

Summary Report of
NHSRC Studies on
Strategies for
Improving Availability
of Health Care
Providers in Rural &
Remote Areas

CONTENTS

Section - I: BACKGROUND

Problem Statement

Section - II: BROAD OUTLINE OF RETENTION STRATEGIES

Section - III: N.H.S.R.C. STUDIES ON STRATEGIES FOR IMPROVING AVAILABILITY OF HEALTH CARE PROVIDERS IN RURAL AND REMOTE AREAS

- 3.1 Why Some Doctors Serve in Rural Areas: A Qualitative Assessment
from Chhattisgarh**
- 3.2 Improving Work Force Management Practices in Haryana State to
Attract and Retain Medical Professionals in Public Health Service: A
Case Study**
- 3.3 Attracting Doctors to Rural Areas: A Case Study of the Post-Graduate
Seat Reservation Scheme in Andhra Pradesh**
- 3.4 Documenting the 2nd ANM Training and Deployment of West Bengal**
- 3.5 Chhattisgarh's Experience With 3-Year Course for Rural Health Care
Practitioners: A Case Study**
- 3.6 Which Doctor for Primary Health Care: An Assessment of Primary
Health Care Providers in Chhattisgarh, India**

SECTION - I: BACKGROUND

The National Rural Health Mission (NRHM) launched in 2005, involves a multi-pronged approach towards achieving accessible, affordable and quality health care that is accountable and responsive to the people's needs. A step towards this was to ensure that public health institutions achieve a certain set of standards called Indian Public Health Standard (IPHS), in terms of infrastructure, human resources, equipment & drugs etc. The IPHS has laid down staffing norms for each level of public health facilities under which, the Health Sub Center (HSC)¹ is to be staffed by 2 Auxiliary Nurse Midwives (ANM) with 18 months training and a Male Health Worker (MPW-M), the Primary Health Center (PHC)² by 3 doctors plus a fourth, trained in indigenous medical systems as well as by 5 Staff Nurses and 1 ANM, the Community Health Center (CHC)³, which is conceived as a Rural Hospital with 30 beds, a functional operation theatre and blood storage facilities is to be staffed by 6 General Duty Doctors and 6 Specialists and 19 nurses. According to these norms, the District Hospital (DH) is to be staffed with at least 30 doctors and thrice as many nurses for a 101 to 200 bedded hospital.

One of the major challenges for the provision of health care services and attaining the Millennium Development Goals is the acute shortage of health personnel followed by unbalanced skill-mix of the existing staff. The trends of critical health indicators like Infant Mortality Rate (IMR) & Maternal Mortality Ratio (MMR) and availability of health personnel show a positive correlation where countries with better availability of skilled health personnel also have lower mortality indicators. The skewed Population-Health Care Personnel ratio in India (Doctor-Population of 1:1507 and Nurse-Population of 1:1207⁴), compounded by the unequal distribution of health workforce in rural & remote geographical areas as compared to urban areas, is one of the main cause for the inadequate performance of the public health system with severe consequences in the availability and quality of health services, and on health outcomes.

¹ Indian Public Health Standards (IPHS) for Sub Centers, Directorate General of Health services, Ministry of Health and Family Welfare, Government of India, (2007)

² Indian Public Health Standards (IPHS) for Primary Health Centers, Directorate General of Health services, Ministry of Health and Family Welfare, Government of India, (2007)

³ Indian Public Health Standards (IPHS) for Community Health Centers, Directorate General of Health services, Ministry of Health and Family Welfare, Government of India, (2007)

⁴ Thiagarajan Sundararaman & Garima Gupta. Indian Approaches to retaining Skilled Health Workers in Rural Areas

PROBLEM STATEMENT

Inadequate availability of health personnel and unequal dispersion of health personnel in the states is disturbing and still remains an impediment towards ensuring quality health care service delivery. Most (60%) health workers are present in urban areas where 28% of the population resides⁵. The problem of the unequal distribution of the health workforce between cities and villages has severe consequences on the availability and quality of health services, and on health outcomes in rural and remote geographical areas.

The public sector has made considerable efforts to place doctors and a variety of other health workers in rural areas through its vast network of health sub-centers, primary and community health centers in these areas. In addition to the filling up of regular vacancies under the State Governments, NRHM, over the years, has also contributed by recruitment of nearly 1.5 lakh contractual health care providers inclusive of Doctors, Nurses and Para-Medics to the public health services.

However, high levels of vacancies in these health facilities due to appointed health workers not taking up posts, absenteeism and dual practice have compromised this effort. This problem is particularly acute for doctors at Primary Health Centers (PHCs) and for specialist doctors at Community Health Centers (CHCs) and District Hospitals (DHs).

⁵ Public Health Foundation of India and World Bank (2008), India's Health Workforce Size, Composition and Distribution

SECTION - II: BROAD OUTLINE OF RETENTION STRATEGIES

Globally, interventions to improve attraction, recruitment and retention of health workers in remote and rural areas, fall under four categories: education, regulation, financial incentives, and personal & professional support⁶:

Categories of interventions used to improve attraction, recruitment & retention of health workers in remote and rural areas		
Category of Intervention		Examples
A.	Education	A1.Students from Rural Backgrounds
		A2.Health professional schools outside major cities
		A3.Clinical rotations in rural areas during studies
		A4.Curricula that reflect rural health issues
		A5.Continuous professional development for rural health workers
B.	Regulatory	B1.Enhanced scope of practice
		B2.Different types of health workers
		B3.Compulsory service
		B4.Subsidized education for return of service
C.	Financial Incentives	C1.Appropriate financial incentives
D.	Professional & Personal support	D1.Better living conditions
		D2.Safe and supportive working environment
		D3.Outreach support
		D4.Career development programs
		D5.Professional networks
		D6.Public recognition measures

In India, states have adopted different strategies towards improving the availability of health care personnel in the rural and remote areas, especially in tribal and hilly areas. The National Rural Health Mission (NRHM) also augments these efforts by funding schemes and initiatives proposed in the State Program Implementation Plans (PIP) to recruit and retain health workers in rural areas.

⁶ Increasing access to health workers in remote and rural areas through improved retention, Geneva: WHO 2009

Some of the strategies adopted by various states are as follows:

1. Educational Measures:

- Rural recruitment: In several states preferential selection of health workers with rural backgrounds for medical education is carried out based on the belief that these health workers tend to serve and remain in their native areas e.g. “Swalamban Yojna” (self-reliance plan), launched in Madhya Pradesh in 2006-07 with the objective of filling the gap of staff nurses wherein women with rural backgrounds from under-served districts are selected and sponsored for the nursing courses with a bond to serve in the rural areas for 7 years after training or else pay a penalty of Rs. 2,00,000
- Multi-Skilling: “Multi-skilling” or adding to the skill set of existing staff to take on additional roles is commonly used in overcoming shortages of specialist doctors at district and sub-district levels e.g. Emergency Obstetric Care (EmOC) and Life Saving Anesthesia Skills (LSAS). These trained Medical officers are permitted to perform clinical functions that were earlier under the specialist’s domain.
- Alternative Service Providers: Some states have introduced, or are planning to, cadres of non-physician clinicians who will serve in primary health care settings or below e.g. RMA in Chhattisgarh and RHPs in Assam

2. Regulatory Measures:

- Mandatory Rural Service: Based on the experiences of missing doctors from public health systems of rural areas, a strong need was felt to modify regulatory reforms at the national and state level. One such measure is mandatory rural service for the medical graduates for a duration varying from 1 - 5 years. This measure was made compulsory in eleven states namely Assam, Arunachal Pradesh, Chhattisgarh, Gujarat, Kerala, Manipur, Meghalaya, Nagaland, Orissa, Tamil Nadu and West Bengal. The bond amount for the same varies from Rs. 1 lakh to Rs. 10 lakh in different states.
- Compulsory rural service for admission to PG programs (“Pre-PG Compulsion”): For retaining skilled health professionals in the rural area, certain states have regulations where graduate doctors are bound to serve in rural areas for a designated time period, after which they are eligible to appear for PG-seat. Eleven states have made it mandatory for all the graduates to

complete two to three years of rural service for admission to the PG degree programs (Arunachal Pradesh, Haryana, Himachal Pradesh, Jammu and Kashmir, Maharashtra, Manipur, Nagaland, Orissa, Sikkim, Tamil Nadu and Tripura).

- Compulsory rural service for all Post Graduates (“Post-PG Compulsion”): Some states have regulations wherein medical doctors have to serve for a particular period in public health facilities after completing their PG studies e.g. in Andhra Pradesh, students availing the in-service quota currently have to sign a bond to serve the state government for 5 years after completing their PG education. If they quit government service within the bond period, they have to pay the full bond amount and refund the salary received since the beginning of their PG course

3. Financial and Non-Financial Incentives:

- Monetary Compensation: Financial incentives for serving in the remote areas e.g. difficult area allowance in addition to their regular salaries
- Giving incentives to in-service public sector doctors in PG admission or towards the cost of a PG degree (“In-service PG incentive”). Several states give certain benefits to in-service doctors working in rural areas for pursuing PG studies. Incentives can be in form of additional marks, which can be added to the total attained by the candidate in the qualifying PG exam. The number of marks given is according to the tenure and the location of service. Some states sponsor PG training of in-service doctors. These benefits are independent of any kind of mandate or compulsion.

4. **Workforce Management Policies:** Issues like lengthy recruitment procedure contributed to acute shortage of health manpower. Thus the recruitment process has been cut short by hiring health workers on contract or walk in interview in some states. Other options include employing retired doctors and nurses to meet the existing human resource shortfalls. An absence of transparent promotion and transfer policies and non-availability of job descriptions are an important cause of low job satisfaction and workforce attrition. The National Rural Health Mission is trying to encourage states to adopt workforce management policies that ensure transparent transfer and placement for doctors and nurses and better residential facilities, which however, most of the time, proves difficult to implement

5. Public Private Partnership: All these models involve engaging with non-government providers to strengthen public health service delivery.

- **Contracting-in:** Appointing contractual workers to supplement human resource requirement at all levels of health facilities. Specialists have also been engaged and paid on case-to-case basis e.g. Obstetricians and Anesthetists for Cesarean Sections
- **Contracting-out:** Handing over management of government health facilities including Human Resources to Non-Governmental Organizations in some states e.g. Arunachal Pradesh, Meghalaya etc.
- **Purchasing services from the private sector:** Under these schemes the services are provided by the private sector and cost of care is borne by the State; e.g. Chiranjivi Yojana in Gujarat. The scheme involves purchasing maternity services from private providers through a voucher system so that women below the poverty line can have access to antenatal care, institutional delivery and post-natal care without any out-of-pocket payment.

**SECTION - III: N.H.S.R.C. STUDIES ON STRATEGIES FOR IMPROVING AVAILABILITY OF HEALTH
CARE PROVIDERS IN RURAL AND REMOTE AREAS**

The National Health Systems Resource Center conducted studies on the diverse strategies adopted by various states to increase the availability of Health Care Providers, especially in the rural and remote underserved areas

Different studies were conducted in the states of Chhattisgarh, Haryana, Andhra Pradesh and West Bengal. These studies fall under some of the broad categories of interventions used to improve attraction, recruitment & retention of health workers in remote and rural areas

CATEGORY OF INTERVENTION	STUDY CONDUCTED
Exploratory study to determine factors that contribute towards doctors opting for and continuing to serve in rural and remote areas	Why Some Doctors Serve in Rural Areas: A Qualitative Assessment from Chhattisgarh
Workforce Management	Improving Work Force Management Practices in Haryana state to attract and retain medical professionals in public health service
Non-Financial Incentive	Attracting Doctors to Rural Areas: A Case Study of the Post-Graduate Seat Reservation Scheme in Andhra Pradesh
Educational Intervention with an element of Public Private Element	Documenting the 2 nd ANM Training and Deployment of West Bengal
Educational Intervention towards Creation of Alternative Service Providers	Chhattisgarh's Experience with 3-Year Course for Rural Health Care Practitioners: A Case Study
	Which Doctor for Primary Health Care: An Assessment of Primary Health Care Providers in Chhattisgarh

Descriptions of these studies have been made in the following chapters along with the key findings.

3.1: WHY SOME DOCTORS SERVE IN RURAL AREAS: A QUALITATIVE ASSESSMENT FROM CHHATTISGARH

A majority of health workers in both private and public sector are present in urban areas and this is consistent across different cadres of health worker. High levels of vacancies in Government Health Facilities due to postings not being taken up, absenteeism and dual practice have compromised efforts to increase availability of health personnel in the rural and remote areas. This lack of qualified medical professionals has resulted in the majority of rural households receiving care from private providers, many of whom are less than fully qualified⁷

Most research works into the phenomenon of workforce mal-distribution has been focused on factors responsible for workers not serving in the rural areas. Breaking away from the beaten path, a qualitative study was conducted in Chhattisgarh State from July to September 2009, to explore reasons for health workers continuing to serve in otherwise underserved rural and remote areas.

This study covered 14 CHCs and 23 PHCs in remote and rural areas across 8 districts. In-depth interviews were conducted with a selection of medical practitioners who have an established record of service in rural areas. The data were sorted into emerging thematic categories representing practitioners' experiences, reasons for staying on, and their expressed needs. Two types of criteria were considered for the selection of participants. Essential criteria included participants serving in PHC or CHC in a rural area for more than five years or participants serving in a PHC or CHC in a remote rural area for more than one year. Desirable criteria include Allopathic training, presence in remote rural area for more than 5 years (more than 10 years highly desirable), serving at primary health center level (as opposed to block level) or female participant. A total of 37 participants were enlisted for interview.

There was an emphasis on extracting underlying implications and meanings which respondents ascribed to their experiences, rather than to overtly stated views and rhetoric. Special attention was paid to notable variations and divergences in perspectives between different respondents.

⁷ WHO (2007). Not Enough Here...Too Many There - Health Workforce in India. New Delhi, World Health Organization, Country Office for India

KEY FINDINGS:

There are key specific complexes of factors at the individual level, which act in favor of retention of service providers in rural areas. Doctors' decisions to remain in rural and remote areas over periods of time were driven by varied combinations of factors including geographical affinities, personal values of service, professional interests and ambitions, strong relationships with colleagues and in the case of contractual doctors, the anticipation of obtaining a regular position. A majority of respondents had had a rural upbringing, and emphasized the importance of familiarity and comfort in village environs. For women doctors, the opportunity for both spouses to work and live in the same location distinctly emerged as a positive factor.

Factors influencing self-retention of Doctors at Rural areas:

- 1. Self and Family:** A range of personal and familial factors were influential in determining doctors' decisions to remain in rural service. Personal values - including service orientations (often influenced by family upbringing), spiritual leanings, disinclination for private practice; and pragmatic factors such as schooling for their children and the opportunity for both spouses to work and live in the same location, emerged as prominent factors.
 - **Personal Values** of service to the poor and a feeling of self-worth & usefulness of practicing in otherwise underserved area serve as motivating factors.
 - **Upbringing and family background:** The fact that a majority of the doctors in this study had had a rural upbringing is indicative that their background and familial values contributed to their serving in these areas. Respondents also linked caring for the poor at no cost, to performing a **religious** service.
 - **Conjugal life:** Spouses and children of some of the respondents were located in nearby towns, with opportunities to visit them on weekends or once a month. Both spouses working in the same or adjacent locations, which allow them to stay together, was also reported to be a factor favoring staying on.
 - **Values of service and the importance of a social return from government-funded medical education:** This was another motivating factor for joining a position in rural or backward areas

2. **Community and Ethnicity:** Community affinities were among the key motivational factors, which contributed to doctors' decisions to continue locally. Some of the respondents also identified themselves as being ethnically tribal, and having community affiliations to tribal groups.
3. **Geographical** linkages of upbringing and culture, and closeness to families and forebears were also the most widely cited and affirmative motivation that doctors associated with their decisions to remain in a particular rural location, trumping negative factors such as inaccessibility and poor facilities. 'SEND ME TO THE PLACE I CAME FROM'. The sense of belonging to local communities due to close links and relationships developed over a period of time was cited by some as a reason for staying on
4. **The Workplace and the 'System':**
 - Security and prestige afforded by a government job was reported to be important by some of the respondents. The anticipation of obtaining a regular job if they continued in service emerged as a significant motivating factor for contractual doctors.
 - A sense of professional fulfillment by way of meeting the challenge of working in strife-affected & remote areas and interest in outreach activities & public health programs inspires many doctors to continue their good work.
 - Good working relationships with colleagues and supportive role of supervisors creates a positive environment at the facility level
 - Sadly though, irregularities in placements and unresponsiveness to transfer requests have also have been a big factor for doctors' continuing to work in their present locations.
5. **Other factors:**
 - Eligibility for or preferential admission to postgraduate degree courses
 - One of the reasons that motivated them to move from a city hospital to a village PHC was the ability to utilize their professional skills better.
 - **Coming to work in rural and remote areas:** Doctors were simply assigned areas by the government's placement process

Practitioners located in rural and remote areas have to confront with a complex range of adverse circumstances and phenomena, some of which are unique to remote locations. These issues directly or indirectly affect the decisions of healthcare workers to serve in rural areas. This study also highlighted the conditions of health workers living in these areas, their concerns as well as their needs.

Concerns related to retention of Healthcare Providers in rural areas:

- 1. Working conditions:** Severe constraints were evident in some instances, and several doctors reported having to cope with shortages of water, electricity, space and supplies.
- 2. Personnel Shortages:** Healthcare workers have to work overtime, share duties and sometimes divide their time across 2 or more facilities in different locations to overcome personnel shortages in these settings
- 3. Access and communication:** Problems in travelling to poorly accessible field outposts were frequently reported, particularly in the remoter areas. Lack of availability of telephonic communication is also an issue, as the doctors have to contend with zero mobile network coverage.
- 4. Residential facilities:** The health personnel were forced to take up private accommodations or live in poorly maintained or inadequate government facilities. Sometimes if they are been provided with the government residential facilities they have to spend a lot for the maintenance.
- 5. Personal and Family Constraints:** Long separations from families, a common consequence of being located in remote and inaccessible areas, were often a cause of distress. Contractual doctors, who had less choice in determining their locations and limited permitted leave of absence, reported problems of separation from families more frequently. Disturbances in spousal relations and estrangements, consequent to the problem of separation was also reported
- 6. Erosion of professional skills:** The lack of confidence and erosions of skills directly correlated to the limitations of resources (clinical facilities and equipment) to practice a high standard of medical care, and the lack of opportunity for further academic development. This was further complicated by problematic interface with alternative knowledge systems and perceptions of

health that were subscribed to by local populations, making it difficult for the doctors to build a rapport with community.

7. **Threat of civil strife:** The threat of civil strife is pervasive in many parts of naxal-hit interior Chhattisgarh. Doctors, while being permitted to stay and work in these areas, were subject to the harsh unwritten rules imposed by militants including limited mobility, medical supplies being taken away and having to treat ill & injured insurgents in the forest camps
8. **Administrative problems of government service:** Some of these included late payments of salaries, inability to obtain promotions or transfers to other locations, and having to adjust with local systemic and societal politics
9. **Contractual Doctors** have to contend with insecurities of employment and a perception of inferiority to regular government doctors

The respondents' expressions of their needs - reflecting perceptions of changes, which would improve their experiences of working in rural and remote areas - encompassed a range of reforms and improvements.

Expressed Needs of Doctors to continue serving in rural areas:

1. **Higher pay scales and security of a regular job** was a widely and strongly expressed need among contractual doctors, with a majority claiming that their salaries had not been increased to match the rising prices of commodities and services.
2. Greater compensation for doctors working in remote areas.
3. The need for more **transparent and rational procedures for promotion and transfer and addressing shortages in personnel** by filling existing vacancies were highlighted by many respondents
4. Need for improving the quality and regularity of medical supplies and provision of better workplace infrastructure, to improve working conditions and enhance professional satisfaction
5. There was a particular demand for **need-specific clinical skills development** among respondents, in areas which reflected their field experiences, and which would enhance their response to community needs.
6. Common complaint of doctors is that living accommodations provided by government did not benefit their professional status and most of the time costs of repairs in dilapidated housing are

often borne personally. Thus doctors need **better living and good housing arrangements** for them and their family to serve in rural areas.

7. **The need for quality education for their children:** One of the problems in retention of doctors in rural areas is that that they can't give their children even good primary education due to lack of proper schools. On the other hand a number of doctors have reportedly stayed on because there are good schools (convent) in the vicinity.
8. **Assurance of personal security:** Amid growing concerns in the wake of increasing civil violence and insurgency, the need for assurance of personal security is clearly important for doctors in certain violence-afflicted areas.
9. **Better acknowledgement and recognition of contribution:** According to healthcare providers in rural areas, their work is not recognized in par with urban doctors, which is demotivating. If their contribution is acknowledged, it would give them professional satisfaction and a reason to work in rural areas.

3.2: IMPROVING WORK FORCE MANAGEMENT PRACTICES IN HARYANA STATE TO ATTRACT AND RETAIN MEDICAL PROFESSIONALS IN PUBLIC HEALTH SERVICE

In Haryana there were high levels of vacancies, especially for doctors, primarily due to poorly designed work force management policies and the lengthy recruitment process under Haryana Public Service Commission (HPSC). A shortfall of 211 specialist existed at the level of CHCs with only 45 in position against 256 sanctioned posts, while 350 MBBS doctors were in position against 580 sanctioned posts (a shortfall of 230) at the PHC level⁸. The shortfall would increase manifold if the shortage at the District and Sub-District levels are taken into account. This problem was compounded by high levels of reported absenteeism among doctors posted at PHCs and CHCs in rural areas.

Absence of any formal transfer and promotion policy in the state further added to the problems of retention of critical human resources within the system. As a working environment constraint, irrational transfers and promotions contributed to the high degrees of job dissatisfaction. Job roles and responsibilities were also not clearly defined leading to a mismatch between the qualification/skills and the job requirements.

This study was aimed at studying the issues plaguing the human resource situation in the State and the efforts made by the government to address these issues and its outcome.

KEY FINDINGS:

The human resource for health situation in Haryana:

- Shortage of doctors
- A high level of reported absenteeism among doctors posted at PHCs and CHCs in rural areas, more so in what was categorized as difficult areas.
- Long recruitment process of the HPSC lead to shortage of manpower, as all vacancies are not filled due to long waiting process for candidates.

⁸ State Program Implementation Plan 2009-10

Initial measures undertaken:

To overcome the lengthy recruitment process, the state attempted the following two strategies:

- Walk-in contractual appointments for a period of one year, extendable every year.
- Public-private partnership for contracting-in private specialists on call basis to provide specialty health care services in the public health facility where regular government specialist posts were vacant.

However, few fundamental problems crept up and these measure were not able to meet the requirements:

- Problem of retention of contractual doctors, who, unsure of their annual extensions would leave the moment they got alternative employment
- When contracting-in specialists, the desired combination of three specialists - pediatrician, obstetrician and anesthetists was never available at one time thereby undermining the functionality of providing referral and emergency care for maternal and child health.

Fresh measures taken to overcome these gaps:

The State Government then adopted fresh strategies to address the matter.

1. Changing recruitment policies for regular M.O.s & Specialists and hastening of recruitment process.

- Taking 630 regular posts out of the purview of the HPSC, whereby recruitment for the posts of generalists and specialists into permanent government service became an on-going process and applications were entertained all through the year.
- Sanction of 424 additional posts of doctors, out of which 359 were of specialists

2. Attraction to retention:

- **Revised placement policy:** Posting of Specialists only at District Hospitals and at the few CHCs that are providing comprehensive emergency obstetric care such that the skills of specialists are utilized mainly towards performing tasks related to their specialty. Flexible approach adopted to post the candidates at the preferred location wherever feasible.

- **Transfer policy:** No transfers would be made until three years of term is completed at one center of posting.
- **Enabling work environment:** Specialists were given a bigger role in decision-making process related to facility development with the government making efforts to meet the demands for necessary logistics in terms of infrastructure & equipment. Disciplinary actions were taken against doctors with poor performance who fail to deliver even in a facility with the required infrastructure & equipment and good performances rewarded with better promotion and transfer opportunities.
- **Revised compensation packages:** Compensation packages were revised for critical cadres like Specialists, MBBS & AYUSH doctors and paramedical staff with special packages for specialists posted in difficult areas categorized on the basis of their grade or category of difficult area
- **Provision of difficult area allowance:** Over and above their salaries, health workers were also given financial incentives depending on the level of remoteness of their place of posting

Outcomes:

1. 825 doctors including 525 specialists appointed during 2008-09
2. As of April 2009, 319 MBBS doctors and 231 specialists have joined on regular posts through the new recruitment policy
3. In comparison to the same period in 2008, January to April 2009 shows an 11% increase in OPD, 20% increase in Institutional Deliveries and a 25% and 24% increase in major and minor gynecological surgeries. Bed occupancy at government health facilities has also risen to 100% from 40% in the last year

3.3: ATTRACTING DOCTORS TO RURAL AREAS: A CASE STUDY OF THE POST-GRADUATE SEAT RESERVATION SCHEME IN ANDHRA PRADESH

A number of states in India, including Andhra Pradesh, have schemes in place by which a certain number of PG seats in medical colleges are reserved for doctors serving in the public sector. In the Indian context, reserving PG seats is a particularly powerful incentive to attract doctors to rural areas, primarily due to the strong desire among medical graduates to become specialists, which coupled with the considerably few PG seats compared to the number of medical graduates, makes for intense competition for obtaining admission to post-graduate training.

For the 4,800 MBBS graduates expected to graduate each year over the next few years in Andhra Pradesh, there are less than 2,000 PG seats. Moreover the various reservation policies (15% for Scheduled Caste, 6% for Scheduled Tribes, 29% for Backward Castes) applying to all the postgraduate seats filled by the PG entrance exam, makes it particularly difficult for the people competing in the general merit quota. Using the in-service quota makes it easier for students to get a PG seat.

This case study focuses on examining the strategy of attracting doctors to the rural areas in Andhra Pradesh by way of reservation of post-graduate (PG) seats for public sector doctors serving in rural areas and has the following objectives:

1. Document the evolution of this scheme
2. Understand the perspectives of various stakeholders about this scheme
3. Examine the ability of the scheme to attract doctors to rural areas
4. Suggest improvements and recommendations to the PG reservation scheme

Government Officials, PG students from both in-service and the general quota as well as MBBS students were interviewed using semi-structured questionnaires. Quantitative data was obtained from the Dr. NTR University of Health Sciences in Vijayawada as well as the Health Department and Directorate of Medical Education of Andhra Pradesh.

KEY FINDINGS

Salient features of the PG Reservation Scheme:

- 1. Eligibility:** A doctor serving in the public sector currently has to complete continuous regular service of at least 2 years in a tribal area or 3 years in a rural area or 5 years of continuous regular service with the government to be eligible for the scheme. Benefits of this scheme are that Eligible Medical Officers have to compete only among themselves for the reserved seats in the PG entrance examination. Those who are selected are given extraordinary leave and sent on deputation for their studies while continuing to receive their full salary with all benefits including grade increments.
- 2. Seat Reservation:** Under the scheme, 50% of the PG seats in Pre-Clinical and Para-Clinical specialties and 30% of seats in Clinical specialties in government medical colleges in the state are reserved for candidates serving in the public sector. In private medical colleges, the same reservation for in-service candidates applies to the approximately 50% of the PG seats which are filled through the entrance examinations.
- 3. Bond:** The bond conditions have change over the years and currently, the students using the in-service quota have to sign a bond of twenty lakhs rupees to serve the state government for 5 years after completing their PG education, failing which they have to pay the compensation amount along with refunding the salary received during their study period.

Impact of the Scheme:

As a result of implementation of the scheme, there has been a significant improvement in the position of vacancies in the state.

1. As recently as 2007, there were 209 PHCs in the state without a doctor, which has now reduced to zero.
2. Further, almost 40% of the PHCs have 2 Medical Officers.
3. There has been a progressive and substantial increase in the number of specialists at the CHC level. In 2009, 72% of the sanctioned posts for specialists were filled.
4. The government directive compelling all PG students (who are not in-service candidates), to serve in the public sector for at least 1 year after completion of their PG studies, can potentially increase the availability of specialists in government health facilities.

Issues & Concerns related to the Scheme:

1. While the government may have been successful in filling the rural posts, reluctant MOs who have come only because of the PG scheme may be less than enthusiastic about their settings, which will impact the quality of work
2. There is a mismatch between the opportunities for specialization available through the PG in-service quota and the need for specialists in the state government e.g. fewer seats in disciplines like Medicine, Surgery, Pediatrics, Obstetrics & Gynecology compared to considerably more seats than required for some subjects like Biochemistry, Microbiology, ENT, Ophthalmology and Venereal Diseases.
3. This raises suggestions for increasing in-service reservations in some subjects to 50%, while doing away the scheme in disciplines where there is an excess of specialists and reviewing the percentage of seats reserved for each specialty every 3 years to re-adjust them as per vacancies and requirements
4. In-service Post-graduate Students have a much lower pass rate in the final year PG exams compared to the non-reservation students.
5. Too many different sections of the health department are involved in the PG reservation program. The Directorate of Health recruits MOs in the PHCs while recruitment of specialists in the Medical College (teaching posts) is done by the Directorate of Medical Education and along with the Andhra Pradesh Vaidya Vidhan Parishd for CHCs and Area Hospitals. The Dr. NTR University of Health Sciences is responsible for medical examinations as well as recipient of the bond compensation from defaulters. And lastly, the department where the defaulting specialist is employed has to receive the salary refund.

Therefore, there is no single system to track the compliance among graduates with the bond or the process of enforcing the bond as well as violators of the bond.

6. There are also concerns that this quota increases the overall time required for a medical student to complete his studies and settle down. Moreover, the reservation for in-service candidates leaves lesser number of seats for general candidates, making it harder for them to achieve their PG degree. These factors may deter people from entering the medical profession

3.4: DOCUMENTING THE 2ND ANM TRAINING AND DEPLOYMENT OF WEST BENGAL

One of the components of the National Rural Health Mission was to increase human resources in health and a specific activity that was encouraged was to increase the number of ANMs in the Health Sub Centers to two, essentially due to three reasons:

1. The work description of the ANM and the fact that the population covered could be dispersed around 7 to 12 habitations, especially in tribal & difficult areas, makes it difficult for 1 ANM to combine the outreach work with midwifery services in the Sub Center
2. The ANM being a woman worker can be expected to be on leave for at least 40 days in a year, not counting maternity leave. 1 ANM per SC provides no room for leave reserves, and as a system, at least a 30% leave reserve is needed, making 2 ANMs per HSC a more viable Health Sub Center
3. A team of 3 (including the MPW-M) is a much more viable unit than a single ANM woman

The number of HSCs increased to 10,356 in 2004 to meet the 1991 population norms⁹. However, no ANMs were produced during 1993-2003 as ANM Schools had been closed, with the view that there were no more vacancies in the State¹⁰.

The net result that in 2003, existing ANMs served an average of 8000-10,000 populations to compensate the vacant posts. In view of this, in 2002, the West Bengal Government took initiative to re-open the government ANM Training Schools to fill the posts in newly sanctioned HSCs and vacancies in the existing ones

Accepting this strategy of 2 ANMs per HSC meant a further increase of at least 10,356 ANMs in the State. In the light of this, a fresh situation analysis of number of ANMs graduating currently and ANM training schools in the state was undertaken by the Nursing Division of the Department of Health and Family Welfare and a plan drawn up to meet the entire requirement of 10,356 ANMs in 3 to 4 years.

⁹ GoWB (2004) Opening of new Sub Centers, Health & family Welfare Department, West Bengal

¹⁰ GoWB (2008) Annual out-turn of Nurses, 1990-2007, State Bureau of Health Intelligence, Directorate of Health Services, Kolkata

KEY FINDINGS

Process Involved:

The plan for addressing the ANM gap involved the following six steps:

1. Increasing the capacity of the existing training institutions and utilizing the un-utilized spaces/infrastructure in exiting training centers

- The first component was to establish new nursing schools. A detailed survey of the existing health facility at secondary level hospitals, having more than 100 bed strength, resulted in 11 new sites being recognized for starting of new Nursing Training Schools (NTS).
- The second component was to augment the existing NTS following the inspection based on availability of classrooms and infrastructure and increase intake capacity in 38 NTS from 520 to 2026, with provision of additional faculty wherever needed

This process was achieved with an expenditure of Rs. 8.17 Crore and Rs. 2 Crore assistance respectively for teaching aids¹¹

2. Developing innovative partnership with the private sector to expand the capacity to train ANMs such that the total deficit is met

- Based on the criteria of available infrastructure, classrooms, laboratory, faculty, vehicles and accommodation, 11 private institutions were selected in the first phase. These institutions entered into a memorandum of understanding (MOU) with the government, wherein they undertook the task of offered training to government sponsored candidates for a specified grant¹²

3. Innovating the selection process of the ANM to ensure clear preference to those ANMs who want to work in the specific villages with active involvement of panchayats in the whole process.

- In the first phase, 141 blocks (with around 4393 HSCs) were selected on the basis of lowest Reproductive and Child Health (RCH) indicators, lowest literacy indicators & higher tribal population and training. Then the recruitment for the second ANM was announced through advertisements in newspapers, pamphlets & notices with the necessary criteria and an

¹¹ GoWB (n,d) Training of Second ANM, The West Bengal Experience, health & Family Welfare Department, Kolkata

¹² GoWB (n,d) Memorandum of Understanding, Government of West Bengal and Non Government Organization, for the purpose of setting up and continue training of ANMs in training centers

emphasis on residents from these particular locations. Some HSCs with high SC/ST or OBC population was kept reserved for candidates from these communities. By a process of screening and well established mechanism for proper independent identification of candidates, 3017 candidate ANMs were admitted in the 1st phase, 822 in the 2nd phase and 2620 in the 3rd phase for 18 months of training in the recognized NTS in the state

- There was a separate selection process for the first “regular” ANM, which differed from that of the second “contractual” ANM, the numbers of which is based on the cumulative numbers of vacant posts in HSCs, gathered based on vacancy assessment exercise carried out by DDHS (nursing).

4. Tailoring the course curriculum to meet the 2nd ANMs’ immediate work needs.

- The course module of the 2nd ANM program has been redesigned with greater stress on serving the community, whereas that of the 1st ANM program is more of clinical skills and less of community orientation.
- The duration of the training was for 72 weeks with courses on Community Health Nursing, Health Promotion, Primary Health Care Nursing, and Child Health Nursing in the first 12 months. The next 6 months comprised of Midwifery, Health Centre Management, Preparatory Leave and Examination followed by 2nd round of community visits.
- Training sessions consisted of clinical, community level and classroom sessions. The clinical postings for all the students were done in district hospitals, medical colleges and other nearby government hospitals and students had to complete 20 deliveries, first few cases and then independently. The community level trainings included visits to rural hospitals, nearby villages and urban slums
- The 1st examinations were held after 12 months, which the students have to pass before proceeding to the level 2 examinations at the end of the course. The successful students are then given the certificate of registration as ANM under the Indian Nursing Council
- At the end of the first phase, 2730 out of 3017 students admitted completed the course and were posted as the 2nd ANM in their respective Health Sub Centers. The unsuccessful candidates were given repeat attempts to clear the examinations from their NTS.

5. Post the ANMs back to their place of selection under the local government, and not as part of the state cadre.

- The posting of the second ANM as an employee of the panchayat is a big break from past practice. This rules the whole issue of transfer and posting except within a range of a three to five HSCs within 5 to 20 km radius.

6. Provide for strengthening the Health Sub Center, especially accommodation for ANMs, so that those posted there could be retained.

- Under the Health Systems Development Project (HSDI) assisted by DFID, 1023 HSCs located in village panchayat head quarters (GP HQ Sub Centers) were taken up for strengthening. 594¹³ units of residential accommodation for both ANMs have been completed with an additional 340 to be completed in 2008-09¹⁴.
- This alignment of sub-centers with gram panchayat headquarters has been done to make them full time functional for access to skilled assistance at birth. Thus, HSCs in west Bengal have now become differentiated into two types, the GP HQ HSCs and the others. MPW (M) also have to stay at the GP HQ HSCs and MOs encouraged to visit them on fixed days

7. Financing under National Rural Health Mission

- The 2nd ANM Program was completely financed under the NRHM.
- The 1st phase funds were utilized for construction of additional classrooms, hostels, expansion of dining space, laboratory equipment etc. while the 2nd phase funds were utilized for surveying existing infrastructure in the vicinity of Sub Divisional Hospitals and converting them into hostels and classrooms
- In the 3rd phase, selected NGOs were provided financial support based on their intake capacity.
- In case of a Nursing School within the premise of a District or Sub Divisional Hospital, the funds were routed through the respective Rogi Kalyan Samiti (RKS). The routine funds allocated under the RKS were also used to supplement the scheme wherever applicable.

¹³ GoWB (2004) Reporting and Feedback under Health Management Information System, Department of Health & Family Welfare, Kolkata

¹⁴ GoWB (n.d) The Plan Document 2007-08, Department of Planning, Kolkata

Strengths of the Scheme:

1. Selection process was appropriate and is the single biggest guarantee of good outcomes in terms of attraction and retention of staff to under-served areas.
2. Reservation for SC/ST in some HSCs to ensure marginalized communities adequate representation was also an effective and well-appreciated measure. The selected students got a stipend and there were no fees, except for registration under WBNC.
3. Free hostel stay with security for students, and special permission for breast feeding mothers and women with infants to bring their children along for the training were other special features that highlighted the government's compassion and commitment towards the challenge of being able to get the right person working in the right place.

Weaknesses of the Scheme:

1. Lack of a clear policy at teacher training and faculty development and support.
2. Reports of rural students not having the required level of intelligent quotient due to socio economic circumstances etc. which point both to inadequate teacher training and inadequate pedagogy.
3. Placing the student ANM away from their district for training, resulting in some drop-outs.
4. Because of a difference in the teaching curriculum, there is a general perception among the trainers that the 2nd ANM cannot be employed in any hospital other than at the community level.
5. A more difficult issue is to scientifically work out the work allocation between the two ANMs and actively counter efforts to make a difference in seniority or in-skills between the regular and the contractual ANM on anything but the work allocation, which ideally should rotate to ensure that there is no loss of skills and parity is maintained.

3.5: CHHATTISGARH'S EXPERIENCE WITH 3-YR COURSE FOR RURAL HEALTH CARE PRACTITIONERS: A CASE STUDY

Providing health care is a human resource intensive activity and Chhattisgarh had one of the lowest health human resource densities in India. The State had 4692 sanctioned Sub Centers and one-third of them not having even a single ANM, though SCs are expected to have 2 ANMs. Only 540 Staff Nurses were available against the 1344 required under IPHS norms for working in primary and secondary public health facilities¹⁵. The shortfall for both MBBS Doctors and Specialists was about 72% with 1455 MOs posted against 1737 posts and only 247 specialists available against 637 sanctioned posts¹⁶. This inadequacy was even starker in the rural and tribal areas, with certain large tracts being devoid of even a single MBBS doctor.

Four years after the creation of the state, the Government College of Nursing started functioning with an annual intake of 33 students. At present, in addition, there are 2 colleges offering PG in Nursing (MSc), 10 colleges offering UG Courses in Nursing and 4 offering Diploma in Nursing (GNM) in the private sector.

In 2000, there was a single Medical College admitting 100 students, which had to be strengthened after the creation of the state. A 2nd Medical College got recognition in 2006 and a 3rd was initiated in 2007, with 2 more in the pipeline. This still meant that it would be quite some time before this would translate into increased recruitment in the public sector.

With the increasing number of facilities to meet the national norms, and the number of posts to meet the IPHS norms, the gap between what is posted and what is needed would become even more.

To address the challenge with respect to physicians, one of the options that the state government considered was the option of a three-year course to train medical professionals or three year doctors as it was then popularly known, to serve in rural areas.

¹⁵ National Health Systems Resource Center and Academy of Nursing Studies 2009

¹⁶ State Program Implementation Plan 2009-10

This Case Study was about examining the process of implementation of the 3-year diploma course for rural health care practitioner, related legal issues, hurdles faced, outcome, closure of admissions and lessons learnt. Information was collected through extensive interviews with key informants representing different stakeholder interests within government and outside, including a Focus Group Discussion (FGD) with over 40 graduates from the 3-year courses and 12 Rural Medical Assistants (RMAs) currently in government employment. In addition, all published documentation related to the 3-year course or to the RMA postings were studied.

KEY FINDINGS

Chronicling the Implementation Process:

The initial idea of a 3-year diploma course for training a health care practitioner for rural areas was that if candidates from rural areas were brought into a 3-year diploma program, they would be more likely to return and serve in such areas. Another rationale being articulated was that a formally trained skilled provider in the underserved areas of Chhattisgarh would serve as a better option as compared to the unqualified practitioners of modern medicine in the villages.

1. Formation of the Chhattisgarh Chikitsa Mandal (CCM)

The first step towards operationalization of the plan, with active political support, was the formation of **Chhattisgarh Chikitsa Mandal (CCM)** in May 2001, with the following officials:

- President: Director of Health Services
- Vice President: Dean of the Medical College at Raipur
- Registrar: District Chief Medical Officer

The CCM was expected to raise its own funds through fees charged from private agencies in return for permission for starting institutes for running these 3 year courses. These agencies in turn would recoup the money through tuition fees. Following responsibilities were given initially to the CCM:

- Inspect private bids for starting institutes for the course
- Act as nodal authority for the admission process
- Decide on the course curriculum
- Fix norms and guidelines for tuition fees
- Undertake the examination process
- Be the registration body for the graduates

2. Opening of Institutes:

Since the course was not going to be government funded, private institutes were chosen for imparting education, in rural and tribal locations with access to large government hospitals (District Hospitals) for clinical teaching and internship.

The first 3 colleges were inaugurated in 2001 and 3 more started in 2002, with all the 6 colleges admitting 150 students each year, contrary to the earlier maximum limit of 100 students each. The students were admitted in 3 categories:

- 50% free merit seats: 75 seats
- 35% paid merit seats: 53 seats
- 15% NRI seats: 22 seats

Admissions took place for 3 years before the course was stopped. In comparison to more than 9000 applicants in the 1st year, the numbers dropped down considerably for the 3rd batch.

3. The 3-year Course, its Name and its Content:

▪ Legal Issues:

The Indian Medical Association (IMA), representing largely private doctors, opposed the idea of a 3-year course of medical education as a dilution of the standards of the medical profession and filed a case against the Chhattisgarh Government questioning the legality of the course.

At the time of the CCM Act in May 2001, the diploma course was to create a “Practitioner in Modern Medicine & Surgery”, which after 3 months was retitled “Diploma in Alternate Medicine”, as a response to legal concerns to the use of “Surgery” and “Modern Medicine”, both of which required clearance from the Medical Council of India and which, the State had not acquired.

New subjects were added to the course to justify the tag of “Alternate Medicine” e.g. Bio-Chemic Medicine, Herbo-Mineral Medicine, Acupressure, Physiotherapy, Magneto-Therapy, Yoga, Flower Remedies and Acupuncture etc.

After a series of changes the course was finally named “**Practitioner in Modern and Holistic Medicine**” and the duration of internship was increased from 6 months to 1 year which included postings of 1 month at HSC, 3 months at the PHC, 4 months at the CHC and 4 months at the DH.

- **Institutional Hurdles**

The state governments explicit priority in setting up these courses led to the responsibility being shifted from the Health Secretary to an “Officer on Special Duty”, who was a faculty member of the Preventive & Social Medicine Department and whose prime task was to deliver on the 3-year course.

This resulted in a lack of co-ordination between the OSD and the Health Secretary, who no longer was directly involved with the course, as well as far less compliance from the Director of Health Services and other senior officials.

In the backdrop of all this, the OSD brought about “corrective” changes, which began with the decision to affiliate the private institutions under the established universities in the state and bring the examinations under their purview rather than the CCM, which in turn ended up delaying the first year examinations by six months.

As part of this revised perspective, in March 2003, the name of the course was yet again changed to “Diploma in Holistic Medicine and Paramedical Course”, through an internal government order, with the notion that this will pave the possibility of the course graduates being registered with the State Paramedical Council, which being beyond the purview of medical councils and associations, is less likely to be challenged legally as compared to the CCM.

However, following the students’ agitation against the term “paramedical”, which was perceived to be a dilution of the status of the course, the name of the course was further revised to “Diploma in Modern and Holistic Medicine” in July 2003, thereafter finally to “**Practitioner in Modern and Holistic Medicine**” in July 2004 and the internship duration increased from 6 months to one year.

4. Closure of Further Admissions:

At the time of inception, the students were given to understand that they would graduate as a 3-year trained doctor and that they had a high likelihood of getting a government job in the rural & tribal areas.

The lack of an official order to this effect and various grievances against the name of the course led to a lot of simmering among the students resulting in three major strikes in January 2003, July

2004 and December 2006. All these agitations led to delays in annual exams, derailing the course schedule. To add to this, the legal and political issues also contributed towards the growing unpopularity of the course, leading to decreased number of applicants and around 809 dropouts from the 6 institutes out of a total of 2200 admissions made.

In the face of all the obstacles associated with the course, and with a new political regime in the state, which did not have to own moral responsibility for the initiative, the course was officially ended on 1st September 2008.

Outcome of the Entire Exercise

Irrespective of the issues plaguing the 3-year diploma course for rural health practitioners leading to its subsequent closure, positive impacts has been noted in the state of Chhattisgarh.

1. Initial decision to appoint these 3-year graduates as Rural Medical Assistants (RMA) in lieu of the 2nd MO posts, in facilities where Medical Officers are already in place, under whose supervision they can work.
2. RMA posts sanctioned in the PHCs classified as “remote” or “tribal” in districts with the most acute shortage of doctors.
3. Funds to be provided by the central government under NRHM
4. In 2008, CCM conducted the 1st round of interviews and 225 candidates were selected and posted in the identified 12 districts with large tribal and remote areas. Another 78 candidates were recruited in the 2nd round during 2009.
5. 303 out of 398 RMAs posts were filled with remaining 95 posts remaining vacant since they were reserved under SC/ST category and there was a lack of adequate trained SC/ST students.
6. In response to the inability to fill MBBS & AYUSH MO posts (only 1407 posts filled out of 2147) and the positive experience of posting RMAs in underserved remote areas, the state increased RMA posts to 858 and introduced 1 RMA post at all PHCs and an additional Lady RMA post at CHCs in all the 18 districts, irrespective of difficult, rural or tribal status of the districts. Subsequently 629 posts were filled through the 3rd counseling session conducted by CCM in October 2009, including 74 RMAs recruited during the 2nd round who were seeking relocation.
7. Historically, this endeavor can be looked as an achievement, probably for the first time since independence, towards filling the trained human resource gap in the rural and remote underserved areas.

Current Status and Way Ahead:

Taking a leaf out of the Chhattisgarh experience, the Government of Assam started the “Diploma in Medicine on Rural Health Care (DMRHC)” course in 2005 at the Jorhat Rural Medical Institute, with the objective of posting these Rural Health Practitioners (RHP), as they came to be called, in the Health Sub Centers in addition to ANMs, thereby upgrading the HSC to an independent, fully functional curative unit in addition to preventive and promotive roles.

As of 2011, the Assam Government has posted 182 RHPs at Sub Centers out of which 146 are in the 14 High Focus Districts.

The High Level Expert Group on Universal Health Coverage under the Planning Commission of India, in its report finalized on 25.09.2011¹⁷, has endorsed the three-and-a-half year medical degree - Bachelor of Rural Medicine and Surgery (BRMS) - with a vision of BRMS Colleges in all districts of the country with a population of over 5 lakhs. The BRMS cadre, as a career progression incentive, would be promoted to the level of Public Health Officers after 10 years of service

¹⁷ The Times of India, New Delhi, Monday, September 26, 2011

3.6: WHICH DOCTOR FOR PRIMARY HEALTH CARE: AN ASSESSMENT OF PRIMARY HEALTH CARE PROVIDERS IN CHHATTISGARH

In the post-independence period, the adoption of the Bhore Committee Report (1946) saw India producing only one type of allopathic physician, the 5 year MBBS graduate. A consequence of this was the acute shortage of qualified health care providers in the rural area, with the density of physicians being 4 times larger in urban compared to rural areas¹⁸. This shortage of physicians in rural areas is one of the biggest impediments towards achieving universal health care.

To overcome this problem and fill up the vacant posts of Medical Officers in the rural and tribal areas, the Chhattisgarh Government started the 3-year Diploma Course for training a health care practitioner for rural areas in 2001. The graduates are serving as Rural Medical Assistants (RMA) in many PHCs, which earlier lacked a Medical Officer. Further, Female RMAs are posted in remote Community Health Centers (CHC) where there were no lady doctors.

The idea of a rural cadre, however, does not enjoy universal support. In Chhattisgarh, the Indian Medical Association opposed the creation of the three-year medical course on the grounds that it would dilute professional standards. To escape legal implications, the state labeled the course as one of alternative medicine, but graduates demanded recognition as doctors. Faced with these contradictions, the government discontinued the course in 2008.

The assumptions on the ability of non-physician clinicians are, unfortunately, not based on any empirical assessment of their performance. Moreover, paramedical staff (e.g. nurses, pharmacists), with little or no clinical training, provides clinical services at PHCs due to lack of a Medical Officer, yet their level of performance and acceptance is not known. This study attempts to fill this information gap by assessing the “natural” experiment in the state of Chhattisgarh where, because the public sector could not adequately staff PHCs with Medical Officers, non-physician clinicians like AYUSH doctors and RMAs provide clinical services.

¹⁸ Rao K, Bhatnagar A, Berman P. India's Workforce: Size, Composition and Distribution. World Bank, New Delhi and Public Health Foundation of India 2009

This study provides a comparative assessment of the performance of different types of clinical care providers working at the primary care level - Medical Officers and non physician clinicians i.e. RMAs, AYUSH physicians and paramedical staff (nurses and pharmacists) - in their capacity as the main providers of clinical services at PHCs in the following dimensions:

1. Provider Competence
2. Prescription Practices
3. Patient and Community Satisfaction and Quality Perception
4. Service Utilization and Equity
5. Attitudes towards Rural Service and Job Satisfaction.

Data for the study was collected in between July and September 2009 and five questionnaires: Form 1-Clinical Vignettes, Form 2-Patient Exit Interview, Form 3-Clinical Care Provider Assessment, Form 4-Household Survey and Form 5-Health Facility Assessment, were used to collect information about clinical care providers at PHCs, their patients and the communities where the sampled PHCs were located.

The sampling frame included 456 PHCs and covered 19% of the PHCs headed by regularized Allopathic Doctors, 24 % of PHCs headed by AYUSH Doctors, 64% of PHCs headed by RMAs and 76% of the PHCs headed by Paramedical Staff in the State of Chhattisgarh. Out of this sampling frame, a total of 146 PHCs, 1082 patients and 2124 households were surveyed. The Service Providers' break-up included of 35 MBBS Doctors, 37 AYUSH Doctors, 39 RMAs and 35 Paramedical Workers. About 40% of the sampled PHCs were located areas with exclusive tribal population, 19% in non-tribal areas and 41% in exclusively non-tribal areas and a majority (74%) of the PHCs headed by an AYUSH Doctors were in exclusively tribal areas.

KEY FINDINGS

1. Provider Competence

Several aspects of provider competence was assessed - history taking, examinations, diagnostics, diagnosis, treatment and home care. How well providers responded to the clinically relevant items in these sections reflected their ability and knowledge to manage these cases.

Findings from this study suggest that Medical Officers and RMAs are equally competent to manage conditions commonly seen in primary health care settings as they received similar average competence score.

Competence scores of AYUSH Medical Officers are less than Medical Officers (and RMAs) and compounded by the finding that nearly half the treatment prescribed by AYUSH doctors, casts aspersions to the practice of posting AYUSH doctors to fill vacancies of MOs in PHCs, thereby becoming the primary clinical care provider in the PHC.

The poor competence of Para-Medics is expected because they do not receive any formal training on clinical care and nor are they supposed to perform such activities. But this is disturbing in light of the fact that due to lack of physicians, these Para-Medics continue to treat patients in numerous PHCs across Chhattisgarh and in the rest of the country.

An important implication of this is that, in terms of clinical competence for primary health care, clinical care providers with short duration of training appear to be a viable alternative to physicians.

2. Prescription Practices:

Two sets of prescriptions were analyzed in this study, the first set being from the clinical vignettes used to assess clinical care provider competence in managing standardized cases and the second set from the prescriptions of the patients of these clinical providers.

Clinical vignettes were used to assess the technical competence of clinical care providers to manage six different cases: Malaria in an adult female, diarrhea in an infant, Pneumonia in a child, pre-eclampsia in a pregnant woman, TB and Diabetes in an adult male, with each vignette classified into history questions, examinations, investigations, diagnosis, treatment (prescription/referral) and home care (including follow-up). For treatment section, service providers were asked to write a prescription based on their diagnosis of the case under the premise that medications prescribed are available and patient is fully compliant. A comprehensive guideline was prepared defining standard treatment protocol for each case. Based on these standard treatment guidelines prescriptions were classified as: Recommended (prescription strictly follows the standard treatment guidelines); Minor errors (prescription deviates from standard treatment

guidelines); Major errors (significantly reduces the effectiveness of the prescription and/or increases the risk of harm and/or does not cure the disease).

Overall, the percentage of “effective” prescription was fairly low, with the RMA (30%) performing the best, followed by MOs (28%), AYUSH doctors (19%) and Para-Medics (7%). In terms of rational drug use, RMAs and MOs most frequently prescribed recommended drugs. This suggests that MOs and RMAs are equally effective in treating conditions commonly seen in primary care settings.

Out of the total 1082 patients interviewed, 954 patients received prescriptions and a majority of them had information on patients’ background and complaints. However few of them mentioned signs/symptoms and diagnosis. There was more-or-less an equal pattern of prescribing antibiotics and injectable, with AYUSH doctors being the most liberal of them.

Poor performance of Para-Medics highlights the harmful treatment people can receive where there are no Medical Officers and only serves to undermine the public’s trust in the primary healthcare delivery system.

3. Patient & Community Satisfaction and Quality Perceptions

Up to 10 patients were sampled in each of the PHCs visited and responses recorded as “satisfied”, “neither satisfied nor dissatisfied” and “not satisfied”.

Four dimensions were taken into account

- a. Medical Advice (inclusive of information given to patients by their physicians regarding the cause of their illness, treatment and health advice)
- b. Physician Behavior (inclusive of doctor’s interpersonal behavior, responsiveness to the patient’s concerns, examination of the patient)
- c. Staff Behavior (inclusive of hospital staff’s helpfulness and courtesy towards patients)
- d. Hospital Infrastructure (inclusive of cleanliness and availability of drugs & amenities at the PHC)

The majority of patients were satisfied with their visit to the local PHCs. Overall, average perceived quality scores was highest for RMAs followed by MOs and AYUSH doctors. Para-Medics consistently received the lowest scores and were generally significantly lower than the other clinical care provider categories.

4. Service Utilization, Equity and Community Perception:

2124 households were sampled from villages where the 146 PHCs were located and information collected on their health seeking behavior, health expenditure and perceptions on the local PHC.

Treatment was mostly sought from private providers except in communities where the local PHC was headed by AYUSH doctors, reflected from the fact that such PHCs received the largest share (60%) of total visits, followed by those headed by RMAs (35%), MOs (29%) and Para-Medics (20%). This may also be because of the reason that the PHCs headed by AYUSH doctors are situated in the tribal districts where there are few alternatives to the local PHC. Where there is no qualified clinical care provider, as in the case of Para-Medicals, the PHCs were hardly used for treatment.

The most common reasons for not using the local PHC had to do with disliking the service at the PHC, non-availability of the doctor/health provider, lack of drugs, and the presence of better private providers in area.

The majority of respondents expressed satisfaction with services, except for the local PHCs headed by Para-Medics, which recorded significantly lower satisfaction levels.

AYUSH doctors had the highest scores for politeness and perceptions of the ability to treat common illnesses; while MBBS medical Officers had the highest mean score for the ability to treat serious illnesses followed by AYUSH doctors and RMAs

The finding that poorer people depend more on the local PHC compared to those who are better-off highlights the importance of investing in primary healthcare services.

5. Attitudes towards Rural Service and Job Satisfaction

The majority of the sampled clinical care providers looked at getting transferred from their current PHC posting at some point and no significant difference was noticed in this aspect, cutting across all types of service providers. The most common reasons were 'being far from family', 'lack of good schooling for children', 'poor housing' and 'inadequate amenities'

The sampled PHC clinical care providers had a moderate level of job satisfaction. Among them, AYUSH doctors had the highest job satisfaction, followed either by MBBS Medical Officers and Para-Medicals with RMAs having the lowest average satisfaction scores.

The consistently low job satisfaction level of RMAs, overall and across all job satisfaction dimensions, is due to several issues. Like AYUSH Medical Officers, they are hired on annual contracts, but their future prospects are quite different. They are not allowed to use the title of 'doctor', which has been a long-standing contention of theirs. Their future as a cadre is uncertain because it is unclear if the Chhattisgarh government will continue with them due to strong lobbies, particularly from the medical community. Further, being a new cadre, they are not fully acceptable to their co-workers or their superiors (who are all physicians). Importantly, they can only serve at the PHC level, irrespective of how long or how well they serve and have limited career prospects within the public health system.

CONCLUSION

Low socio-economic population depend more on the local PHC compared to those who are better-off, highlighting the importance of investing in primary healthcare services.

However, successful primary health care is built on the trust and rapport between physician and the communities they serve. The mere presence of a qualified clinical provider is not adequate to make a PHC 'successful'.

Non-physician clinicians offer a substantial improvement over the situation where no physician is present and placing qualified clinical care providers in rural health facilities is an important first step in the process of expanding quality health services.

Better professional and personal support for the health personnel in the rural and remote areas will increase the willingness to continue serving in these settings

In primary health care settings in India, clinical care providers with shorter duration of training are a competent alternative to physicians, which endorses the introduction of rural cadres like the RMAs of Chhattisgarh or the BRHC course by the health ministry.