



Research Article

Alignment of Primary Care Managers' Perceived Competencies and Job Tasks: An Exploratory Study

Kesavan Sreekantan Nair

*Department of Health Informatics,
College of Applied Medical Sciences,
Qassim University, Buraydah 51452
Saudi Arabia
Email: k.nair@qu.edu.sa

Correspondence
Kesavan Sreekantan Nair
Email: k.nair@qu.edu.sa

Citation
Nair, K.S. (2025). Alignment of Primary
Care Managers' Perceived Competencies and
Job Tasks: An Exploratory Study.
*Administrative and Management Sciences
Journal*, 4(1), 44-52

This is an open access article distributed
under the terms of
[Creative Commons Attribution License
\(CC BY\)](https://creativecommons.org/licenses/by/4.0/).



The reproduction, distributions and use in
other forum is permitted provided copyright
owner(s) and original author(s) are credited
and original publication is cited

ABSTRACT

This study investigates how primary health care center (PHCC) managers assessed their managerial knowledge and skills, and how they perceived the significance of these competencies in their job performance. It aims to identify gaps between PHCC managers' self-assessed skills, and the importance attributed to these skills, thereby highlighting areas for potential improvement. The study employed a structured questionnaire adapted from the CDC-US format and tailored to the local context. A survey of 120 medical officers-in-charge of PHCCs revealed variations in their managerial perceptions based on gender, system of medicine, and managerial experiences. Team building and communication emerged as domains with the strongest alignment between perceived importance and self-assessed knowledge and skills. However, the participants acknowledged the need to strengthen competencies in leadership, planning & priority setting, problem-solving, and performance assessment. The research underscores the significance of formal management education and training to healthcare professionals across all levels. It also highlights the need for continuous evaluation to enhance management competencies in PHCC settings.

KEYWORDS

Management Competencies, Primary Health Care, Leadership, Planning, Problem-solving, Performance Assessment.

1 | INTRODUCTION

Effective primary health care (PHC) is crucial for a sustainable healthcare system (Starfield, Shi & Macinko, 2005; WHO, 2008). Effective management practices are essential for enhancing the performance of primary healthcare facilities and the provision of quality services (Sanaeifar *et al*, 2015). A well-organized primary health care center (PHCC) is crucial for delivering healthcare that has a positive impact on population health (Schulz *et al*, 2025). An efficient and effective PHC system depends on well-qualified managers with appropriate skill sets, functional support systems, and optimal work environments (WHO, 1978; Dorji *et al*, 2019). As PHCC is responsible for achieving universal health coverage (UHC), a key component of the Sustainable Development Goals, it requires strong leadership and management capacity (WHO, 2018). To effectively meet the health care needs of the population, PHCC managers should be equipped with a diverse range of competencies, such as planning, priority-setting, problem-solving, and performance assessment, to effectively address the healthcare needs of the population (Kumar *et al*, 2024; Garg *et al*, 2022). Thus, management competencies are critical for the success of PHCCs, and effective leadership helps in building effective teams with the necessary skills (Chatterjee *et al*, 2018).

Strengthening PHCC management can improve healthcare resource distribution, reduce costs, and create productive working environments (WHO, 2005; Flessa *et al*, 2022). In recent years, increasing attention has been directed towards evaluating managerial competencies and performance within healthcare organizations (Rabkin *et al*, 2022). Competencies comprise a combination of knowledge, skills, attitudes, and behaviors necessary for

effective task performance (Stefi, 2008; Santric *et al*, 2005; Munyewende *et al*, 2016; Zhao *et al*, 2017; Garg *et al*, 2022). Consistent measurement is crucial for ongoing quality enhancement, optimal management strategies, and the design of management education (Santric, 2008). Numerous leadership frameworks and models emphasize the significance of competencies in healthcare, such as the National Center for Healthcare Leadership framework, the Cleveland Clinic's leadership model, and the CDC-US managerial matrix of essential competencies (Dikic *et al*, 2019; Lopes *et al*, 2020; Silva *et al*, 2022). These models highlight leadership qualities such as driving change, fostering transformation, ongoing personal growth, collaboration, and ethical integrity (Stephi, 2008; Berkenbosch *et al*, 2013; Munyewende *et al*, 2016).

PHCCs are a key component of India's public health system, delivering essential primary healthcare services to the rural and urban communities (Kumar *et al*, 2025). The government established PHCCs to cover 30,000 people in rural areas, and 20,000 in hilly, desert, and tribal areas. As of March 2023, 31882 PHCCs were functioning across 28 states and 8 union territories. Currently, the Ministry of Health and Family Welfare (MoHFW) under the National Health Mission (NHM), provides various management training programs for healthcare managers at various levels (MOH, 2024). The NHM has underscored the importance of effective health management systems for ensuring quality and affordable healthcare. By coordinating resources and efforts, these systems can help achieve UHC (Tiwari *et al*, 2018). Training programs under the NHM focus on developing managerial skills, leadership, and strategic thinking for healthcare professionals. These training programs are designed to enhance the managerial competencies of healthcare managers, enabling them to manage healthcare services and improve health outcomes effectively. In Tamil Nadu, management training for PHCC medical officers is provided by state and national-level organizations, including the NHM and MoHFW, focusing on operational management and quality improvement. However, there is a lack of training for primary health care managers on various aspects of management competencies, including team building, problem-solving, leadership, and assessment of performance. Recognizing the need for management training, the present study aimed to explore PHCC managers' self-assessed knowledge and skills, the significance of these competencies in performing their job effectively, and the extent to which these two perceptions align. The study used the CDC-US matrix of basic managerial competencies, such as communication, team building, planning, priority-setting, performance assessment, problem-solving, and leading. This study's findings can inform the development of targeted management training programs to enhance PHCC management capacity in developing countries.

2 | REVIEW OF LITERATURE

In recent years, there has been an increasing emphasis on evaluating managerial competencies and health system performance. Competencies comprise a cohesive collection of knowledge, abilities, attitudes, and behaviors that enable individuals to perform tasks and fulfill roles effectively in varied and complex situations (Schulz *et al*, 2025). Systematic assessment is crucial for the ongoing advancement of quality in healthcare, the application of best management practices, and the design of management education (Sanaeifar *et al*, 2025; Berkenbosch *et al*, 2013). PHC managers play a vital role in ensuring the delivery of high-quality healthcare services. Effective management competencies are essential for these professionals to lead and manage healthcare teams, make informed decisions, and improve patient outcomes. Few studies have attempted to measure the perceived competencies of PHC managers (Schulz *et al*, 2025; Sanaeifar *et al*, 2025; Dikic *et al*, 2025; Lopes *et al*, 2020). Many studies have pointed out that effective communication is considered as a critical competency for PHC managers. According to Dorji *et al*. (2019), communication skills enable managers to build strong relationships with team members, patients, and stakeholders, ensuring seamless care delivery and collaboration. A study by Liang *et al*. (2020) highlights the importance of interpersonal and communication skills in healthcare management, emphasizing the need for managers to be effective communicators. Strategic planning is another essential competency for PHC managers. As noted by Lopes *et al*. (2019), planning involves setting goals, prioritizing resources, and allocating tasks efficiently. Effective planning enables managers to ensure that healthcare services are delivered efficiently and effectively, meeting the needs of patients and communities. Building and leading high-performing teams is a vital competency for PHC managers. According to Howard *et al*. (2018), team building involves leading people and organizations, enabling managers to motivate and support team members, foster collaboration, and drive quality improvement initiatives. A study by Bhatnagar *et al*. (2018) emphasizes the importance of teamwork and collaboration in healthcare, highlighting the need for managers to build and lead effective teams.

Few studies have pointed out that PHC managers require strong problem-solving skills to address complex healthcare challenges. As noted by Teo et al. (2020), problem-solving involves critical thinking, analysis, and decision-making, enabling managers to identify solutions and implement effective interventions. Wong et al. (2019) highlights the importance of evidence-informed decision-making in healthcare management, emphasizing the need for managers to use data and evidence to inform their decisions. Regular performance assessment is crucial for PHC managers, enabling them to evaluate service delivery, identify areas for improvement, and implement quality improvement initiatives (Curzi et al, 2019). Performance assessment involves monitoring and evaluating performance, providing feedback, and driving continuous quality improvement (Sanaeifar et al, 2025). By developing these competencies, PHC managers can improve patient outcomes, enhance service delivery, and drive quality improvement initiatives. Studies have shown that there is a gap between how important the competencies are perceived to be and actual knowledge and skills demonstrated by PHC managers (Dikic et al, 2019). To strengthen the managerial competencies of medical officers in primary healthcare settings, formal education and training in management are essential. This need is underscored by the existing gap.

3 | METHODS

3.1 | Design of Research

This descriptive and cross-sectional study was conducted among medical officers in charge of the two southern districts of Tamil Nadu State in India.

3.2 | Participants and Sampling Approach

The study included the medical officers-in-charge of PHCCs in the districts of Kanyakumari and Tirunelveli, in Tamil Nadu State of India. According to the report of the District Health Departments, there are a total of 269 PHCCs in the districts. The list of PHCCs and contact addresses of medical officers in charge was collected from the respective Health Directorate of the districts. Initially, 142 PHCCs were randomly identified for the study. After receiving the informed consent from the participants, an online questionnaire was sent to the medical officers in charge, who were holding managerial positions in the selected PHCCs. The complete responses were received from 120 medical officers in charge of PHCCs, yielding a response rate of 85.7%.

3.3| Data Collection and Sources

The study employed a structured questionnaire adapted from the CDC-US format and tailored to the local context. (Dikic *et al*, 2019). The questionnaire comprises 36 questions organized into two sections. The questionnaire assessed socio-demographic characteristics, system of practice, work position, and knowledge and skills in six core competency domains: planning, performance assessment, leadership, problem-solving, communication, and team building (Table 1).

Table 1

Competencies included in the Questionnaire

Section	Category	Sub-Category
Section - 1	Personal information	Age, gender, general education, management education, work experience (in years), experiences in managerial position (in years), experience in managerial position (in years).
	Planning and priority settings	Priority setting of tasks, developing work plans of PHCCs, using various decision analysis methods, and establishing programs.
Section - 2: Perception about knowledge and skills	Leadership	Fostering collaboration, engaging employees' involvement, and articulating shared goals and values
	Performance assessment	Assessing and evaluating employees' performance, preparation of
	Problem solving	Problem identification, analyzing root causes, designing solutions, and solving the problem as a team
	Communication	Oral presentation, communicating through print media, planning and implementation of communication programs, and designing communication strategies.
	Team building	As a team member in leading, building, and managing teams

3.4 | Measuring Perceived Competencies and Job Tasks

The study participants self-assessed the importance and their level of knowledge and skills relevant to their job using a five-point Likert scale, where 1 indicated low importance or no knowledge and skills, and 5 indicated high importance or high knowledge and skills. The average scores for importance and their self-assessed knowledge and skills were calculated across all six core domains, such as leadership, planning & priority setting, assessment of performance, problem-solving, communication, and team building. To assess the gap between respondents perceived importance and self-assessed level of job-related knowledge and skills, the formula $A = I^2 - KS^2$ was applied, where 'A' denotes the level of discrepancy, 'I' stands for perceived importance, and KS refers to perceived knowledge and skills (Dikic *et al*, 2019; Zhao *et al*, 2015). A higher gap 'A' indicated lower alignment between respondents perceived importance and their actual knowledge and skills across all six core domains. Five key variables were analyzed, including gender, age, system of medicine practiced, work experience, managerial experiences of medical officers, and six competencies. The study participants were grouped by gender (male and female), age (<35 and >35 years), system of medicine practiced (modern system and Indian system), work experience (<5 years, 5-10 years, and 10 years+), and managerial experience (< 5 years and > 5 years), respectively.

3.5| Data Analysis

The data were analyzed using both descriptive and inferential statistical methods. Descriptive methods included frequencies, means, standard deviations, and reliability testing through Cronbach's Alpha. The reliability of the instrument scales was supported by Cronbach's Alpha values, which ranged from 0.701 for the planning and priority domain to 0.821 for leadership competency (Table 2). A significant threshold of $p < 0.05$ was applied throughout the analysis. All statistical analyses were performed using SPSS Statistics version 21.0.

Table 2

Results of Cronbach's Alpha Coefficient

Managerial competency	Cronbach's Alpha Coefficient	
	Respondents' self-perceived level of importance of possessing relevant knowledge and skills for their job (I = Importance)	Respondents' self-assessed level of job-related knowledge and skills (KS = Knowledge and Skills)
Planning and priority settings	0.701	0.756
Leadership	0.724	0.821
Performance assessment	0.748	0.802
Problem solving	0.710	0.708
Communication	0.718	0.756
Team building	0.713	0.812

4 | RESULTS

4.1 | Descriptive Summary

The study population consisted of 120 medical officers-in-charge of PHCCs who completed the questionnaire. Most of the participants were male (71.66%). The participants' ages ranged from 26 to 54 years, with a mean age of 39.78 years (Standard deviation 7.34). While 64.16% of participants were below 35 years, 35.83% of them were 35 years and above. Most of the participants (76.66%) were practicing the modern system of medicine, and the rest of them belonged to the Indian system of medicine, including ayurveda, unani, siddha, and homeopathy. More than one-half of them had a work experience of more than 10 years (53.33%), and the rest of them had less than 10 years of work experience. The participants had managerial experience ranging from 2 years to 18 years. While 57.5% of them had less than 5 years of managerial experience in the job, 42.5% of them had more than 5 years of managerial experience in PHC. Only 46 medical officers-in-charge of PHCCs (38.33%) had some form of management education or training. (Table 3)

Table 3
Socio-demographic Characteristics of Study Participants

Variables	Characteristics	Number (n=120)	Percentage
Gender	Male	86	71.66
	Female	34	28.33
Age	Below 35 years	77	64.16
	35 Years & above	43	35.83
System of practice	Degree in Allopathy	92	76.66
	Degree in ISM	28	23.33
Work experience	Less than 10 years	56	46.66
	More than 10 years	64	53.33
Managerial experience	Below 5 years	69	57.50
	5 Years & above	51	42.50
Management education/training	Yes	46	38.33
	No	74	61.66

Note: The Indian system of medicine (ISM) includes Ayurveda, Unani, Siddha, and Homeopathy.

4.2 | Perceived Importance and Self-Assessed Knowledge and Skills

The study examined the medical officers' perceptions of importance and their self-evaluated knowledge and skills across six key domains of managerial competency. The findings revealed that all domains achieved average scores exceeding 3 on the 5-point Likert scale, reflecting a satisfactory level of perceived importance, knowledge, and skills relevant to management of PHCCs. Team building within the management domain was perceived as the most important competency ($I = 4.56 \pm 2.34$), and the study participants also assessed their knowledge and skills in this domain the highest ($KS = 4.42 \pm 1.98$). The second most important management domain is perceived as problem-solving ($I = 4.36 \pm 0.46$), with the self-assessed knowledge and skills in this domain ($KS = 4.36 \pm 1.32$). The managers' self-assessed perceived competencies were high in problem-solving and team-building domains. (Table 4)

Table 4
Perceived level of importance and self-assessed knowledge and skills of medical officers in PHCCs

Core domain	Importance (I) $\bar{X} \pm SD$ (95% CI)	Knowledge & Skills (KS) $\bar{X} \pm SD$ (95% CI)	Difference ($A = I^2 - KS^2$) $\bar{X} \pm SD$ (95% CI)
Planning and priority settings	4.27 ± 1.96 (4.22–4.89)	3.89 ± 1.73 (3.95–4.37)	4.91 ± 5.08 (4.13–5.34)
Leadership	4.28 ± 1.56 (4.29–4.67)	3.79 ± 2.32 (4.12–4.53)	3.93 ± 4.92 (2.28–5.26)
Performance assessment	4.36 ± 2.26 (3.32–4.18)	3.73 ± 2.31 (4.02–4.34)	4.87 ± 5.52 (3.57–5.96)
Problem solving	4.42 ± 0.46 (4.12–4.34)	4.27 ± 1.32 (3.62–4.19)	4.18 ± 5.27 (2.24–5.21)
Communication	4.03 ± 1.31 (3.94–4.14)	3.89 ± 1.92 (4.01–4.64)	3.52 ± 4.13 (2.16–4.78)
Team building	4.56 ± 2.34 (4.31–4.76)	4.42 ± 1.98 (3.98–4.25)	3.28 ± 4.21 (2.96–5.32)

The strongest alignment between perceived importance and self-assessed knowledge and skills was observed in the domains of team building and communication, with minimal differences between these two measures (A) of 3.28 and 3.52, respectively. The weakest alignment was observed in the domain of planning and priority setting ($A = 4.91$), followed by performance assessment ($A = 4.87$).

4.3 | Socio-Demographic Characteristics Vs the Alignment of Perceived Importance, Self-Assessed Knowledge, and Skills

The study also examined the relationship between the socio-demographic characteristics of PHCC managers (such as gender, age, system of practice, work experience, and managerial experience) and the alignment of perceived

importance and self-assessed knowledge and skills (Table 4). The results showed that gender, system of medicine, work experience, and managerial experience were significant factors in aligning perceived importance and their self-assessed knowledge and skills for certain management competencies.

Specifically, male medical officers-in-charge of PHCCs demonstrated a stronger alignment between the perceived importance of team building and their self-assessed knowledge and skills in this domain ($p < 0.05$). Similarly, this group demonstrated stronger alignment between the importance of the leadership domain and their self-assessed knowledge and skills in that domain ($p < 0.05$). Additionally, medical officers who practice the modern system of medicine demonstrated better consistency between the perceived importance of communication and their self-assessed communication knowledge and skills ($p < 0.05$). Likewise, they demonstrated a stronger alignment between the perceived importance of the leadership domain and their self-assessed leadership knowledge and skills ($p < 0.05$). Furthermore, the medical officers in charge of PHCCs, having more than 10 years of work experience but less than 5 years of managerial experience, demonstrated better consistency between the perceived importance of team building and their self-assessed team building knowledge and skills ($p < 0.05$). (Table 5)

Table 5

Participants perceived importance of knowledge and skills, and their self-perceived knowledge and skills, according to socio-demographic characteristics

Socio-demographic characteristics	Communication	Team Building	Planning & Priority Setting	Performance Assessment	Problem Solving	Leadership
Gender						
Male	3.79±5.23 (1.29-5.38)	3.84±4.26* (2.54-4.38)	4.82±4.23 (2.18-5.92)	4.12± 5.23 (2.78–6.32)	4.37±5.42 (2.81–6.34)	3.68± 4.51* (2.78–5.34)
Female	4.03±5.23 (1.29-5.38)	4.27±4.26 (2.54-4.38)	4.78±4.23 (2.18–5.92)	4.86± 5.23 (2.78–6.32)	4.77±5.42 (2.81–6.34)	3.68± 4.51 (2.78–5.34)
Age						
Below 35 years	3.62±4.24 (2.23-4.52)	3.73±4.98 (2.16-5.25)	4.29±5.17 (2.18–5.92)	3.52± 6.28 (2.05–5.24)	4.78±4.42 (1.81–6.26)	4.08± 3.63 (2.65–6.04)
35 and above	4.03±5.43 (2.39-5.28)	4.17±5.18 (2.04-4.83)	4.58±5.35 (2.36–5.28)	4.36± 4.37 (2.59–5.33)	3.86±4.82 (2.91–5.46)	3.64± 4.67 (2.29–4.08)
System of Medicine						
Allopathic	4.04±3.28* (2.93-4.92)	4.65±4.28 (2.41-4.68)	4.02±4.34 (2.94–4.37)	4.38± 5.31 (2.37–5.24)	4.23±4.41 (2.58–4.38)	3.68± 4.06* (2.62–5.34)
Indian System	4.63± 3.25 (2.62-4.37)	4.29±5.27 (2.32-5.03)	4.82±5.32 (2.34–4.53)	4.37± 4.67 (2.36–5.47)	4.30±5.83 (2.34–4.62)	3.59± 4.34 (2.88–4.83)
Work experience						
Below 5 years	3.39±4.23 (2.65-5.29)	4.06±4.38 (2.54-5.16)	4.32±4.96 (2.27–4.26)	4.01± 4.18 (2.63–5.38)	4.06±5.37 (2.62–5.47)	3.63± 4.43 (2.78–5.18)
5-10 years	3.55±5.23 (1.29-5.38)	4.94±5.13 (2.34-4.16)	4.29±5.13 (2.32–5.14)	4.09± 4.96 (2.08–5.62)	4.37±5.51 (2.28–5.56)	3.68± 4.51 (2.33–5.68)
10 Years & above	3.67±5.23 (2.29-5.38)	3.92±3.56* (2.15-3.34)	3.95±3.82 (2.87–5.27)	4.29± 4.38 (2.52–5.31)	4.01±3.47 (2.81–4.94)	3.27± 5.43 (2.62–4.54)
Managerial experience						
Below 5 years	4.26±3.68 (2.23-4.62)	3.86±3.23* (2.41-4.08)	4.32±4.34 (2.34–4.62)	4.31± 4.83 (2.37–5.24)	4.14±5.42 (2.28–5.38)	3.28± 4.34 (2.71–4.63)
5 years & above	3.62± 3.25 (2.39-5.27)	4.34±5.16 (2.08-5.27)	4.64±4.23 (2.18–4.92)	4.57± 5.23 (2.78–6.67)	4.53±5.42 (2.28–5.93)	4.28± 4.37 (2.64–5.08)

* $p < 0.05$ level of significance

5 | DISCUSSION AND CONCLUSION

5.1 | Discussion

This study explored how medical officers-in-charge of PHCCs evaluate their managerial competencies, both in terms of self-assessed knowledge and skills, and the perceived importance of these abilities in performing their jobs. The study aimed to identify gaps between managers' self-assessed skills and the importance they attributed to these skills, highlighting areas for improvement. The results showed that managers perceived team building and problem-

solving as the most important competencies for the effective management of PHCCs, while communication was considered the least important. The managers' self-assessed perceived competencies were high in problem-solving and team building. On average, participants rated their managerial competencies as moderate, yet consistently lower than the perceived importance required for their job. Notably, the strongest alignment between perceived importance and self-assessed knowledge and skills was observed in the domains of communication and team leadership. In contrast, the weakest consistency was observed in planning of services and priority setting, followed by performance assessment of staff. These findings underscore the critical need for formal management education and training to strengthen core competencies, especially in planning, priority setting, problem-solving, and performance assessment. (Santric *et al*, 2009; Dikic *et al*, 2019). Earlier research emphasizes the importance of education and training in improving managerial competencies (Munyewende *et al*, 2016; Santric *et al*, 2009). The study underscores the significance of aligning management education with the operational requirements of healthcare facilities to enhance health outcomes.

The findings of the study are consistent with earlier studies conducted in India. A study by Patel *et al* (2024) showed a considerable proportion (60%) of managers adopted a participative leadership approach, and teamwork skills were moderately well-developed. Over half of the medical officers were new to their roles, with less than a year's experience. Middle-level managers primarily motivated their teams through recognition of their work (41.8%). The findings of the study have implications for health policymakers, human resources managers, and healthcare administrators (Flessa *et al*, 2022). It emphasizes the need for formal management education and training, as well as the development of competency frameworks and regular performance assessments (Sharma *et al*, 2010; WHO, 2018; Curzi *et al*, 2018; Kumar *et al*, 2024). The study contributes to existing efforts to improve the managerial competencies of health professionals and highlights the importance of investing in managerial competencies to achieve better health outcomes. Effective primary care services in resource-limited settings require well-trained mid-level providers to achieve better healthcare outcomes and patient satisfaction (Garg *et al*, 2022; Flessa *et al*, 2022).

These study findings imply that several managerial competencies appear to be lacking in primary healthcare in India. Developing PHC management for effective strategic planning and priority setting is crucial for the continuous improvement of the quality of PHC (Kumar *et al*, 2025). Additionally, healthcare managers need to have problem-solving skills to address the complex challenges facing primary healthcare. Moreover, effective performance management is necessary to ensure that healthcare services are delivered efficiently and effectively (WHO, 2018; Tiwari *et al*, 2018; Patel *et al*, 2024). Furthermore, strong communication and community collaboration skills are vital for healthcare managers to work effectively with diverse stakeholders and promote public health. Apart from these competency dimensions, health managers should possess adequate skills in financial management, human resource management, and change management.

5.2 | Limitations of the Study

One of the limitations of the study is that the managers' ranking of competencies was based on subjective self-assessment, which may have been affected by knowledge gaps or lack of confidence. Involving more managers at the PHCCs in future studies could enhance the generalizability of the findings. Additionally, this study used the CDC-US questionnaire, which was validated by earlier studies, to measure alignment between the primary care managers perceived competencies and their job tasks. This model may not account for many contextual factors, such as organizational culture, availability of resources, or other external environment, that can impact primary care managers' performance in different settings. Many specific tools can be used to evaluate primary care managers' competencies in specific areas, such as leadership, communication, or problem-solving.

5.3 | Policy Recommendations and Future Research

To address the gaps in management competencies of PHC managers, the health department should provide management training and capacity development programs for health care managers at various levels of care. Additionally, specialized diploma courses in health care management and related disciplines can be introduced to health care managers at various levels. Further, health care managers should be encouraged and supported in higher education programs in health care management by providing fellowships and other assistance. Future studies should apply specific tools to evaluate the management competencies of all categories of health professionals to enhance the delivery of primary health care.

5.4 | Conclusion

Medical officers-in-charge of PHCCs rated their competency level as moderate; however, they believed it was inadequate to meet the demands of their role. Notably, team-building and communication skills were deemed most crucial, yet the largest gap between perceived significance and self-evaluated knowledge/skills was found in performance assessment and planning/priority setting. This research has significant implications for enhancing management in PHCCs and highlighting the need for primary healthcare professionals to acknowledge their competency gaps and commit to improvement. This research underscores the significance of formal management education and training for healthcare professionals to effectively manage primary healthcare facilities.

Declaration Statement: The author declares that there is no competing interest.

Funding Statement: This research received no specific grant or funding from any public, commercial, or not-for-profit funding agency.

Data Availability Statement: The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Acknowledgment: The author would like to express their sincere gratitude to the respondents who generously contributed their time and insights, making this study possible.

REFERENCES

- Berkenbosch, L., Schoenmaker, S.G., Ahern, S., Sojnaes, C., Snell, L., Scherpbier, A.J., & Busari, J.O. (2013). Medical residents' perceptions of their competencies and training needs in health care management: An internal comparison. *BMC. Medical Education*, 13, 25.
- Chatterjee, R., Suy, R., Yen, Y., Chhay, L.(2018). Literature review on leadership in healthcare management. *Journal of Social Science Studies*, 5:38–47.
- Curzi, Y., Fabbri, T., Scapolan, A.C., & Boscolo, S. (2019). Performance appraisal and innovative behavior in the digital era. *Frontiers in Psychology*, 10, 1659.
- Dikic, M., Nikolic, D., Todorovic, J., Terzic-Supic, Z., Kostadinovic, M., Babic, U et al (2019). Alignment of perceived competencies and perceived job tasks among primary care managers. *Healthcare* (Basel), 27;8(1):9.
- Dorji, K., Tejavataddhana, P., Siripornpibul, T., Cruickshank, M., & Briggs, D. (2019). Leadership and management competencies required for Bhutanese primary health care managers in reforming the district health system. *Journal of Healthcare Leadership*, 11:13–21.
- Flessa, S., & De Allegri, M., (2022) Healthcare management and health economics. *Healthcare* (Basel),10:1879–1879.
- Garg, S., Tripathi, N., Datla, J. (2022). Assessing competence of mid-level providers delivering primary health care in India: a clinical vignette-based study in Chhattisgarh state. *Human Resources for Health*, 20, 41.
- Kumar, S., Bhoi, P., Gharat, MS., & Mohanta, GP. (2025). Developing a competency assessment framework for pharmacists in primary health care settings in India. *Plos One* 10;20(3):e0316646. doi: 10.1371/journal.pone.0316646.
- Kumar, S., Chhabra, G., Sehrawat, KS., & Singh, M. (2024). Developing a competency assessment framework for medical laboratory technologists in primary healthcare settings in India. *Plos One*, 19(4):e0294939. doi: 10.1371/journal.pone.0294939.
- Liang, Z., Howard, P., Wang, J., & Xu, M. A. (2020). Call for leadership and management competency development for directors of medical services—evidence from the Chinese public hospital system. *International Journal of Environmental Research and Public Health*, 17, 6913. <https://doi.org/10.3390/ijerph17186913>.
- Lopes, AG., Narattharaksa, K., Siripornpibul, T., & Briggs D. (2020). An assessment of management competencies for primary health care managers in Timor-Leste. *International Journal of Health Planning and Management*, 35:520–531.
- Ministry of Health and Family Welfare, Annual Report 2023-24, Government of India. New Delhi,2024.
- Munyewende, P.O., Levin, J., & Rispel, L.C. (2016). An evaluation of the competencies of primary health care clinic nursing managers in two South African provinces. *Global Health Action*, 9, 32486.
- Patel, NA., Nayak, SN., Bariya, BR., & Patel, MN. (2024). Analysis of leadership and team management skills of middle-level healthcare managers of Valsad district, Gujarat. *Journal of Family Medicine and Primary Care*, 13(2):498-504.
- Rabkin, SW., Frein, M. (2021). Overcoming obstacles to develop high-performance teams involving physician in health care organizations. *Healthcare* (Basel), 9:1136–1136.

- Sanaeifar, E., Houshmand, E., Moghri, J., Vejdani, M., & Tabatabaee, SS. (2025). Requirements for evidence-based management competency in healthcare: a scoping review. *Frontiers in Public Health* 13:1490454. doi: 10.3389/fpubh.2025.1490454.
- Santric, Milicevic M.M., Bjegovic-Mikanovic, V.M., Terzic-Supic, Z.J., & Vasic, V. (2011). Competencies gap of management teams in primary health care. *European Journal of Public Health*, 21, 247–253.
- Sharma, K., & Zodepy, S. (2010). Need and opportunities for health management education in India. *Indian Journal of Public Health*, 54(2):84-91.
- Silva, L. B. da., Sousa, M. H. O., & Íñiguez-Rueda, L. (2022). Managers' views on professional competencies for primary health care. *Sage Open*, 12(4). <https://doi.org/10.1177/2158244022113825>.
- Soto-Schulz K., Herrera-Echenique, R., Brito-Díaz, R., & Pérez-Romero, N.(2025). Competencies required for the performance of primary health care managers: a systematic review. *Cad Saude Publica*. 41(1):e00092624. doi: 10.1590/0102-311XEN092624.
- Starfield, B., Shi, L., & Macinko, J (2005). Contribution of primary care to health systems and health. *Milbank Quarterly*, 83, 457–502.
- Stefl, M.E. (2008). Common competencies for all healthcare managers: the healthcare leadership alliance model. *Journal of Healthcare Management*, 53, 360–373.
- Tiwari, R., Negandhi, H., Zodepy, SP. (2018). Health management workforce for India in 2030. *Front Public Health*, 6:227. doi: 10.3389/fpubh.2018.00227.
- World Health Organization and the United Nations Children's Fund. Declaration The Global Conference on Primary Health Care, Astana, Kazakhstan. 2018. Available: <https://www.who.int/docs/default-source/primary-health/declaration/gcPHCC-declaration.pdf>.
- World Health Organization. Declaration of Alma Ata. In Proceedings of the International Conference on Primary Health Care, Alma-Ata, Kazakhstan, 6–12 September 1978. Available online: https://www.who.int/publications/almaata_declaration_en.pdf.
- World Health Organization. Strengthening Management in Low-Income Countries. The “Making Health Systems Work”; Working paper No. 1; The World Health Organization: Geneva, Switzerland, 2005. Available online: WHO/EIP/healthsystems/2005.1.
- World Health Organization. The World Health Report 2008: Primary Health Care Now More Than Ever; The World Health Organization: Geneva, Switzerland, 2008.
- Zhao, L., Sun, T., Sun, B.Z., Zhao, Y.H., Norcini, J., & Chen, L. (2015). Identifying the competencies of doctors in China. *BMC Medical Education*, 15, 207.