilly/tribal/difficult area
Subcentre	5000	3000
Primary health centre	30 000	20 000
Community health centre	120 000	80 000

Faculty of Medical Sciences, Delhi University, New Delhi
S. GARG Department of Community Medicine
Maulana Azad Medical College, Bahadurshah Zafar Marg, New Delhi
R. SINGH, M. GROVER Department of Community Medicine