

Research Article

Barriers in the Service Delivery of Community Health Officers of India- A Cross-Sectional Study

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Email: vjaiswal@nihfw.org**Received:** November 20, 2024; **Accepted:** December 11, 2024; **Published:** December 18, 2024**Abstract**

In India Health care services provided at the community is not adequate to meet the health needs of country's huge population. There is a huge shortage of human resources in the health care facilities. To bridge critical gap in reaching many communities with essential health services a new cadre of Community Health Officer(CHO) was created by Government of India (GOI) at the health and wellness centers (sub health centers) under Ayushman Bharat scheme. The present study was conducted to explore the factors hindering the service delivery of Community Health Officers in selected Health and Wellness Centers of Andhra Pradesh and Haryana. Quantitative data was collected through Cross-sectional survey among CHOs. A structured questionnaire was used to evaluate the factors affecting the functioning of CHOs in the delivery of a comprehensive range of services. Qualitative data was collected through in-depth interviews (IDI) with the CHOs. Tools used for data collection was in-depth interview schedule to assess the factors affecting the service delivery of CHOs. A total of 366 CHOs (225 in AP & 141 in Haryana) working in the HWC (sub-health centers) were selected for the study as samples using multi stage random sampling. In the study, challenges faced by the CHOs in providing comprehensive health care services were categorized into personal, professional, organisational, and external work environment. The qualitative analysis of data revealed that CHOs were unable to perform their job responsibilities in the health and wellness center as they were assigned other duties in the CHCs and outreach services by their supervisors such as district health officials and perceived lack of co-operation from fellow team members. CHOs require regular skill enhancement training, support from higher authorities, positive work environment and regular field visits for effective service delivery.

Introduction

In recent years, India has experienced significant changes in its disease burden. The country has made remarkable progress in reducing maternal and infant mortality over the past two decades. However, the burden of diseases such as lower respiratory infections, diarrhea, tuberculosis, and neonatal disorders remains notably high in certain states [1]. According to the recent India State-Level Disease Burden Initiative, the burden of non-communicable diseases and injuries has surpassed that of communicable, maternal, neonatal, and nutritional problems in all states [2]. In India, out-of-pocket expenditures (OOPE) expenses account for about 62.6% of total health expenditure – one of the highest in the world [3]. Currently, (OOPE) on healthcare are pushing 15–17% of Indian families into poverty. In India Health care services provided at the community is not adequate to meet the health needs of country's huge population and high burden of disease. There is a huge shortage of human resources in the health care facilities. India faces a critical shortage of skilled health workers, in particular doctors and nurses [4]. Health system weaknesses due to inadequate number and skills of health workers is most pronounced at the primary health care (PHC) level in India. The primary care workforce in the world is expanding to include non-Physician Health Workers (NPHWs) to increase its capacity⁵. Also, NPHWs as mid-level health providers (MLHPs) are currently being employed in high- and low income countries to assist doctors and specialists to make up

for the scarcity of health professionals. This shortage is directly related to the health status of the country. Community-level healthcare services often lack adequate support. To resolve the health issues and to achieve universal health coverage, a new cadre was created by Government of India (GOI) at the health and wellness centers (sub health centers) under Ayushman Bharat scheme called community Health Officer (CHO)³ in addition to the primary healthcare team⁶. It involved posting a mid-level provider (non-physician practitioner) to every subcenter (rural health outpost) across the country. These mid-level providers, also known as community health officers (CHOs), are mandated with providing basic adult outpatient care and screening for chronic diseases. The role of Community Health Officers (CHOs) is crucial in disease prevention, health promotion, and community engagement. The training and adopted skills of CHOs are essential for addressing the diverse healthcare needs of communities. The clinical competence of CHOs is essential for accurate diagnosis, treatment, and management of common health conditions encountered in community settings. Continuous training, supervision, and skills development programs are necessary to ensure that CHOs maintain high standards of clinical practice. CHOs play a vital role in health promotion and disease prevention activities within their communities. Effective implementation of health education programs, vaccination campaigns, and screening initiatives can significantly impact

population health outcomes and reduce the burden of preventable diseases. The performance of CHOs is intricately linked to the quality of care provided at Health and Wellness Centers (HWCs). Patient satisfaction with healthcare services provided by CHOs is a crucial indicator of performance. Factors such as communication skills, empathy, and responsiveness to patient needs significantly influence patient satisfaction levels and overall perceptions of healthcare quality. The CHOs are in leadership position of the SHC-HWCs and will undertake all the major activities and initiatives started by the Ministry of Health and Family Welfare (MoHFW) [7]. Until now, the SHCs and PHCs were meeting only 20% of the health care needs and were providing limited services pertaining to RCH (Reproductive and Child Health) care and some communicable diseases [8]. However, there are issues of lack of appropriate skill acquisition in pre service education leading to production of health care providers with variable competencies. As the health outcomes are mainly dependent on the skills of care provider, it becomes critical that their knowledge and skills in context to their job functions need to be examined. The program is underway but the issues arising are not known yet. CHOs, being a new and relatively young cadre, are faced with the challenge of implementing new packages while carrying out their day-to-day activities. The specific issues arising to enhance other healthcare parameters with the addition of (CHOs) are not yet known. CHOs are key team member of AB-HWC team needs continuous understanding of their roles and also mechanisms to strengthen their capacities as a team leader of Primary health care team. This paper tries to evaluate the effectiveness of CHOs in improving health outcomes, by identifying barriers to service delivery, and exploring innovative approaches to strengthen community healthcare systems.

Methodology

The present study was conducted to explore the factors enabling the service delivery of Community Health Officers in selected Health and Wellness Centers of Andhra Pradesh and Haryana. This study was undertaken with the objectives to determine the enabling factors and barriers in the service delivery of CHOs.

Research design adopted for the study was descriptive cross sectional. The study variables were hindering (barriers) factors that hinders the service provision of CHOs,

Tools used for data collection was in-depth interview to assess the role performance and factors hindering the service delivery of CHOs. The study was conducted in one southern (Andhra Pradesh) and one northern state (Haryana) of the country. Within the chosen states, 2 districts from each state (Yamuna Nagar & Nuh in Haryana & Chittoor & Krishna in Andhra Pradesh) were selected using selected health and social indicators of National Family Health Survey IV. Based on the availability and inclusion criteria, 366 CHOs (225 in AP & 141 in Haryana) working in the HWC (sub-health centers) were selected for the study as samples using multi stage random sampling. Based on the objectives of the study, the data collected was analyzed and broadly divided in to four major themes.

Results

Factors that affect CHO's work performance and challenges CHOs encounter during service delivery that consequently affect their performance have been classified under four broad categories:

personal, professional, organizational, and external work environment. The details are as follows

1. Personal -Domicile
2. Professional-Incentives, Relationship with Co-workers, Training, knowledge and skills, Job security, Job accountability
3. Organisational-Infrastructure, Supervision, Human resource shortage, Resource allocation
4. External work environment

Personal Barriers

Domicile -Being the resident of the village they serve were said to affect CHOs' performance. As they felt more powerful and fearless due to support from local leaders and villagers. Deployment of CHOs in the health facility of their own villages/nearby areas should be done.

Professional Barriers

Placement -In Andhra Pradesh, Community Health Officer designation is given to the regular ANMs when they get promotion. Hence the current healthcare workers who had undergone the 6 months CHO course or integrated B. Sc. Nursing course, had been appointed under the cadre of Mid-Level Health Professionals (MLHPs). But the MLHPs wanted proper recognition of their cadre under the same name of CHOs which had been duly recognized under the AB-HWCs programme in other states.

Incentives The use of performance-based payments for CHOs can be an important motivator. Delay in payment and complexity in calculation of performance parameters for team-based incentives was reported as a barrier for its effective implementation by all states. Incentives must be provided considering the population catered. It needs modification in the guidelines. It should be based on the population of 5000. For some CHOs, population distribution is not according to the recommended norm of 1 CHO: 5000 population. This has increased the workload of CHOs who have more population to cater to, as they have to work harder to achieve the targets in comparison with other CHOs. Some indicators need to be revised. Eg. in the case of "TB Follow-up" indicator, if there is no TB patient in the village of CHO, she has zero case reporting for that indicator and does not get the incentive.

Training, knowledge and skills-Skill enhancement training at regular intervals to the CHOs is essential to make them competent for providing extended primary health care services.

Job security -The absence of a clear career path for CHOs post in NRHM, lack of clarity on any reward or promotion as a result of their good performance, and not having an 'employee status' with the department unlike their coworkers have led to job insecurity and lack of motivation to work amongst CHOs. Career progression and regularization of job of CHOs needs to be considered.

Job accountability: Clear delineation of roles and responsibilities, along with specialized training programs, are essential for equipping CHOs with the skills and knowledge necessary to deliver comprehensive primary healthcare services effectively. Multiple duplication of reporting and recording done by both ANMs and CHOs.

Relationship with Co-Workers

CHOs experienced lack of co-operation from Multipurpose Health Workers, ASHAs and Anganwadi workers in service delivery and perceived that these health workers lack dedication and accountability. They reported of being overburdened by their superiors with multiple tasks, unachievable targets and were seldom offered guidance and support. As the posting of CHOs is new cadre and not a permanent position, ANMs do not consider the CHOs as their team leader in some HWCs of Andhra Pradesh.

Organisational Barriers

Infrastructural support:

Adequate infrastructure, and facilities are crucial for ensuring the smooth functioning of HWCs. Some CHOs reported that their HWC is functioning in a rented building with no provision of restrooms, water supply, ANC check-up rooms etc in Haryana and Andhra Pradesh. As some HWCs situated at the outskirts, the beneficiaries find it difficult to reach the facility for availing healthcare services. It is also difficult for CHOs to provide ANC and PNC services. Desk top and other equipment's were issued in the HWC without providing secured space to keep them.

Inappropriate utilization of specialist services via tele-consultation in order to reach the target of OPD tele-consultation services. Lack of accessibility of specialist as there are only few specialists in the two tele-consultation hubs provided (PGI Chandigarh and Yamuna Nagar), leading to long waiting period and resistance from the community to avail services. The optimal implementation of the teleconsultation services was hindered by poor internet infrastructure, poor quality video in handheld computers and nonavailability of consultants in hubs.

As there are about 400 CHOs connecting to one hub with only 7-8 specialists in Machchli Patnam, Vijayawada and Siddhartha Medical College, there is long waiting period. Many a times due to internet connectivity issues and shortage of specialists, patients are unable to avail the consultancy services. Irrational use of tele consultation services was also observed.

Human Resource Shortages: The shortage of trained healthcare professionals, including CHOs, poses a significant challenge to healthcare delivery in the study area. Addressing this shortage requires concerted efforts to recruit, train, and retain competent CHOs in community settings. Due to shortage of manpower CHOs perform multiple tasks. In addition, they are deputed to perform other duties in CHC/PHC, outreach areas (organization of health camp), MMUs, vaccination centers in Haryana and Andhra Pradesh also.

Resource Allocation: Adequate medical supplies are crucial for ensuring the smooth functioning of HWCs and enabling CHOs to deliver quality healthcare services. CHOs also reported the is shortage and irregular supply of drugs. The route of drug supply from the higher centers needs to be streamlined both in Andhra Pradesh and Haryana. Due to unavailability of timely release of untied funds CHOs are not able to hire housekeeping and security staff resulting in safety and cleanliness issues in Haryana. So far, the fund has not been released in JAS (Jan Arogya Samiti) account in Andhra Pradesh.

Supervision-They reported that, as being a new cadre, support and handholding was needed from the district officials as well as the medical officer of their respective PHC-HWCs for establishing them as the leaders of the SHC-HWCs. The routine work, movements, leave of other team members should be routed through CHO of the HWCs, to empower them as leader of the team.

External Work Environment

Participants discussed the discouraging challenges CHOs face while working in difficult field situations such as distant, scattered, inaccessible and insecure geographical locations; combined with illiteracy, myths and misconceptions, religious and cultural beliefs, and fear and distrust of community people on CHOs and co-workers.

Discussion

For primary healthcare systems to bring care closer to the communities, the availability of appropriate human resources is crucial. The addition of CHOs has enhanced the capacity of HWCs to provide an expanded range of services, which has proven beneficial during the COVID-19 pandemic. Many issues related to the training, recruitment and deployment of CHOs were identified. These include suboptimal competencies, friction between CHOs with AYUSH and nursing cadre background, transfers/ attritions and concerns among ANMs/MPWs with the contractual CHOs being made the HWC in-charge.

Most of them were well versed with neonatal and infant health care services, childhood & adolescent health care services, Family planning services, and serviced related to the management of Communicable and NCDs with limited knowledge about newer packages. In context to service delivery, all the CHOs (100%) were aware of the use of several IT applications like the HWC portal, ANMOL, CPHC NCD IT application etc. for recording service delivery. The CHOs had sound knowledge regarding their role in facilitating community-level actions for health promotion & prevention of diseases. They were also aware of their role as a leader of the primary healthcare team

This study explored and distilled the challenges of CHO cadres drawing on diverse perspectives of various community health stakeholders. Studies have shown that CHOs trained with specialized skills and knowledge are better equipped to deliver comprehensive primary healthcare services, resulting in improved health outcomes among community members. Another study revealed similar findings that strengthening the team dynamics was a key solution mentioned by the CHOs for increasing the service delivery [9]. Our findings show how challenges differed by state category, but were consistent between the states. Our findings also highlight how inadequate knowledge, structural support, and social acceptance limit CHO performance. current status of infrastructure as a key bottleneck in achieving the target Our study also highlights the critical role of structural support, including equipment and supplies and in line with existing literature as reported by Jaskiewicz W et al and Mohan P [10,11]. Equipment and supplies are key prerequisites for translating theoretical to experiential knowledge, thereby enhancing retention and preventing depreciation of newly acquired competency due to non-application. Second is the effect of the non-availability of structural support on service coverage. Our study illustrates how CHOs continue to work on the sharp end of the health system with poor working conditions, including

inadequate supplies, transportation, and accommodation challenges resulting in poor service coverage. Interpersonal issues were the crux of poor delivery of the various CPHC indicators which was directly observed as decreased utilization of certain service packages for the beneficiaries [12]. With less than a decade away from the 2030 target year set for achieving the SDGs (including health-related goals), the United Nations has expressed concerns that Universal Health Coverage (UHC) will not be achieved for up to one-third of the global population as about half of the world's population still lack access to essential health services [13]. Hence, there is a need to support CHOs in providing basic health services especially to individuals in hard-to-reach communities who are unlikely to seek facility-based care because of logistic challenges, the smaller resource envelope and the lack of financial flexibility for infrastructure work [14].

Deputation of CHOs for some other duties such as outreach services, MMUs, community gatherings, at CHC/PHC hinder their duties at the HWCs. These findings are consistent with the study by Atul Kumar conducted in Madhya Pradesh in 2021 which documented 66.6 percent of participants who said they were unable to visit their Health and Wellness Center (HWC) due to their Block/District officials imposing their duty in other tasks instead of HWC [15]. These findings are also similar with WHO report on CHOs in Assam in 2021 which identified lack of provision of patient seating areas, inadequate or high supply of medications and the unavailability of a drug delivery system, lack of Multipurpose Workers (MPWs) and support staff [16]. The people referred to the CHO as "doctor" and observed better availability and access to fundamental healthcare services. However, participants in several communities reported finding it challenging to get health services at night because to a lack of CHOs, other personnel, and medications.

Conclusion

The study showed that CHOs work in a complex interpersonal, inter-professional, and inter-organizational environment, in addition to a challenging external geographic environment. Apart from prioritizing corrective action at the professional and organizational front, the study identifies the need for improving trust, respect, and rapport between all groups of community workers to enable a 'Community Health Team' approach that will not only improve CHO's performance but also have a positive impact on the overall community's health. CHOs require regular skill enhancement training, support from higher authorities, positive work environment and regular field visits for effective screening of non-communicable diseases and provision of other primary health care services.

References

1. India: Health of the Nation's States"- The India State-Level Disease Burden Initiative in 2017 by Indian Council of Medical Research (ICMR).
2. Naghavi M, Abajobir AA, Abbafati C, Abbas KM, Abd-Allah F, Abera SF, et al. Global, regional, and national age-sex specific mortality for 264 causes of death, 1980–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017; 390: 1151–1210.
3. Ved RR, Gupta G, Singh S. India's health and wellness centres: realizing universal health coverage through comprehensive primary health care. *WHO South-East Asia Journal of Public Health*. 2019; 8: 18.
4. Mehta V, Ajmera P, Kalra S, Miraj M, Gallani R, Shaik RA, et al. Human resource shortage in India's health sector: a scoping review of the current landscape. *BMC Public Health*. 2024; 24: 1368.
5. Chauhan V, Dumka N, Hannah E, Ahmed T, Kotwal A. Mid-level health providers (MLHPs) in delivering and improving access to primary health care services - a narrative review. *Dialogues Health*. 2023; 3: 00146.
6. NHA. National Health Accounts: Estimates for India 2014-15. Ministry of Health and Family Welfare. Government of India. 2017.
7. AYUSHMAN BHARAT Comprehensive Primary Health Care through Health and Wellness Centers Operational Guidelines.
8. Ministry of Health and Family Welfare, Government of India. National Rural Health Mission. Guidelines on community processes-ASHA guidelines 2013: 34.
9. Mishra A. 'Trust and teamwork matter': Community healthworkers' experiences in integrated service delivery in India. *Glob Public Health*. 2014; 9: 960–74.
10. Jaskiewicz W, Tulenko K. Increasing community health worker productivity and effectiveness: a review of the influence of the work environment. *Hum Resour Health*. 2012; 10: 38.
11. Mohan P, Iyengar SD, Martines J, Cousens S, Sen K. Impact of counselling on careseeking behaviour in families with sick children: cluster randomised trial in rural India. *BMJ*. 2004; 329: 1–6.
12. Das N, Gandhi B, Dongre A. Interpersonal Challenges Faced by Community Health Officers at Health and Wellness Centres in Delivery of Comprehensive Primary Health Care at Tribal Setting of Gujarat: A Mixed Methods Study. *Healthline*. 2023; 14: 143-149.
13. Perry HB, Hodgins S. Health for the people: Past, current, and future contributions of national community health worker programs to achieving global health goals. *Glob Heal Sci Pract*. 2021; 9: 1–9.
14. Lahariya C. Health & wellness centers to strengthen primary health care in India: Concept, progress and ways forward. *The Indian Journal of Pediatrics*. 2020; 87: 916-29.
15. Kumar Atul. Study about the identification of factors that affect the performance of Community Health Officers (CHO's) & services of Health and Wellness Centers (HWC's) in Community area of Madhya Pradesh, India. 2021.
16. World Health Organization. Community health officers: a promising resource in delivering comprehensive primary health care in Assam.