



RURAL MEDICAL ASSISTANT: A RAY OF HOPE FOR PRIMARY HEALTH CARE? AN EXPERIENCE FROM CHHATTISGARH STATE – INDIA

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Abstract

Background: The state of Chhattisgarh faces significant challenges in delivering equitable primary health care due to geographical barriers, a predominantly rural population, and a severe shortage of qualified medical professionals. Conventional strategies to recruit and retain MBBS doctors in rural areas have largely been ineffective, necessitating innovative human resource solutions in current situation of the State/Country. **Objective:** To assess the role and impact of Rural Medical Assistants (RMAs) as an alternative cadre for strengthening primary health care services in underserved regions. **Methods:** This study is based on a descriptive analysis of the Rural Medical Assistant initiative implemented under the National Rural Health Mission. Data were compiled from state health reports, program evaluations, and institutional records. The RMA program involved a three-year medical training course with a strong emphasis on community-oriented primary care, followed by deployment at Primary Health Centres (PHCs). **Results:** The introduction of RMAs significantly improved the availability of clinical services in rural PHCs. There was a notable increase in outpatient attendance, inpatient admissions, and institutional deliveries. RMAs effectively managed common illnesses, provided maternal and child health services, and supported national health programs. Their presence also reduced dependence on unqualified practitioners and improved healthcare accessibility in remote areas. Evaluation studies demonstrated improved service delivery indicators and operational efficiency at PHCs staffed by RMAs. **Conclusion:** The RMA initiative represents a pragmatic and scalable solution to address the rural healthcare workforce crisis. By training locally recruited candidates and deploying them in underserved areas, the program ensures sustained service delivery. Strengthening this cadre through policy support, career progression, and continuous training can significantly enhance primary health care outcomes. RMAs may serve primary health care as a vital component in achieving universal health coverage in resource-limited settings.

Keywords: Rural Medical Assistant (RMA), Primary Health Care, Human Resources for Health, Chhattisgarh, National Rural Health Mission, Rural Health Services, Task Shifting, Health System Strengthening



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INTRODUCTION

The State of Chhattisgarh was carved out of south eastern Madhya Pradesh in the late November 2000 as the 26th State of India. It has a with 18 districts 146 Community development blocks, and 20,308 revenue villages of each around 1000 population. The middle part of the state is mostly plane land while both the northern and southern parts are largely upland area with dense forest which is about 44% of the geographical area. The main crop of the state is paddy.

The total population of the state is projected to be around 24.2 million in 2010. Nearly 80% of the people live in rural areas and about 32% of the population is classified as scheduled tribes (Indigenous people) in the state which is significantly high. Seven of the dwindling tribes of India, are in Chhattisgarh also known as tribal dominant state. The density of population is very low, 154 persons per square kilometre against the 324 per sq.km for whole of India and the habitations are scattered. Currently there are a total of 856 public health facilities of which about 44% come under the inaccessible, most difficult, difficult areas, based on the national report.

The state as part of the old Madhya Pradesh has long been classified among the “BIMARU” or sickly states characterised by poverty, poor health and education status and low living standards. Female literacy rate was as low as 52.4% (2001). the state has become now one amongst the progressive states in the country.

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The State has a predominant public health care delivery system in which most people especially the poor are seeking health care. (See figure below) The grass root level health care is provided at 4741 Sub-Health-Centres. There are three referral facilities, namely 721 Primary Health Centre, 154 Community Health Centre/ Sub-divisional level civil hospitals and 15 District Hospitals. Apex institutes for tertiary care are three Medical College and Research institute affiliated hospital. Since 2002 there have been 60,000 Community Health volunteers (MITANINS- at National level known as ASHA) who support the health service.

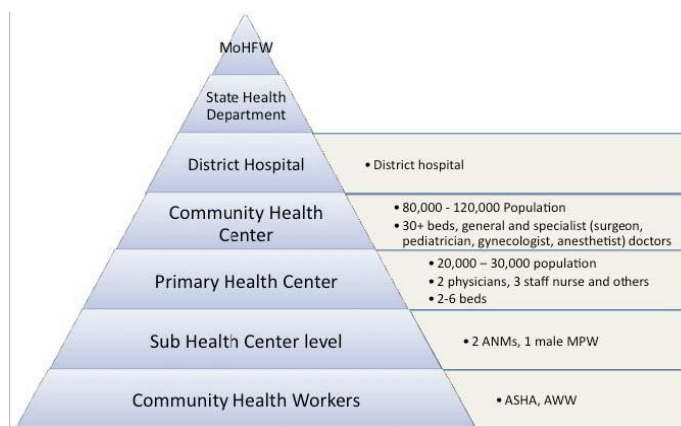
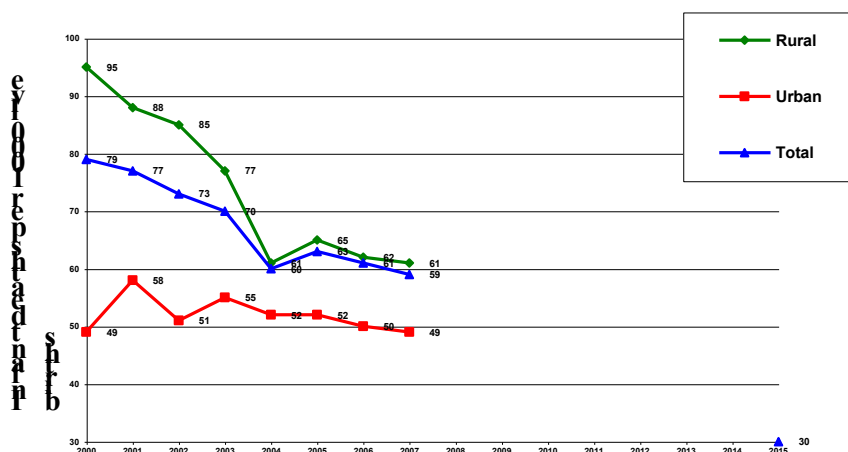


Figure 1: Apex Medical Colleges & Research Institutes.
Source- Document of National Rural Health Mission

Initially, in 2000 the newly formed state government of Chhattisgarh was posed with many challenges like providing basic, universal health care services to the people. To make effective, equitable and universal basic health services available, accessible, affordable, to the entire population was a formidable challenge. One of the biggest challenges was qualified human resources for health. For all these, human resources on the supply side and awareness of the people on the demand side were the greatest and critical challenge of the system and still it is existing.

In Chhattisgarh State, community involvement under health sector reforms led to the genesis of globally acclaimed “Mitani Programme” (One of the largest Community Health Volunteer (CHV) Programme where 60,000 women volunteers are involved) These interventions undertaken during initial period of state formation and being continued still have enabled the state to achieve positive changes in key health indicators particularly in rural infant mortality rate which dropped from 95 to 59 per thousand live births (Figure 2)



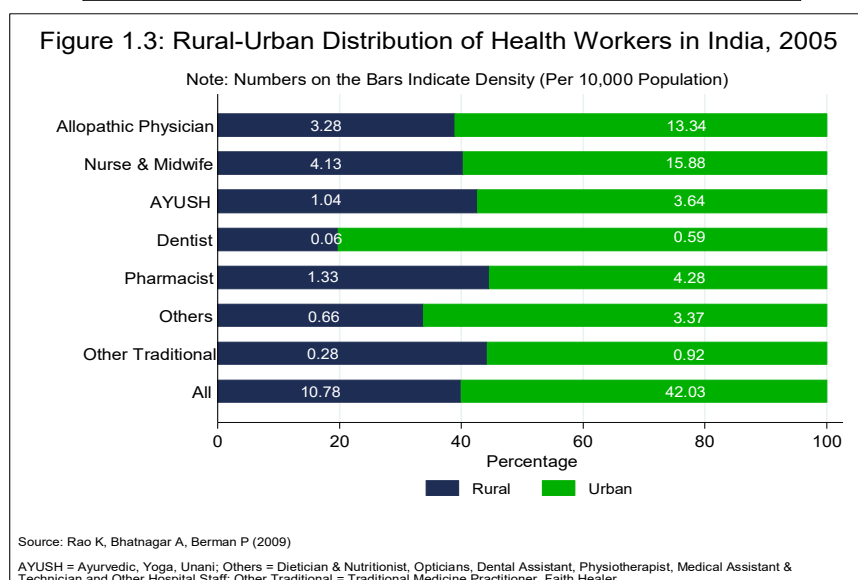
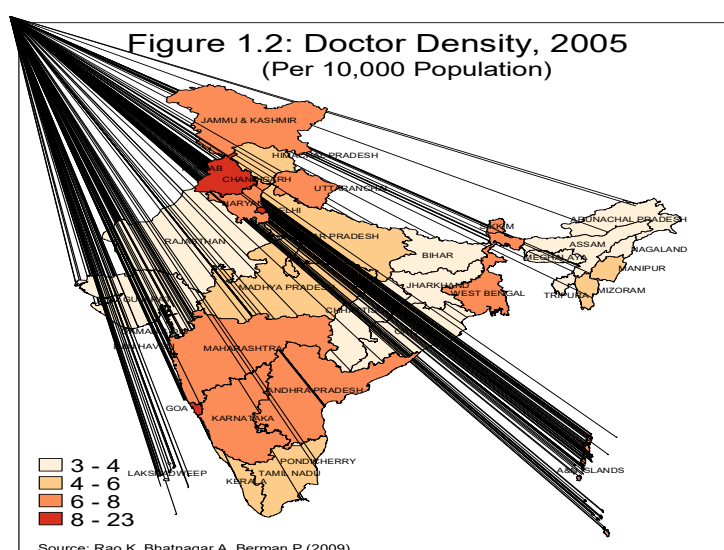
Apart from infrastructure challenges, there was an acute need of developing and deploying a vast network of proficient, motivated, human resource for primary, secondary and tertiary levels of health care. As evident from Table-1 since the formation of Chhattisgarh, the largest challenge the state government has faced in the health sector is the lack of human resources for provision of health care. The human resource challenge was so extensive that the state was not able to provide even routine primary health care services to a major chunk of its needy population.

Table 1: the Changing HRH situation in Chhattisgarh State

Facility	Name of the Post	Year 2002-03			Year 2006-07		
		Sanctioned	In Position	Gap	Sanctioned	In Position	Gap
Sub-centers	ANMs + LHV's	5729	4667	1062	6470	5275	1195
PHCs	MPW + supervisor	3785	3121	664	4467	3149	1318
CHCs	Medical Officers	1455	516	939	2571	1345	1226
District Hospitals	Specialist	291	103	188	1006	291	715

Source – SHRC Chhattisgarh

Also, there is evidence, that health workers in India are unevenly distributed across the country (Figure 1.2). In Chhattisgarh, the gap between the status of development of rural and urban areas is very wide. This leads to another challenge of attracting and retaining the services of physicians in rural and remote areas of the state.



Rationale of an RMA- Rural Medical Assistant:

As the main issue of shortage of clinical providers still remained unresolved, government tried to motivate the clinical provider staff on the pay role in many ways to go and serve in rural areas of the state. Vacancies of jobs were advertised in the year 2001, 2003-4, 2005) through State Public Service Commission and a recommended list was sent to the government in the year 2001, 2005, 2009 respectively. Less than half of the positions were filled till 2005 and even in 2009 less than

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25% of advertised positions were filled of the advertised posts. The State tried many measures such as implementing a policy/strategy to retain health staff in rural or remote areas, various financial and non-financial incentive systems, Chhattisgarh Rural Medical Corp-CRMC policy (one such policy/strategy to attract and retain doctors), reservation of Post Graduate seats in the state for doctors serving in rural areas, priority to provide residential quarter (housing) were some of the initiatives, and even compulsory rural posting. All these measures failed to reap results as MBBS doctors had more lucrative options (like private practice and jobs that were inclined to clinical practice especially in urban areas).

Currently out of 706 PHCs only 333 had either or both regular and contractual MBBS physicians)- the undergraduate degree, referred to as Bachelor of Medicine and Bachelor of Surgery which provides basic training in clinical medicine over 5.5 years including compulsory rotatory residential internship. The rest of the 53% PHCs were vacant for the position of physician.

The lack of facilities like proper residential accommodation, poor educational facilities for children and slow infrastructural development deterred the MBBS doctors from serving in rural areas. the graduates of new medical college will be able to serve the state only after a long wait of more than six years! Even after such a long wait there is no guarantee that all the graduates will join the government service.

The acute shortage of doctors thus could not be addressed by routine measures. It was then realized that some innovative and strategic intervention was needed.

The goal of medical education should be to produce health personnel capable of managing common problems in realistic health care settings. The type of health manpower requirement needs to be forecasted and appropriate strategies need to be identified by the state. Why can't Primary Health Care be provided by the locally selected and adequately trained health care providers whereas the physicians would provide more specialized care?

The solution sought –Pioneering initiative of RMA course:

Realizing the need of some innovation and strategic intervention to address the HRH problem the state Government introduced a three year course for rural medical graduates in 2001, producing a new generation of three year medical graduates, with the idea behind this being that if candidates from rural/ tribal areas (selection bias) were trained to become clinical service providers, they are more likely to return and serve in the rural areas. A modified teaching schedule with more community-oriented learning - intrinsic to the curriculum and conditional licensing was established for a set of services and an enabling environment provided to practice primary health care. The course was termed "Practitioner in Modern and Holistic Medicine".

The subjects taught were the same as in MBBS curriculum but were condensed and covered in a span of three years with compulsory rotatory residential internship of 1 year in SHCs, CHCs, PHCs and district hospitals. A special focus was kept on training them in commonly prevalent and endemic diseases of the state like Malaria, Tuberculosis, Diarrhoea etc. with hands on experience in case management.

At that time even the State Health department was not sure of posting them in the government health facilities. Central Regulatory body under constitutional law, known as Medical Council of India, had refused to register the trained 3-year physician in the Indian Medical Register. The recognition of this course was challenged in the court of law. So, a State regulatory body, known as "Chhattisgarh Chikitsa Mandal (CCM)", CCM was established after approval of State Legislative Assembly. The course was started with the initial support of CCM and after completion of the course; students were registered in state register of CCM board. The course was started in 6 private institutions; all located in tribal or remote rural areas in the state.

Launching the RMAs into service: Evolution of the RMA post in Public Health System

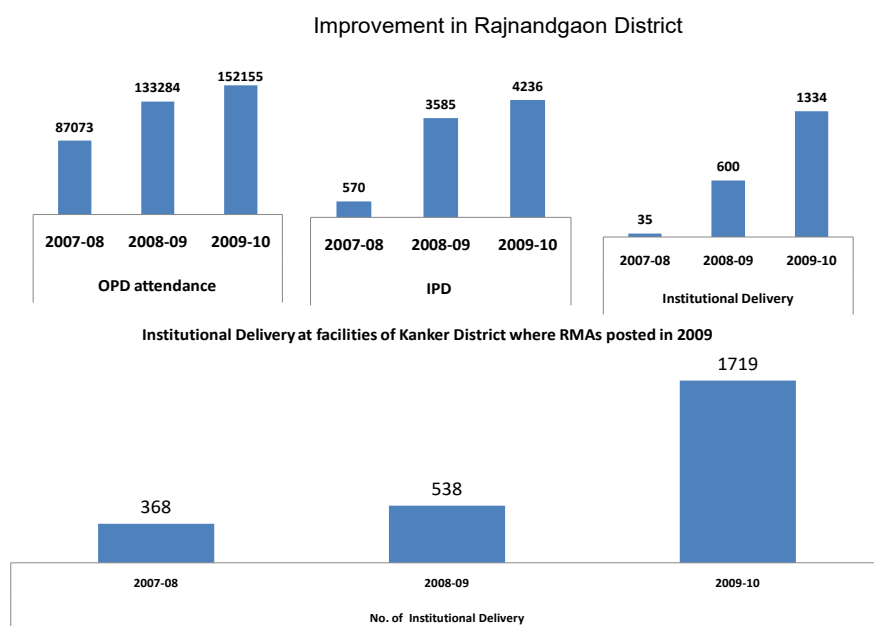
The initial idea was conceptualized by the State Health Resource Centre, additional technical capacity to the department of Health and Family Welfare in 2007-08 with proper justification and considering existing realities brought out after a situation analysis. With full political and administrative commitment, the concept was approved by the State Government and later by Government of India. The state decided to utilize the trained 3year doctors at the Primary Health Centers as **Rural Medical Assistants (RMAs)** eventually in 2008-09 under the umbrella of National Rural Health Mission funded by Government of India. RMAs were posted only at notified remote and underserved PHCs, but later they were posted at each PHC and lady RMAs in CHCs under the supervision of MBBS Medical Officers. The Rural Medical Assistants have various administrative roles in addition to clinical case management. They take the overall charge of the PHCs in the absence of MBBS doctors. They are authorized to implement & operate National Health Programmes. On the clinical side, they are responsible for providing first aid, primary medical care and treatment of common illnesses as prescribed by the departmental instruction. In serious cases, they are supposed to stabilize the patient and then refer to higher centers. They

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provide basic maternal and child health care, conduct delivery and deal with obstetric complications. They are also supposed to perform simple surgical procedures.

Visible Impacts:

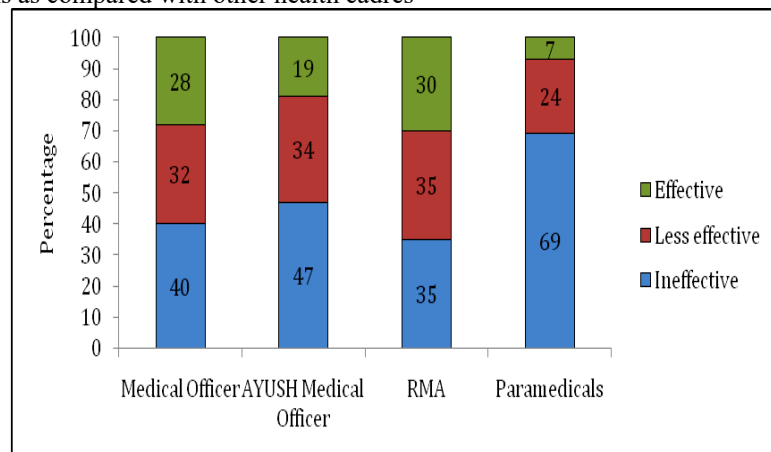
Posting of the RMAs was done at all Primary Health Centers in a phased manner over a period of two years. Now at any given point of time, in any PHC a qualified medical staff is available in the form of Rural Medical Assistant, leading to an increase in outpatient and inpatient registrations and institutional deliveries at PHC's (Table 3). RMAs formed part of medical human resource at the PHCs. As these RMAs could provide the basic health services, MBBS doctors could be posted at higher, levels of institutions like CHCs. This could also lead to some extent preventing people from visiting quacks or private practitioners, thereby reducing their treatment costs figure 3.

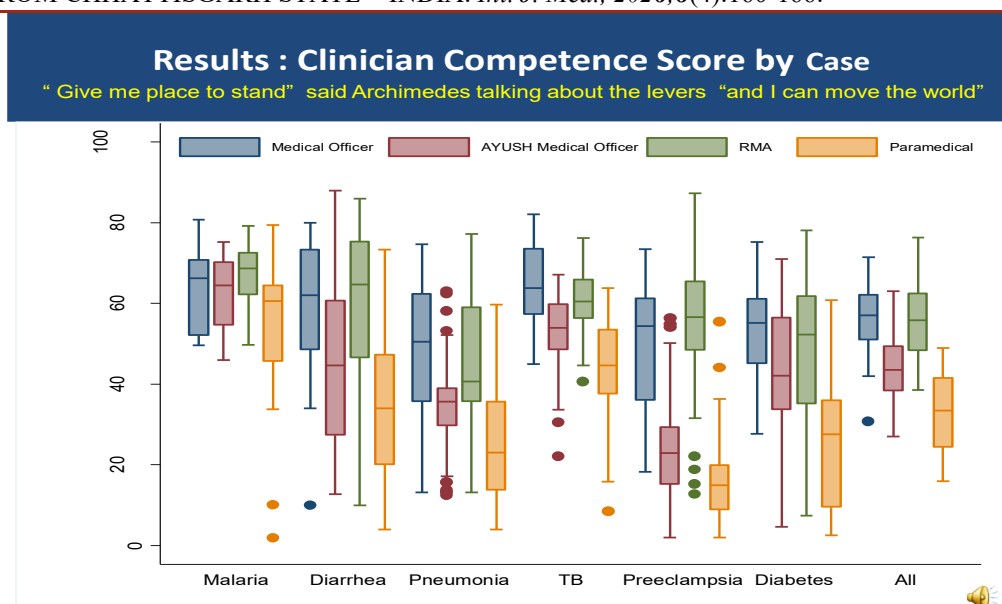


Source: Health facility reports 2007-10

An impact evaluation of this initiative was carried out in 2009 by the Public Health Foundation of India, New Delhi, the National Health Systems Resource Centre, New Delhi and the State Health Resource Center, Raipur supported by WHO, which further established the role of these rural medical assistants in improving the health services at the PHCs. Based on the findings (table 4 & 5) and the component of health services, it is now being advocated by all key stakeholders of the state to post RMAs on a regular basis. Now state government has issued a letter (Government Order no: F-1-121/2010/17/1 and dated on 03.04.2010) stating that the physician (MBBS doctor) will be posted at the community health centers (CHC) and they will supervise the PHCs run by RMAs. This decision was taken as MBBS doctors are not effectively working at PHCs because of their lack of interest to serve at PHCs and high rate of absenteeism. The impact of this revolutionary action of the government will be seen in the years to come.

Prescription ability of RMAs as compared with other health cadres





Source- Rao K. D, Jain K, Sundararaman T, et al. Study Report - Which Doctor for Primary Health Care? (June 2010).

Policy Impact: Hope:

In due course of time the state government intends to create regular posts for the RMAs with its own budgetary provision and plan for their career in government service not as an alternative but as the main clinical provider at PHC and even well patronized Sub Health Centers. Now the time has come to work on medical education reform in India by a design shift.

Recommendations:

After bringing evidence of success to this forum and based on our experience with RMAs, I suggest that we should ***not promote the word RURAL*** in their nomenclature which belittles their profession. This is to avoid a subtle implication that they are not good enough for urban populace and a possible future discrimination in Chhattisgarh state as well as in India. The nomenclature of the degree or diploma must promote and link it with a package or set of services. Categorization may be for instance 1. For primary health care services- three-year medical education degree course, 2. For secondary health care services- MBBS doctors and 3. for tertiary health care – Specialists and Super specialist doctors. By reforms in design of the medical education, we can reduce the insecurity feeling and conflict in different professional associations like Indian Medical Association etc. In this manner a strategic solution could be brought about in this sector. On the other hand, I would also promote their presence in the urban sector, where also the primary health care is needed but urgency is definitely in rural areas. The Sub-Centre, which caters to 5000 population in plain areas and 3000 in tribal or hilly area, is also the place where regular clinical services must be provided. Before scaling up this scheme, further selection of candidates should preferably be restricted to rural/tribal districts of the state (regional reservation) to ensure their services in respective areas. Residential facilities should be provided in the PHC campus to ensure round the clock availability of RMA in the PHCs. Regular promotions and salary hikes should be given based on performance. Continuous medical education by means of workshops and training must be provided. A minimum density of 250 health professionals per 100,000 populations to achieve basic public health goals and comprehensive efforts on HR with effective strategy could help us achieve the Millennium Development Goals in health sector.

CONCLUSION

Thus, the new cadre generated by modified medical education system can be viewed as the Saviour of the Primary Health Care System. Currently, they offer the only ray of hope to effectively improve the Primary Health Care system of India. It can be stated, for sure, that if the government is able to properly nurture this cadre of medical personnel, they are sure to become the permanent stakeholders in the health care system of the entire country.

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