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Leadership competencies of primary healthcare managers: a cross-sectional quantitative study of high, medium and low performing district councils in Tanzania

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Abstract

Objectives: This research article examined the leadership competency of primary healthcare facility managers in the selected high, medium and low performing District Councils in Tanzania.

Methods: The study was conducted in the selected high, medium and low performing District Councils in Tanzania. This research used cross sectional quantitative research design. A complete enumeration sampling strategy was employed to inquire data from 102 primary healthcare facility managers. Similarly, the Statistical Package for Social Sciences (SPSS version 25) was used to analyse the data. Ethically, the permission was granted by the University of Dodoma.

Findings: Results revealed that, (72.55%), (66.45%) and (80.39%) of primary healthcare manager were competent and (27.45%), (33.55%), and (19.61%) were less than competent in leading people and teams, leading organisation, and leader quality respectively.

Conclusions: The study concludes that primary healthcare managers exhibited competent and less than competent levels of leadership competency in all investigated constructs.

Keywords: Leadership competency, Primary healthcare managers, Low- and middle-income countries.

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Compétences de leadership des gestionnaires de soins de santé primaires : une étude quantitative transversale des conseils de district à rendement élevé, moyen et faible en Tanzanie

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Résumé

Objectif de l'étude : Cet article de recherche a examiné les compétences de leadership des gestionnaires d'établissements de soins de santé primaires dans les conseils de district sélectionnés à rendement élevé, moyen et faible en Tanzanie.

Méthode de l'étude : L'étude a été menée dans les conseils de district sélectionnés à rendement élevé, moyen et faible en Tanzanie. Cette recherche a utilisé une conception de recherche quantitative transversale. Une stratégie d'échantillonnage par dénombrement complet a été utilisée pour interroger les données de 102 gestionnaires d'établissements de soins de santé primaires. De même, le package statistique pour les sciences sociales (SPSS version 25) a été utilisé pour analyser les données. Sur le plan éthique, l'autorisation a été accordée par l'Université de Dodoma.

Résultat de l'étude: Les résultats ont révélé que (72,55 %), (66,45 %) et (80,39 %) des gestionnaires de soins de santé primaires étaient compétents et (27,45 %), (33,55 %) et (19,61 %) étaient moins que compétents pour diriger des personnes et respectivement les équipes, l'organisation dirigeante et la qualité du leader.

Conclusion: L'étude conclut que les gestionnaires de soins de santé primaires ont fait preuve de niveaux de compétence en leadership compétents et moins que compétents dans tous les concepts étudiés.

Mots-clés : Compétence de leadership, gestionnaires de soins de santé primaires, Pays à revenu faible ou intermédiaire.

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INTRODUCTION

Assessing the leadership competency of primary healthcare managers in the context of low- and middle-income countries (LMICs) is very important (1,11). This is because, its assessment will contribute knowledge and empirical evidence in understanding the leadership competency of primary healthcare managers. Similarly, its understood will enable identification of current leadership knowledge and skills, and contributing to support individual and organizational leadership improvement and development (1,2,32). Additionally, the support of leadership competency development deemed necessary. Since leadership abilities inspire individual and organizational excellence, develop a common vision, and successfully manage change to achieve an organization's strategic goals (3,34). Moreover, the ability to lead is also very crucial for the efficient and effective management of hospitals (4,6,7).

Despite the important need to understand leadership competency among health service managers, limited knowledge and empirical evidence exist in the context of LMICs (5,11). The study conducted in South Africa found that front line nursing managers at the unit level encountered difficulties in resolving conflict between individuals and generally in the unit (8). Similarly, the study by (9) revealed several crucial leadership abilities that need to be developed, according to the quantitative, cross-sectional study from four private hospitals in KwaZulu-Natal, South Africa, which examined the efficacy of nurse leaders across the nine leadership dimensions.

Also, a cross-sectional, multicenter comparison analysis was conducted in Jos Metropolis to ascertain and compare perceived leadership competencies of doctor-managers working with public and private hospitals. Results reported that, majority of respondents (66.4%) gave doctor-managers worse strategic orientation scores than the median. In comparison to the public hospital, a greater percentage of respondents from private hospitals gave their doctor-managers ratings that were higher than the median for the transformation domain's accomplishment oriented and innovation thinking subcomponents. Similarly, more respondents from public hospitals said that their doctor-managers performed better than the median figure for information seeking (10).

The study by (11) conducted in the Eastern region of Ghana, investigated the leadership competencies of front-line nursing managers. The study used quantitative cross-sectional design. The findings revealed the moderate level of leadership competencies among front-line nursing managers in Ghana. On one hand, the study further revealed a high knowledge and ability to apply delegation, higher decision-making skills, and high knowledge and ability to apply conflict resolution at the unit. On the other hand, the lowest score of leadership competency was knowledge of research process and ability to apply the research process.

Previous scholarly works revealed limited evidence on the leadership competency of health managers (12,13). Furthermore, other scholars reported that leadership capabilities are limitedly investigated in most LMICs (14). Moreover, a study by (15) revealed the limited empirical research on leadership competency related issues at the primary healthcare level in developing countries. This has resulted to a considerable knowledge gaps on the leadership competency of health managers in the LMICs that substantiate the need to be investigated (14,16). Thus, a reliable information is necessary to unveil the evidence on the leadership competency among primary healthcare facility managers in the LMICs including Tanzania (16,17). That have shown a knowledge gaps that needs to be contributed to.

On one hand, if this study will not be conducted there will be a continuing limited knowledge and empirical evidence on the leadership competency among primary healthcare managers in the LMICs. On the other hand, the limited knowledge and empirical evidence on the leadership competency of primary healthcare managers leads to limit the understanding of policy makers, stakeholders, health managers and researchers, on whether primary healthcare faciality managers know their leadership roles and have the required capacity. Consequently, leads to hinder and limit the efforts to improve leadership competency of the primary healthcare facility managers. With that respect, this research article aimed at contributing to the empirical evidence and knowledge on the leadership competency of primary healthcare facility managers in the LMICs including Tanzania.

MATERIALS AND METHODS

Study settings

The study conducted in the three District Councils, that were purposively selected based on their category of low, medium, and high performance of health facilities in Tanzania (18).

Research design

The study used a cross-sectional quantitative descriptive research design. In the cross sectional is whereby the measurable data on the leadership ability of primary healthcare managers were gathered at the same time. Also, the statistical evidence indicating the current status as being experienced in a perfectly typical and unchanging natural environment of the variables of interest in the current study was examined in the descriptive phase (19). The descriptive study design was used to reveal precisely what a certain group's characteristics are (20).

Measuring leadership competency

In the current study, Management Competency Assessment Project (MCAP) framework was adapted to measure leadership competency of primary healthcare facility managers. In the MCAP framework, the leading people and organisation domain with the following constructs were assessed. The leading people and teams (abilities to inform and educate influential decision makers, encourage ideas and identify opportunities and empower others to achieve goals indicators). Also, leading organization (developing and implementing a shared vision, managing with the broader organisational context as well as engage effectively in organizational decision-making indicators). Moreover, leader quality (encompasses aspects of flexibility to leadership style with respect to the situation, perseverance to achieve goals, establishing and maintaining personal and professional support network as well as being able to remain calm under pressure) (21).

The MCAP framework questionnaire with a seven-point Likert scale ranging from 1-not competent, 2-basic or novice, 3-advanced beginner, and 4-competent with occasional guidance. Likewise, 5-competent with no guidance, 6-proficient, and 7-superior expertise. Thereafter, the scores from 1 to 4 were considered as less than fully competent meaning primary healthcare facility managers needed assistance in performing their leadership duties and responsibilities. Similarly, the scores from 5 to 7 were considered as fully competent, meaning that primary healthcare facility managers do not need assistances in performing their leadership duties and responsibilities (21).

Pilot study

The pilot study was carried out using the questionnaire prior to the start of the actual data collection process. The pre-test of the questionnaire on style and approach was made possible by the pilot research (22,23). Pre-testing also provides an opportunity to evaluate if the research tools can gather valid and trustworthy data that is consistent with the study's purpose. Prior testing of the questionnaire was conducted at ten primary healthcare facilities. Utilizing (1%–10%) of the sample size that deemed sufficient (24). Similarly, a range of (5% to 10%) of the sample size was also recommended (25).

Sampling and data collection

The total of 102 public primary healthcare facilities were chosen using the complete enumeration sampling approach from the selected low, medium and high performing District Councils. It enlisted the study's participants by contacting managers of public primary healthcare facilities. The data was collected between September and December 2020. Survey was conducted to collect quantitative primary data to realize pre-stated objective and responding to research questions. In the survey questionnaires was administered to the primary healthcare facility managers of the public primary healthcare facilities. The survey intended to collect quantitative data related to the leadership competency of primary healthcare facility managers. In order to characterize and investigate relevant variables and constructs, the survey research method was an effective and valid strategy (26).

Data analysis

The Statistical Package for Socio Sciences (SPSS) version 25 was used to descriptively analyze the quantitative data. The results on the leadership competency of the primary healthcare facility managers were presented using descriptive statistics, including means and standard deviations.

Ethical consideration

The University of Dodoma, which is authorized to provide staff and students authorization to conduct research on behalf of the Tanzanian government and the Tanzania Commission for Science and Technology, gave ethical consent. The selected low, medium and high performing District Councils gave their approval for the study in their respective administrative councils after receiving the clearance. The primary healthcare facility managers were asked verbally for their consent. Respondents were advised that participation in the study was voluntary and that they might leave

at any time without facing any repercussions. Additionally, they received guarantees that all material would be kept confidential and that the study would maintain their identities (27).

RESULTS AND DISCUSSION

Leadership competency of primary healthcare facility managers

The leadership competency of the primary healthcare facility managers' ability in leading people and teams, leading organization, and leader quality were analysed.

Leading people and teams

With respect to leading people and teams, primary healthcare facility managers were assessed in their abilities to inform and educate influential decision makers, encourage ideas and identify opportunities and empower others to achieve goals (Table 1). Findings indicated the least mean competency score of 5.0 was noted in informing and educating influential decision makers as well as leading, developing and evaluating performance to build an effective team. On the other hand, the highest mean competency score of 5.1 was found for all other indicators. Also, the overall mean competency of 5.2 was noted in leading people and teams construct (Table 1). This establishes that, in all indicators related to leading people and teams primary healthcare facility managers scored slightly above the average mean competency. Overall, the results establish that, (27.45%) of the primary healthcare facility managers are less than fully competent, implies that, they needed assistance in performing their duties and responsibilities related to leading people and teams. The rest (72.55%) of the primary healthcare facility managers considered to be fully competent, and that they did not need any form of assistance in performing their duties and responsibilities related to the indicators within leading people and teams construct **(**Table 1**)**.

Related findings were observed among both the head nurses and directors working in Finland with specialized primary healthcare organizations and social care sector of nursing whose mean competency score of leadership competencies was quite good at 2.11 (28). On the other hand, conflicting findings show that those who were educated primarily as clinical experts and healthcare managers frequently lack core competencies of leaders (29). Similarly, managers in a study by Miller et al., were also found to have low competencies for team-building, (30). An explanation of this could be that, the managerial skills between two groups differ according to the characteristics of the respondents (31).

Similarly, the line managers' awareness of the manager's capacity to build future plans with the team (40%). Also, the manager's capacity to forge a unifying goal to unify the team and enable them to work cohesively to deliver (55%), and other skills were among the lowest reported nurse manager competencies. Likewise, the line manager is always seeking for ways to recognize and honor excellent performance (46%). Additionally, the capability of the line manager to give long-term coaching and mentoring (46%). Moreover, the ability of the line manager to identify high potential team members and concentrate development efforts on them (45%) (9).

Leading organization

Leading organization aspects of health managers' competency include developing and implementing a shared vision, managing with the broader organisational context as well as engage effectively in organizational decision making (Table 2). The study findings indicate that, the least mean competency score of 5.1 was found in managing with reference to the broader organizational context. Furthermore, the highest mean competency score of 5.2 was noted in engaging effectively in organizational decision making. The overall mean score competency was 5.1 in leading the organization (Table 2).

Similarly, the findings of the matching nature was witnessed among hospital managers in the South Africa, working in the public and private sectors who perceived themselves as relatively more competent in their ability to lead with a mean competency score of 4.02 (33). Also, in Iran, the mean score of management competency in leadership in general hospitals was found to be good at 3.49 (34). Likewise, in South Africa, the clinic nursing managers working in Gauteng (an urban province) and Free State (a mixed urban–rural province) overall rated themselves high on leadership and management with a mean score competency of 8.67 (35). Equally, clinic nursing managers rated themselves high in planning and priority setting (8.6) (36). On a similar move, a group of private and public hospital managers in South Africa perceived themselves relatively more competent in their ability to plan (4.14) (33).

Overall, this establishes that, (33.33%) of the primary healthcare facility managers considered themselves less than fully competent, meaning that, (33.33%) of primary healthcare facility managers needed assistance in

performing their managerial duties and responsibilities related to leading organization. The rest, (66.67%) of the primary healthcare facility managers were considered as fully competent, in that they did not need any form of assistance in performing their duties and responsibilities related to the indicators within leading organization construct (Table 2). Also, managers considered themselves more competent in the dimensions of leadership and strategic management (37). Additionally, the greatest reported nurse manager competency scores (73%) were found to be in motivating a shared purpose (9).

Leader quality

The leader quality encompasses aspects of flexibility to leadership style with respect to the situation, perseverance to achieve goals, establishing and maintaining personal and professional support network as well as being able to remain calm under pressure (Table 3). The study findings indicate the highest mean competency score of 5.5 in adapting leadership style to suit the situation (Table 3). This implies that, primary healthcare facility managers were more capable in adapting leadership style to suit the situation.

The results indicate further that, the majority (38.24%) of the primary healthcare facility managers rated themselves at the proficient level of managerial competency in the area of leader quality. This communicate that (38.18%) of the primary healthcare facility managers always applied competency appropriately in their role and with extensive experience in performing their duties and responsibilities related to the indicators within leader quality construct (**Table** 3). Overall, this establish that, (**19.6%)** of the primary healthcare facility managers were considered less than fully competent, meaning that, primary healthcare facility managers needed assistance in performing their managerial duties and responsibilities related to leader quality. The rest, (**80.4%)** of the primary healthcare facility managers were considered to be fully competent, in that they did not need any form of assistance in performing their duties and responsibilities related to the indicators within leader quality construct **(Table** 3). This proves that, in the pool of primary healthcare facility managers, more than three quarter of them were capable in demonstrating competency in their managerial duties and responsibilities related to leader quality without any assistance. This higher rating in leadership could also be explained by the reflection that, some key issues in the leadership were taught in their formal clinical classes.

CONCLUSION

Overall, the study establishes that, (27.45%) and (72.55%) of the primary healthcare facility managers considered themselves as less than fully competent and full competent respectively related to the indicators within leading people and teams. Similarly, (33.33%) and (66.67%) of the primary healthcare facility managers are less than full competent and full competent respectively in the indicators within leading organization construct. Moreover, (19.6%) and (80.4%) of the primary healthcare facility managers were considered less than fully competent and fully competent respectively in performing their duties and responsibilities related to the indicators within leader quality construct.

Recommendations

There is a need to improve leadership competency of primary healthcare facility managers, in the areas of leading people and teams, leading organization and the leader quality. The emphasis should be more prominence in leading organization that revealed to have a large proportion of primary healthcare facility managers perceived to be less than competent. Also, based the evidence that training is a tool to strengthen key managerial competencies backs up the recommendations . Similarly, training leadership is crucial due to the need for learning and renewal brought on by ongoing organizational changes . Similarly, the capability of health service management to deal with complex as well as dynamic nature of health system has empirically evidenced to be improved potentially by formal training and education, continuous professional development, on the job coaching, mentoring, role modelling work-based as well as experiential learning .

Conflict of interest: The authors declare no conflict of interest.

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Author's contribution: Kingu UA, Ismail JI and Kibusi SM carried out the Proposal development, Data collection, Data analysis, Manuscript preparation

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Table 1: Summary of statistics for leading people and teams indicators

Statement	Not competent	Basic/ novice	Adv beginner	Comp, guidance	Comp, no guidance	Proficient	Super Expert	M (SD)
Informs and educates decision makers	0 (0.00)	7 (6.86)	10 (9.80)	25 (24.51)	12 (11.76)	26 (25.49)	22 (21.57)	5.0 (1.5)
Leads and evaluates performance	0 (0.00)	2 (1.96)	10 (9.80)	27 (26.47)	19 (18.63)	28 (27.45)	16 (15.69)	5.1 (1.3)
Empowers others to achieve goals	0 (0.00)	4 (3.92)	12 (11.76)	17 (16.67)	20 (19.61)	30 (29.41)	19 (18.63)	5.1 (1.4)
Identifies opportunities	0 (0.00)	2 (1.96)	13 (12.75)	18 (17.65)	24 (23.53)	33 (32.35)	12 (11.76)	5.1 (1.3)
Leading people and teams	0 (0.00)	2 (1.96)	8 (7.84)	18 (17.65)	26 (25.49)	35 (34.31)	13 (12.75)	5.2 (1.2)

Table 2: Summary of statistics for leading organization indicators

Statement	Not competent	Basic/ novice	Adv beginner	Comp, guidance	Comp, no guidace	Proficient	Super Expert	M (SD)
Develops and implements vision	0 (0.00)	3 (2.94)	7 (6.68)	25 (24.51)	16 (15.69)	35 (34.31)	16 (15.69)	5.2 (1.3)
Manages with the broader org. context	0 (0.00)	3 (2.94)	11 (10.78)	21 (20.59)	19 (18.63)	35 (34.31)	13 (12.75)	5.1 (1.3)
Engages in org. decision-making	0 (0.00)	4 (3.92)	5 (4.9)	26 (25.49)	16 (15.69)	33 (32.35)	18 (17.65)	5.2 (1.3)
Overall leading	0 (0.00)	1 (0.98)	9 (8.82)	24 (23.53)	22 (21.57)	33 (32.35)	13 (12.75)	5.1 (1.2)

Table 3: Summary of statistics for leader quality indicators

Statement	Not competent	Basic/ novice	Adv beginner	Comp, guidance	Comp, no guidace	Proficient	Super Expert	M (SD)
Adapts leadership style to suit the situation	0 (0.00)	6 (5.88)	5 (4.90)	10 (9.80)	18 (17.65)	36 (35.29)	27 (26.47)	5.5 (1.4)
Establishes and maintains network	0 (0.00)	4 (3.92)	5 (4.90)	18 (17.65)	21 (20.59)	38 (37.25)	16 (15.69)	5.3 (1.3)
Perseveres to achieve goals	1 (0.98)	5 (4.90)	5 (4.90)	12 (11.76)	25 (24.51)	36 (35.29)	18 (17.65)	5.3 (1.4)
Demonstrates confidence and commitment	0 (0.00)	1 (0.98)	13 (12.75)	14 (13.73)	18 (17.65)	38 (37.25)	18 (17.65)	5.3 (1.3)
Remains calm under pressure	0 (0.00)	6 (5.88)	8 (7.84)	14 (13.73)	13 (13.73)	38 (37.25)	23 (22.55)	5.4 (1.5)
Overall	0 (0.00)	2 (1.96)	6 (5.88)	12 (11.76)	31 (30.39)	39 (38.24)	12 (11.76)	5.3 (1.1)