

## HEALTHCARE MANAGERS' MANAGERIAL COMPETENCY IN ENABLING AND MANAGING CHANGES: EVIDENCE FROM PRIMARY HEALTHCARE MANAGERS IN TANZANIA

Ukende A. Kingu<sup>1</sup>

<https://orcid.org/0000-0002-4908-3666>

Ismail J. Ismail<sup>2</sup>

<https://orcid.org/0000-0003-4649-2912>

Stephen M. Kibusi<sup>3</sup>

Recebido: 30.08.2023

ACEITO: 30.11.2023

Publicado: 15.01.2024

### ABSTRACT

This research article examined the primary healthcare managers' managerial competency in enabling and managing changes. The study was conducted in Tanzania. This study used a cross-sectional research approach. A census sampling approach was used to gather data from one hundred and two healthcare managers. Utilizing SPSS version 25, statistical product and service solutions were used to analyze the data that had been gathered. Results show that, about the indicators within the preparation for change, implementation of change, evaluation of change, and leadership qualities concerning lead changes constructs, respectively, (73.53%), (65.69%), and (76.47%) of the healthcare managers are competent, and (26.47%), (34.31%), and (23.53%) are less competent. The study concludes that primary healthcare managers in Tanzania have shown both levels of competence and less competent practices in facilitating and managing changes.

**Keywords:** Managerial competency; Preparation for change; Implementation of change; Evaluation of change; Leadership qualities for changes.

*Competência de gestão dos gestores de cuidados de saúde para permitir e gerir a mudança: evidências dos gestores de cuidados de saúde primários na Tanzânia*

### RESUMO

Este artigo de investigação examinou a competência de gestão dos gestores dos cuidados de saúde primários na viabilização e gestão da mudança. O estudo foi realizado na Tanzânia tendo utilizado uma abordagem de investigação transversal. Foi utilizado um método de amostragem por censo para recolher dados de cento e dois gestores de cuidados de saúde. A análise dos dados recolhidos foi efetuada com recurso a soluções de produtos e serviços estatísticos SPSS versão 25. Os resultados demonstram que, relativamente aos indicadores dos constructos, preparação para a mudança, implementação da mudança, avaliação da mudança e qualidades de liderança na orientação da mudança, respetivamente, (73,53%), (65,69%) e (76,47%) dos gestores de saúde são competentes e (26,47%), (34,31%) e (23,53%) são menos competentes. O estudo conclui que os gestores dos cuidados de saúde primários na Tanzânia revelaram níveis de competência e práticas menos competentes na facilitação e gestão da mudança.

**Palavras-chave:** Competência de gestão; Preparação para a mudança; Implementação da mudança; Avaliação da mudança; Qualidades de liderança para a mudança.

*Competencia gerencial de los administradores de atención médica para permitir y gestionar cambios: evidencia de administradores de atención primaria de salud en Tanzania*

### RESUMEN

Este artículo de investigación examinó la competencia gerencial de los administradores de atención primaria de salud para permitir y gestionar cambios. El estudio se realizó en Tanzania. Este estudio utilizó un enfoque de investigación transversal. Para recopilar datos de ciento dos administradores de atención sanitaria, se utilizó un método de muestreo censal. Utilizando SPSS versión 25, se utilizaron soluciones estadísticas de productos y servicios para

<sup>1</sup> Lecturer, Department of Business Management, Mbeya University of Science and Technology, Mbeya, Tanzania. [ukendekingu@yahoo.com](mailto:ukendekingu@yahoo.com)

<sup>2</sup> PhD, Senior Lecturer, Department of Business Administration and Management, University of Dodoma, Tanzania. [ismailismail1977@gmail.com](mailto:ismailismail1977@gmail.com)

<sup>3</sup> PhD, Senior Lecturer, Department of Public Health, University of Dodoma, Tanzania. [skibusi@gmail.com](mailto:skibusi@gmail.com)

analizar los datos que se habían recopilado. Los resultados muestran que, con relación a los indicadores dentro de los constructos preparación para el cambio, implementación del cambio, evaluación del cambio y cualidades de liderazgo con respecto a liderar cambios, respectivamente, (73,53%), (65,69%) y (76,47%) de los gestores sanitarios son competentes, y (26,47%), (34,31%) y (23,53%) son menos competentes. El estudio concluye que los administradores de atención primaria de salud en Tanzania han mostrado niveles de competencia y prácticas menos competentes para facilitar y gestionar los cambios.

**Palabras clave:** Competencia gerencial; Preparación para el cambio; Implementación del cambio; Evaluación del cambio; Cualidades de liderazgo para el cambio.

## Introduction

Examining the healthcare managers' ability in enabling and managing changes in the context of low- and middle-income countries (LMICs) is very important (Cleary et al., 2018; Hahn & Gil, 2019; Kingu et al., 2023; Le-Dao et al., 2020). This is due to the fact that its evaluation will provide knowledge and empirical evidence to our understanding of how well primary healthcare managers are able to enable and manage changes.

The understanding of healthcare managers' ability to manage changes, this is because it enables organizational transformation towards efficiency and achieves value based on healthcare and organizational strategic goals (AwadAllah & Salem, 2021; Cleary et al., 2018; Hahn & Gil, 2019, Le-Dao et al., 2020). Moreover, managing of organizational change is now one of the key responsibilities of health service managers (Daouk-Öyry, 2020; Ndayishimiye et al., 2023). Public health organizations must effectively and systematically manage change since doing so is associated with increased of organizational performance (Thompson, 2010). Likewise, as a result of technological improvements, aging populations, shifting illness patterns, novel medical discoveries, political reforms, and policy efforts, health care organizations cannot move away from undergoing ongoing change (Nilsen et al., 2020).

Despite the important need to understand enabling and managing changes ability of health service managers, limited knowledge and empirical evidence exist in the context of LMICs (Daouk-Öyry, 2020; Figueroa et al., 2019; Kingu et al., 2023; Le-Dao et al., 2020).

Furthermore, in Jos Metropolis, a cross-sectional, multicenter comparison analysis of the perceived competencies of doctor-managers working with public and private hospitals was conducted. Results showed that more respondents from private hospitals gave their doctor-managers higher ratings than the median for the transformation domain's accomplishment-oriented and innovative thinking subcomponents (Yakubu et al., 2019).

Another study examined the perspectives of the New South Wales state's leaders and workers on managing change. In this, 16 healthcare managers and leaders were interviewed in a semi-structured interview. Thematic analysis was applied to the collected data. Results show a dearth of agreement on frameworks and approaches for managing transformation for every scope or measure of transformation, a lack of resources to implement, manage, and lead changes, a lack of leadership, and aptitude to manage changes, and a requisite for provision and values backing transformation at whole levels of the system (Le-Dao et al., 2019).

Previous research works have shown limited confirmation on the ability of health managers' to enable and manage changes (Daouk-Öyry, 2020; Le-Dao et al., 2019). Likewise, other scholars informed the limited investigation in understanding health managers ability in enabling and managing changes in most LMICs (Daouk-Öyry, 2020; Le-Dao et al., 2019). Moreover, other studies revealed inadequate empirical investigation of leadership capability associated matters at the primary care level in developing countries (Barsbay & Öktem, 2021). Thus has commanded to significant information breaches on the ability of managers' in LMICs to enable and manage change, which supports the need for investigation (Kingu et al., 2023; Le-Dao et al., 2019). Thus, dependable statistics are deemed essential to reveal the substantiation on the enabling and managing changes capability amongst primary healthcare facility managers in the context of limited

resource settings containing Tanzania (Le-Dao et al., 2020). That has revealed a knowledge gap that has to be filled.

On the one hand, there will continue to be a lack of knowledge and empirical evidence regarding the ability of primary healthcare managers in LMICs to enable and manage changes. On the other hand, policymakers, stakeholders, health managers, and researchers may not fully understand whether primary healthcare facility managers are proficient in facilitating and managing changes due to the paucity of knowledge and empirical evidence in this area. In light of this, the objective of this study was to examine the primary healthcare managers' managerial competency in enabling and managing changes.

## **Methods and Material**

The study was conducted in the three District Councils, that were purposively selected to represent low, medium, and high-performance groupings of the Tanzanian healthcare facilities (Ministry of Health Community Development Gender Elderly and Children, 2018). The study used a cross-sectional investigation strategy. In which the quantifiable records on the primary healthcare managers' capacity for facilitating and managing change were gathered once and at the same time. The framework for the Management Competency Assessment Project (MCAP) was revised in the current study to assess primary healthcare facility managers' ability to enable and manage changes. In the MCAP framework, the enabling and managing change ability of health managers was assessed based on the following constructs: preparation for change, implementation and evaluation of changes, and leader quality to facilitate changes. The change preparation ability of health managers includes their abilities to explain the need for change, assess readiness for change as well as anticipate and appreciate the impact of change. Also, the change implementation and evaluation competency of health managers encompasses the managers' ability to implement change, effectively manage the transition process and evaluate the process and outcomes of change. Moreover, the leader quality in change management competency of health managers includes their ability to act accountably and accept personal responsibilities, balance consultation in decision-making as well as identify and tolerate ambiguity (Liang et al., 2018). 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 less than fully competent meaning managers needed assistance in enabling and managing changes duties and responsibilities. Similarly, the scores from 5 to 7 were considered fully competent, meaning that managers do not need assistance in performing their enabling and managing changes duties and responsibilities (Liang et al., 2018).

Before the actual data gathering procedure began, the pre-testing of the data collection tool was steered. The pre-test of the questionnaire enables the test on approach and style (Majid et al., 2017). Pre-testing offers an opportunity to evaluate whether the questionnaire have a potential to gather dependable data that is in line with the study's goal. Prior testing of the questionnaire was conducted at ten primary healthcare facilities. Utilizing (1%–10%) of the sample size that deemed sufficient (Van Teijlingen & Hundley, 2001). Similarly, a (5% to 10%) of the sample size was similarly suggested (M. Mugenda & G. Mugenda, 2012).

The census method was used to pick the 102 public primary healthcare facilities from the selected District Councils. From September to December 2020, is the time whereby data was collected. A survey was carried out to collect primary data in order to achieve the stated objectives. In the survey, questionnaires were administered to the facility managers. The survey collected data connected to the enabling and managing changes ability of facility managers. The survey study technique was a valuable and effective method to characterize and examine pertinent variables and constructs (Ponto, 2015). The statistical product and service solution version 25 was used to

analyze the quantitative data. The results were reported using descriptive statistics that included means and standard deviations.

The University of Dodoma provided ethical clearance to conduct this study. Ethical clearance was presented to the respective District Councils that approve the study to be conducted in their respective administrative councils. The primary healthcare facility managers were asked verbally for their consent. Respondents were advised that involvement in the research was by their choice and that they might withdraw from the study at whichever time without facing any consequences. Additionally, their research guarantees that all material would be kept confidential and that the study would maintain their identities (Fouka & Mantzorou, 2011).

## Results

### Enabling and Managing Change Managerial Ability of Primary Healthcare Facility Managers

The constructs of preparations for changes, implementation and evaluation of changes, and leader quality ability for change were all examined in relation to health managers' capacity for facilitating and managing changes.

#### Change Preparation

Change preparation competency of health managers includes their abilities to explain the need for change, assess readiness for change as well as anticipate and appreciate the impact of change (Table 1).

**Table 1.**

Summary of Statistics for Change Preparation Indicators

Statement	Not competent	Basic/novice	Adv beginner	Comp, guidance	Comp, guidance	no	Proficient	Super Expert	M (SD)
Explains the need for change	0 (0.00)	3 (2.94)	9 (8.82)	15 (14.71)	17 (16.67)	35 (34.31)	23 (22.55)	5.4 (1.4)	
Assesses readiness for change	0 (0.00)	4 (3.92)	9 (8.82)	23 (22.55)	19 (18.63)	31 (30.39)	16 (15.69)	5.1 (1.4)	
Uses evidence to appraise options	0 (0.00)	3 (2.94)	9 (8.82)	26 (25.49)	25 (24.51)	24 (23.53)	15 (14.71)	5.0 (1.3)	
Anticipates the impact of change	0 (0.00)	3 (2.94)	8 (7.84)	29 (28.43)	25 (24.51)	26 (25.49)	11 (10.78)	4.9 (1.2)	
Overall	0 (0.00)	1 (0.98)	5 (4.90)	21 (20.59)	34 (33.33)	25 (24.51)	16 (15.69)	5.2 (1.2)	

#### Change Implementation and Evaluation

The change implementation and evaluation competency of health managers encompasses the managers' ability to implement change and effectively manages the transition process and evaluate the process and outcomes of change (Table 2).

**Table 2.**

Summary of Statistics for Change Implementation and Evaluation Indicators

Statement	Not competent	Basic/novice	Adv beginner	Comp, guidance	Comp, guidance	no	Proficient	Super Expert	M (SD)
Implements change and manages the transition	0 (0.00)	3 (2.94)	10 (9.80)	29 (28.43)	15 (14.71)	29 (28.43)	16 (15.69)	5.0 (1.4)	
Evaluates the processes and outcomes of change	0 (0.00)	3 (2.73)	14 (12.73)	22 (21.57)	19 (18.63)	32 (31.37)	12 (11.76)	5.0 (1.4)	
Overall	0 (0.00)	2 (1.96)	9 (8.82)	24 (23.53)	20 (19.61)	29 (28.43)	18 (17.65)	5.2 (1.3)	

## Leader Quality in Change

The leader quality in change management competency of health managers includes their ability to act accountably and accept personal responsibilities, balance consultation in decision making, and to identify and tolerate ambiguity (Table 3).

**Table 3.**

Summary of Statistics for Leader Quality in Change Indicators

Statement	Not competent	Basic/novice	Adv beginner	Comp, guidance	Comp, no guidance	Proficient	Super Expert	M (SD)
Accepts personal responsibility	0 (0.00)	2 (1.96)	8 (7.84)	19 (18.63)	20 (19.61)	29 (28.43)	24 (23.53)	5.4 (1.3)
Balances consultation in decision	0 (0.00)	0 (0.00)	8 (7.84)	24 (23.53)	15 (14.71)	35 (34.31)	20 (19.61)	5.3 (1.3)
Recognizes, and tolerates ambiguity	0 (0.00)	4 (3.92)	6 (5.88)	18 (17.65)	18 (17.65)	33 (32.35)	23 (22.55)	5.4 (1.4)
Overall	0 (0.00)	0 (0.00)	6 (5.88)	18 (17.65)	29 (28.43)	30 (29.41)	19 (18.63)	5.4 (1.2)

## Discussion

### Change Preparation

Change preparation competency of health managers includes their abilities to explain the need for change, assess readiness for change as well as anticipate and appreciate the impact of change (Table 1).

The study findings noted the least mean competency score of 4.9 in anticipating and appreciating the impact of change and plan accordingly. On the other hand, the highest mean competency score was 5.4 observed to explain the need for change in an effective way (Table 1). Thus, primary healthcare facility managers were better in explaining the need for change effectively than their ability in all other indicators within change preparation.

The results indicate further that the majority (33.33%) of the managers working with healthcare facilities were assessed themselves to be at the competent with no guidance managerial competency level in the area of change preparation. Thus, (33.33%) of the managers working with healthcare facilities could commonly establish competency in performing their role independently, though they had no account comprehensive experience in their duties and responsibilities related to the indicators within the change preparation construct. Generally, overall, this establishes that, (26.47%) of the managers working with healthcare facilities were less competent; this means that (26.47%) of the primary healthcare facility managers needed support in performing their managerial duties and responsibilities related to change preparation. The rest, (73.53%) of the managers working with healthcare facilities were fully competent, in that they do not need of any form of assistance in undertaking their roles related to the indicators within the change preparation construct (Table 1). Similar findings reported the need for training in change management (Stoller, 2014).

### Change Implementation and Evaluation

The implementation of changes and its evaluation competency of health managers encompasses the managers' ability to implement change, effectively manage the transition change, effectively manage the transition process, and evaluate the process and outcomes of change (Table 2).

The findings in (Table 2) indicate that, the same mean competency score of 5.0 was observed in implementing change, effectively manage the transition process and evaluating the processes and outcomes of change. With the overall mean competency score of 5.2 was noted in change implementation and evaluation.

The results indicate further that, the majority (28.43%) of the primary healthcare facility managers gaged themselves at the proficient level of managerial competency in the area of change implementation and evaluation. This reveals that, (28.43%) of the managers in health facilities constantly applied competency correctly in their roles and with broad experience in their roles related to the indicators within implementation of changes and its evaluation construct. Overall, this establishes that, (34.31%) of the managers are less competent, this means (34.31%) of managers in the primary healthcare facility needs form of assistance in their managerial roles related to change implementation and evaluation. The rest, (65.69%) of the managers were considered to be fully competent, in that they were in no need of any form of assistance in performing their responsibilities related to the indicators within change implementation and evaluation construct (Table 2). The fact that most mid-level healthcare managers are ill-equipped to produce results may be a contributing factor in the poor score for change management competency. This result, many managers struggled to lead their facilities through change and became disengaged (Al-Maqbali, 2019). Also, 43% of respondents reported a skill gap in change management (Bogaert et al., 2019). Similarly, scholars established an evidence of nurse managers' competency for two university hospitals (public and private) and one public hospital and reported least competent area was in making decision (Bilgin & Torun, 2023).

### **Leader Quality in Change**

As revealed in (Table 3), the study's results indicate the least mean competency score of 5.3 in effectively balancing consultation and decisiveness in decision-making constructs, with a score of 5.4 across other indicators were observed to be the same as overall score of 5.4. Thus, the primary healthcare facility managers have almost equal abilities in demonstrating proficiencies in their duties and responsibilities in all indicators related to leader quality in change. A similar result was reported by (Kakemam & Dargahi, 2019) that, in general hospitals in Iran, the average score for management competency in change management at all levels was determined to be good (3.26). The further indicated results that, the majority (29.41%) of the managers were at the proficient level of managerial competency in the area of leader quality in change. This revealed that, (29.41%) of the managers working with primary health facilities always applied competency appropriately in their role and with extensive experience in their duties and responsibilities related to the indicators within leader quality in change construct. Overall, the findings established that, (23.58%) of the managers working with primary health facilities were considered to be less skilled, thus wanted to help in the execution of their managerial duties linked to leader quality in change. The rest (76.47%) of the healthcare managers were considered fully knowledgeable, in that they do not need of any support in carrying out their responsibilities related to the indicators within leader quality in change construct (Table 3).

A study by Kakemam & Dargahi (2019) indicated a similar results that, The best hospital managers in terms of change management were determined to be from Tehran, Iran. In a similar manner, the study conducted by (Jiyenze et al., 2023; Tataw and Stokes 2023), revealed the similar results showing limited competency level on leadership amongst health managers in different councils. According to Liang et al. (2018), just about 4% of Victoria, Australia's health service managers were unable to demonstrate the competency of "enabling and managing change. This finding is consistent with the finding that the mean score of management competency in change management at various levels in general hospitals in Iran was found to be 3.26 (Kakemam & Dargahi, 2019). However, contrary results showed that participants had lower competencies in change management (Liang et al., 2018). This may be explained by the fact that, depending on the respondents' characteristics, the two groups' managerial abilities varied (Al-Momani, 2018).

## Conclusions

This study concludes that, (26.47%) and (73.53%) of the managers in public primary healthcare facilities are less competent and competent respectively related to the indicators within change preparation construct. Similarly, the indicators within the construct for change implementation and evaluation show that (34.31%) and (65.69%) of the managers are less competent and competent respectively. Moreover, (23.53%) and (76.47%) of the managers of the primary healthcare facilities were less competent and competent respectively in performing their managerial tasks related to leader quality in change construct. Thus, primary healthcare managers in the study site exhibited competent and less than competent levels of managerial competency in enabling and managing changes.

The study recommends to improve enabling and managing changes capability of managers' works with primary healthcare facilities in the constructs of: preparation for change, implementation and evaluation for changes, and the leader qualities in facilitating changes. The emphasis needs to be placed more heavily on change implementation and evaluation, as it shown that many primary healthcare facility managers were viewed as below competent levels.

Findings implies that, there is a proportion of primary healthcare facility managers perform their enabling and managing changes management duties with limited competency. This offers an optimistic message with a great opportunity, to improve the current level of healthcare managers' managerial competency in enabling and managing changes.

The current study is limited to the primary level of healthcare, so it is suggested that future research should increase the heterogeneous population of the study by including healthcare facilities at secondary, tertiary and national level. Furthermore, the current study is limited to public health institutions, so it is suggested that upcoming researchers should consider district-designated hospitals, teaching hospitals, private and religious organizations.

## Acknowledgement

The research acknowledges the financial support from Mbeya University of Science and Technology, Tanzania. The scholarship as part of the PhD study.

## Competing Interest

None

## References

- Al-Maqbali, M. (2019). Transdisciplinarity: What competencies do future healthcare managers need to succeed. *Journal of Nursing Research Practices*, 3(1), pp.5-10. <https://www.researchgate.net/publication/332414030.pdf>.
- Al-Momani, M.M. (2018). Exploring characteristics and perceptions of private hospital physician managers regarding their management training needs. *Biomedical Research*, 29(8), pp.1712-1717. <https://doi.org/10.4066/29-17-2055>.
- AwadAllah, M.B. and Salem, G.M. (2021). Managerial Competencies of Primary Health Care Managers. *Egyptian Journal of Occupational Medicine*, 44(1), pp.35–46. [https://ejom.journals.ekb.eg/article\\_143333\\_c9f33b684ac494e91c77f9017d234d31.pdf](https://ejom.journals.ekb.eg/article_143333_c9f33b684ac494e91c77f9017d234d31.pdf).
- Barsbay, M.C. and Öktem, M.K. (2021). The Competency Movement in Public Hospitals: Analysing the Competencies of Hospital Executive Managers. *Transylvanian Review of Administrative Sciences*, 17(62), pp.22-43. <http://dx.doi.org/10.24193/tras.62E.2>
- Bilgin O, and Torun S (2023). Determination of the managerial competencies of clinical nurse managers: Self-assessment. *Journal of Health and Nursing Management*, 10(1), pp.1-9. <http://doi.org/10.54304/SHYD.2023.41033>.
- Bogaert, K., Castrucci, B.C., Gould, E., Rider, N., Whang, C. and Corcoran, E. (2019). Top training needs of the governmental public health workforce. *Journal of Public Health Management and*

- Practice*, 25(2 Suppl), p.S134. <https://doi.org/10.1097/PHH.00000000000000936>.
- Cleary, S., Toit, A.D., Scott, V. and Gilson, L. (2018). Enabling relational leadership in primary healthcare settings: lessons from the DIALHS collaboration. *Health Policy and Planning*, 33(suppl\_2), pp.ii65-ii74. <https://doi.org/10.1093/135>.
- Daouk-Öyry, L., Sahakian L., and van de Vijver, F. (2020). Evidence-Based Management Competency Model for Managers in Hospital Settings. *British Journal of Management*, (00), pp.1–20. <http://doi.org/10.1111/1467-8551.12434.pdf>.
- Figueroa, C.A., Harrison, R., Chauhan, and Meyer, L (2019 ). Priorities and challenges for health leadership and workforce management globally: a rapid review. *BMC Health Service Research* 19(239). <https://doi.org/10.1186/s12913-019-4080-7>.
- Fouka, G. and Mantzorou, M. (2011). What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing?. *Health science journal*, 5(1), pp.3-14. <https://www.researchgate.net/publication/233959936>.
- Hahn, C.A. and Gil Lapetra, M. (2019). Development and use of the leadership competencies for healthcare services managers assessment. *Frontiers in Public Health*, 7(34). <https://doi.org/10.3389/fpubh.2019.00034>.
- Jiyenze, K. M., Sirili, N., Ngocho, J. S., Kikula, A., Chikoti, B., Kapologwe. N., Kengia, T.J. (2023). Strengthening health management, leadership, and governance capacities: What are the actual training needs in Tanzania? *Health Science Reports*. <https://doi.10.1002/hsr2.1158>.
- Kakemam, E. and Dargahi, H. (2019). Competencies gap in Hospital Management in Tehran, Iran: a cross-sectional survey. *Journal of Health Management*, 21(4), pp.451-464. <https://doi/pdf/10.1177/0972063419884412>.
- Kingu, U. A., Ismail, I. J., and Kibusi, S. M. (2023). Managerial Competency of Primary Healthcare Facility Managers in the Selected District Councils in Tanzania. *Management & Economics Research Journal*, 5(1), 45-65. <https://doi.org/10.48100/merj.2023.277>.
- Le-Dao, H., Chauhan, A., Walpolo, R., Fischer, S., Schwarz, G., Minbashian, A., Munro, A., D'Arcy, E., Allan, J. and Harrison, R. (2020). Managing complex healthcare change: a qualitative exploration of current practice in New South Wales, Australia. *Journal of Healthcare Leadership*, 10(12). pp.143-151. <https://doi.org/10.2147/S274958>.
- Liang, Z., Blackstock, F.C., Howard, P.F., Briggs, D.S., Leggat, S.G., Wollersheim, D., Edvardsson, D. and Rahman, A. (2018). An evidence-based approach to understanding the competency development needs of the health service management workforce in Australia. *BMC Health Services Research*, 18(976). pp.1-12. <https://doi.org/10.1186/s12913-018-3760-z>.
- Majid, M.A.A., Othman, M., Mohamad, S.F. and Lim, S.A.H. (2017). Employee satisfaction with offshore catering job: Piloting for interviews. *International Journal of Academic Research in Business and Social Sciences*, 7(10), pp.729-737. <http://dx.doi.org/10.6007710/3428>.
- Ministry of Health Community Development Gender Elderly and Children. Health facility performance. Dar es Salaam: Ministry of Health. (2018). [http://www.tzdpq.or.tz/fileadmin/documents/dpg\\_internal/dpg\\_working\\_groups\\_clusters/cluster\\_2/health/JAHSR\\_2018/2\\_Health\\_facility\\_performance.pdf](http://www.tzdpq.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/JAHSR_2018/2_Health_facility_performance.pdf).
- Mugenda, O.M. and Mugenda, A.G. (2012). Research methods dictionary. Nairobi. *Kenya Applied Research and Training Services, Kenya*
- Ndayishimiye C, Dubas-Jakóbczyk K, Holubenko, A and Domagala, A (2023) Competencies of hospital managers – A systematic scoping review. *Frontiers in Public Health*. 11(1130136). <https://doi.org/10.3389/fpubh.2023.1130136>.
- Nilsen, P., Seing, I., Ericsson, C., Birken, S.A. and Schildmeijer, K. (2020). Characteristics of successful changes in health care organizations: an interview study with physicians, registered nurses and assistant nurses. *BMC health services research*, 20(147). pp.1-8. <https://doi.org/10.1186/s12913-020-4999-8>
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the advanced practitioner in*

- oncology*, 6(2):168-71 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/>
- Stoller, J.K. (2014). Help wanted: developing clinician leaders. *Perspectives on medical education*, 3(3), pp.233-237. <https://doi.org/10.1007/s40037-014-0119-y>.
- Tataw, B.D, and Stokes, E. W., (2023). Leadership in interProfessional healthcare practice (IPHP): Readiness, roles, and competencies for healthcare managers and human resource professionals. *Journal of Interprofessional Education & Practice*, 32, <https://doi.org/10.1016/j.xjep.2023.100635>.
- Thompson, J.M. (2010). Understanding and managing organizational change: implications for public health management. *Journal of Public Health Management and Practice*, 16(2), pp.167-173. <https://doi.org/10.1097/phh.0b013e3181c8cb51>
- Yakubu, K., Dankyau, M. and Lodenyo, M. (2019). A comparison of leadership competencies among doctors practicing in public and private hospitals in Jos metropolis of Plateau State, Nigeria. *Annals of African medicine*, 18(1), p.23-29. [https://doi.org/10.4103\\_9\\_18](https://doi.org/10.4103_9_18).