

Leading The Way: Insights Into Leadership Competencies And Healthcare Performance; A Systematic Review

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Abstract

Background: The research was carried out to understand the impact of leadership competencies on healthcare performance in Saudi Arabia. **Aim:** The purpose of the systematic review is to carefully analyze the existing literature on leadership competencies and their influence on healthcare performance. **Method:** A systematic search of databases including PubMed and Google Scholar was conducted to identify relevant studies published between 2012-2022. The inclusion criteria for this study consisted of selecting articles written in English that specially examined leadership competencies and healthcare performance. Additionally, the chosen articles had to use well-established scales for measurement and provide valuable data on leadership competencies and healthcare performance in the hospital setting. After initial screening and quality assessment, twelve studies were included in the synthesis. **Results:** It revealed a consistent link between leadership competencies and healthcare performance. Different leadership competencies were highlighted which are directly associated with the growth and development of healthcare professionals. **Conclusion:** The review underscores the importance of leadership competencies and their role in healthcare performance which is directly linked with healthcare professionals and the healthcare system at large.

Keywords: Leadership Competencies, Healthcare, Performance.

Introduction

Today's healthcare systems encounter numerous challenges. These encompass increasing healthcare demands and expenses due to a growing elderly population with diseases and

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various ailments, compounded by the influx of new medical technologies. These issues are exacerbated by imbalances and shortages in the workforce, as well as substandard quality and safety of service delivery. Furthermore, disparities in healthcare access, deficient quality of care, and an inadequately skilled health workforce are among the significant hurdles faced by the healthcare system in Saudi Arabia (AL ALI et al., 2022; Alotaibi et al., 2022; Hejazi et al., 2022). The healthcare system in Saudi Arabia is rapidly evolving, as services develop to meet the 2030 vision in providing a comprehensive, effective and integrated health system (Harb et al., 2022).

Healthcare leaders and managers must exhibit essential competencies encompassing knowledge, skills, and attitudes to effectively carry out managerial duties and meet their responsibilities. Despite the reiterated need to develop leadership and management competencies in hospitals and recognize management as a legitimate profession, current efforts have fallen short without clear focus and direction. International literature has established the presence of fundamental leadership and management competencies for health service managers, with several proposed management competency frameworks. These endeavors can serve as a valuable guide for healthcare systems across various countries and contexts, aiding in establishing training and development strategies for healthcare managers (Heinen et al., 2019).

This paper aims to present and discuss the outcomes of a systematic literature review aimed at addressing the following inquiries:

1. What core leadership and management competencies have consistently been acknowledged as necessary for healthcare professionals?
2. What behavioral indicators can be utilized to demonstrate/assess each of these core competencies?

The management competency assessments program (MCAP) has already been developed and implemented for the assessment of leaders' competencies working in the healthcare sector. The health leadership competency model is comprised of people, transformation, and execution (Figure:1). It is anticipated that the study's findings can inform the enhancement of the current health administration training curriculum in Saudi Arabia and guide the recruitment and professional development provision for existing leaders and managers in Saudi hospitals.



Figure 1: Health Leadership Competencies Model

Methodology

Literature Search

A comprehensive literature search was conducted to identify relevant studies investigating leadership competencies and healthcare performance in healthcare organizations. The search was performed using articles published and included in databases like Google Scholar and PubMed. An initial search of databases for research on, the ‘leadership competencies in healthcare organizations ’ resulted in 250 results while a search on ‘healthcare leadership ’ resulted in 500 while results for ‘healthcare leadership competencies and performance’ resulted in 230 results.

The search strategy employed the use of keywords to optimize the retrieval of relevant articles. The following search terms and their variations were used: "healthcare leadership," "Healthcare leadership competencies and performance" "leadership competencies" and "Healthcare performance and leadership competencies." The search was not limited by publication date however only the publications in the English language were accessed. The PRISMA diagram (Figure 2) provides complete details for research identified, screened, and included in the systematic review.

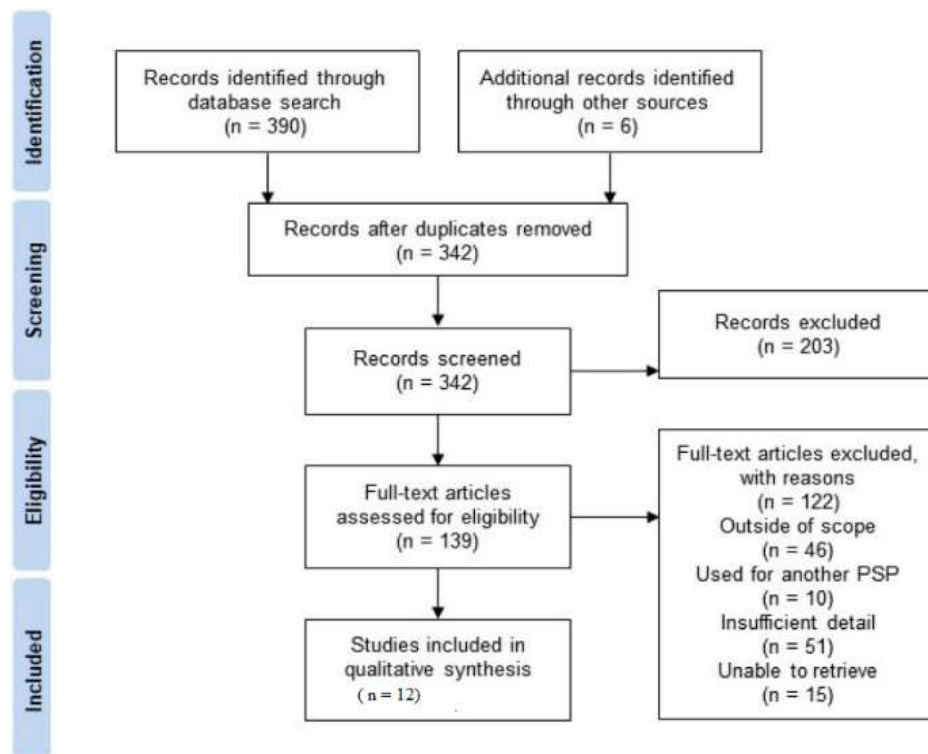


Figure 2: PRISMA Flow Diagram for Systematic Review

Study Inclusion and Exclusion Criteria

Inclusion Criteria

The following inclusion criteria were used as a guide for searching and screening the articles: 1) papers were published between 2012 and 2022; 2) articles were published in the English language; 3) empirical/original studies focusing on the identification and development of leadership or management competencies in hospitals.

Exclusion Criteria

Publications that did not go through a peer-review process and articles that did not present results of empirical studies such as book reviews, commentaries, and opinion articles were excluded from the analysis.

Search Strategy and Data Sources

Four databases were selected for the search, namely PubMed, Web of Science (ISI), Emerald, and Scopus. These databases were chosen because they encompass a vast majority of studies pertaining to health services and health service management research. Additionally, references cited in the journal articles included in the final analysis underwent screening to identify relevant studies. However, this process did not yield any new articles for inclusion. Keywords were employed in the title and abstract search of papers via an advanced search feature within the databases. The keywords or combinations of keywords used for guiding the search included hospital manager, hospital management, hospital leadership, healthcare leadership, and health service manager.

Systematic Analysis of Research

Sr	Author	Research Topic/Title	Objective	Research Design/Methodology	Leadership Competencies	Results	Conclusion
1	(N. Algaarni et al., 2018)	Identifying Factors Influencing the Leadership Performance of Saudi's Healthcare Sector	The purpose of this article is to identify the aspects that relate to performance level; including enablers and inhibitors that influence leadership performance in the healthcare sector	A grounded research methodology and an action research approach that was 'issue focused' were used to gain the perceptions of the participants from the organizational culture as empirical data	Combining human aspects with regulation, Fairness of the evaluation criteria, National cultural difficulties, openly communicating, Personal relationships, Personifying the work environment' and Tolerance	One of the more significant findings to emerge from this study is that a number of factors that particularly affect leadership performance in the public health sector of KSA are	The findings of this study revealed that leadership competencies are influenced by 'national culture' and organizational culture.

			of the Kingdom of Saudi Arabia			dominant.	
2	(Hejazi et al., 2022)	Attitudes and Perceptions of Health Leaders for the Quality Enhancement of Workforce in Saudi Arabia	this study aimed to understand the current healthcare workforce quality and future expectations from the attitudes and perceptions of health leaders	Qualitative research was carried out using semi-structured interviews consisting of 24 different questions. Participants of the study were healthcare leaders from different backgrounds and governmental institutions.	Workforce competency, health transformation, leadership, workforce planning, and healthcare quality	Health leaders are satisfied with the current direction of workforce competency and planning, yet fragmentation of the system and poor accessibility may need further enhancement	Health leaders are satisfied with the current direction of workforce competency and planning, yet fragmentation of the system and poor accessibility may need further enhancement
3	(Vainieri et al., 2019)	Explaining performance in health care: How and when top management	The aim of this study was to investigate the relationship	This relationship is empirically tested using the longitudinal data of public health care organizations	Ability to structure the strategic vision, develop long-term plans, and communicate them	Findings show that managerial competencies are positive	Systematic information sharing process regarding performance results, goals, and organizational structure

		competencies make the difference	between top management competencies, information sharing, and organizational performance in public healthcare system	.	efficiently to the employees in order to empower them to enact	ely associated with organizational performance. Moreover, managerial competencies are strongly linked to the information-sharing process developed in the organizations	provided by top management seems an effective strategy to engage professionals.
4	(Feliciano et al., 2021)	Nurses' competency in Saudi Arabian healthcare context: A cross-sectional correlational study	To measure the competence and characteristics of nurses in Saudi Arabia delivering	A cross-sectional correlational study. a purposive sample of 621 nurses working in Saudi Arabia.	Legal/ethical practice, critical thinking, and research aptitude	A positive evaluation of nurses' overall core competency components is recognized	Nurses' competence and their sociodemographic characteristics are significantly correlated attributes. Nurses evaluated greater competency levels in

			health care with significant correlations			izably measured with greater competency levels in their workplace	their workplace.
5	(Heinen et al., 2019)	An Integrative Review of leadership competencies and Attributes in advanced nursing practice	To establish what leadership competencies are expected of master level-educated nurses like the Advanced Practice Nurses and the Clinical Nurse Leaders as described in the international literature.	Integrative review, Embase, Medline and CINAHL databases were searched (January 2005–December 2018)	30 competencies in four domains: Clinical Leadership, Professional Leadership, Health system leadership, Health policy leadership	Fifteen studies and seven competency frameworks were included. Synthesis of 150 identified competencies led to a set of 30 core competencies in the clinical, professional, health systems. and	30 core competencies within four leadership domains can be used for further development of evidence-based curricula on leadership.

						health policy leadership domains.	
6	(Davidson et al., 2012)	Identifying and Developing Leadership Competencies in Health Research Organizations: A Pilot Study	Investigated leadership competencies for developing senior and emerging leaders and the perceived effectiveness of leadership development programs in Health Research Organizations (HROs)	qualitative and quantitative data using an innovative framework for analyzing HRO leadership development. The National Center for Healthcare Leadership (NCHL) 'Health Leadership Competency Model' was used as the foundation of our competency research.	talent development, collaboration, strategic orientation, and team leadership. Senior executives need financial skills and scientific achievement; emerging leaders need technical/scientific competence, information seeking, and a strong work ethic	Results show greater than half of the HRO leaders did not utilize a LDP in the past 2 years due to a variety of negative perceptions of the value of leadership development.	Resources and expertise are needed to address this deficiency in medical school and other health professions education programs, e.g., apply lessons learned from Fortune 500 companies in biotech and pharmaceuticals which have already blazed the trail in talent development and mentoring
7	(Harb et al., 2022)	Nurses Perceptions of Nursing Leadership Styles in the Eastern	This study aims to examine nurses' perceptions	A cross-sectional quantitative study, purposive sampling technique, sample	Transformational, Transactional, Passive-Avoidant leadership	Results show that nurses perceive that their management	The transformation of the healthcare system in Saudi Arabia, and challenges

		Healthcare Cluster in Saudi Arabia	ons about the managers' leadership and to determine whether the style used may play a role in determining the quality of patient care	comprised of 577 nurses		ers are using transformational and transactional leadership styles more often than passive avoidant leadership style. There was a positive and highly significant correlation between leadership and outcome factors	that are inherent, emphasize the importance of ensuring that nurses are effective leaders if organizational needs are to be met in the future.
8	(N. A. Algethami et al., 2020)	The Effects of Cultural Aspects and Leadership Practices on the Healthcare Organization	This article aims to investigate the effects of cultural factors and	The constructive-interpretivism philosophical approach is used for this study, employing a qualitative strategy.	Research participants indicate that positive and negative behaviors of leaders and executives in top	Results suggest the heavy influences of organizational culture	The study offers some important insights in the healthcare sector of KSA. These include maintaining personal relationships

		ions' Performance: The Case of Saudi Arabia	leadership practices on organizational performance development in healthcare organizations.		management affect the performance of employees and shape the organizational culture.	e and other factors in the health care sector such as religious and national cultures, on the leadership performance .	with employees as a form of personal support, individualizing employees' motivations, having moral criteria for employment , using evaluation indicators to observe and assess employees, supervising the relationship between managers and employees in the workplace, evaluating employees' mind-set, and combining a human-aspects with regulations
9	(Çitaku et al., 2012)	Leadership competencies for medical education and healthcare professions: population	To identify and empirically investigate the dimensions of leadership in	A population-based design with a focus group and a survey were used to identify the perceived competencies for effective leadership in	Social responsibility, Innovation , self-management, Task management , Justice orientation	Exploratory principal component analyses yielded five factors accou	The results of the principal component analyses support the theoretical meaningfulness of these factors, their coherence, internal

		n-based study	medical education and healthcare professions.	medical education.		ning for 51.2% of the variance: (1) social responsibility, (2) innovation, (3) self-management, (4) task management and (5) justice orientation	consistency, and parsimony in explaining the variance of the data. Although there are some between-group differences, the competencies appear to be stable and coherent.
10	(Hasanain, 2017)	An Overview of the Performance Improvement Initiatives by the Ministry of Health in the Kingdom of Saudi Arabia	Saudi Arabia's Ministry of Health (MOH) uses corporate performance improvement methodologies to develop and implement performance improv	Evaluated the feasibility of setting up a performance improvement unit (PIU) within the MOH to apply the principles of Lean Six Sigma and to change management methodologies.	PIU Capability Building, High-Impact Project Implementation, Project Sustainability and Knowledge Transfer	PIU program shows that it is a feasible approach for improving healthcare delivery in the KSA. It also highlights the importance	PIU implementation is a feasible approach to improving healthcare delivery in Saudi Arabia. Poor sustainability despite initial success highlights the need to further improve the engagement, incentivization, and training of team leaders and

			<p>ement initiatives designed to continue building on the Ministry's vision of transforming hospital operations and instituting a culture of quality and performance focused on the "patient first" principle.</p>			<p>of requisite engagement, training, and motivation of leadership and management teams as well as local team members, and the adoption of clear KPIs and tangible incentives for sustainability of the program.</p>	<p>members to achieve long-term success with the program</p>
11	(Herd et al., 2016)	Finding What Works: Leadership Competencies for	the purpose of this study was to investi	A qualitative research method was used, the 26 participants in this study were	Change leadership, self-development, talent development, and	Results from the present study suggest that	The study provides insights regarding the competencies perceived

		the Changing Healthcare Environment	gate which National Center for Healthcare Leadership (NCHL) competencies were referenced by exemplary healthcare leaders as most important for success in today's changing healthcare environment	exemplary healthcare leaders as identified by 15 C-level executives.	team leadership were the top four NCHL competencies	the exemplary healthcare leaders interviewed in this study perceive that change leadership, self-development, talent development, and team leadership are the four most critical competencies for effective performance of their healthcare leadership roles.	by a sample of current exemplary healthcare leaders as most critical for the effective performance of their leadership roles.
1 2	(Alilyan et	An integrative review	to identify the	Integrative review design,	It was found that transforma	The study highli	Leadership competencies were found

	al., 2022)	of nursing leadership in Saudi Arabia	current state of evidence about relationships between leadership competencies and nurse, patient, and organization outcomes in Saudi Arabia	Qualitative and quantitative studies	tional, transactional, laissez-faire, passive/avoidant and management-by-exception passive leadership styles were the most leadership styles that have been examined in nursing studies in Saudi Arabia	ghts the significant impact of nurse managers, particularly through transformational leadership, on nurses' job satisfaction and retention in Saudi Arabia	be an integral and important aspect for employees and team members working in healthcare organizations.
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DISCUSSION

The present systematic review aimed to thoroughly investigate the leadership competencies and their influence in the healthcare system of Saudi Arabia. The review synthesized findings from a range of studies, including those conducted by (Alilyyani et al., 2022), (N. Algarni et al., 2018), (Hejazi et al., 2022), (Vainieri et al., 2019), (Feliciano et al., 2021), (Heinen et al., 2019), (Davidson et al., 2012), (Harb et al., 2022), (N. A. Algarni et al., 2020), (Çitaku et al., 2012), (Hassanain, 2017) and (Herd et al., 2016). As illustrated in this systematic review of the literature, leadership is a complex, multidimensional construct representing a diverse set of underlying competencies that differ considerably based on the approach selected. The competencies vary and leadership is a professional obligation of all healthcare professionals at their level.

Research indicates that nurse executives reported a low level of leadership competencies, thus implying necessary actions for improvement in Saudi Arabia. There were personal factors that influenced the level of nurse executives' leadership competencies. To achieve quality outcomes and maintain a high level of nursing care in hospital organizations, the findings must be considered in planning strategies related to the improvement of the leadership competencies of nurse executives. Leadership competencies are influenced by 'national culture' and organizational culture (N. Algarni et al., 2018). Health leaders are satisfied with the current direction of workforce competency and planning, yet fragmentation of the system and poor

accessibility may need further enhancement(Hejazi et al., 2022). A systematic information-sharing process regarding performance results, goals, and organizational structure provided by top management seems an effective strategy for engaging professionals(Vainieri et al., 2019) . Nurses' competence and their sociodemographic characteristics are significantly correlated attributes. Nurses evaluated greater competency levels in their workplace(Feliciano et al., 2021) . It was found that thirty core competencies within four leadership domains can be used for further development of evidence-based curricula on leadership(Heinen et al., 2019) . Resources and expertise are needed to address this deficiency in medical school and other health professions education programs, e.g., apply lessons learned from Fortune 500 companies in biotech and pharmaceuticals which have already blazed the trail in talent development and mentoring(Davidson et al., 2012) . The results of the principal component analyses support the theoretical meaningfulness of these factors, their coherence, internal consistency, and parsimony in explaining the variance of the data. Although there are some between-group differences, the competencies appear to be stable and coherent(Çitaku et al., 2012). PIU implementation is a feasible approach for improving healthcare delivery in Saudi Arabia. Poor sustainability despite initial success highlights the need to improve further the engagement, incentivization, and training of team leaders and members to achieve long-term success with the program (Hassanain, 2017). The study provides insights regarding the competencies perceived by a sample of current exemplary healthcare leaders as most critical for the effective performance of their leadership roles(Herd et al., 2016). The review provides insights for further research on leadership competencies necessary to improve healthcare leadership directly or indirectly involved in the healthcare sector.

Implications

To achieve quality outcomes and maintain a high level of healthcare in the hospital organizations of KSA, the study's findings must be considered in planning for strategies related to the improvement of the leadership competencies of executives and healthcare professionals. In addition, competent and confident healthcare professionals with appropriate leadership competencies are critical in ensuring positive relationships at a workplace which utilizes competency-based leadership, is needed in identifying the development needs of nurse executives, such as in the areas of communication and relationship building, knowledge of the healthcare environment, leadership, and business skills.

Recommendations

This competency-based leadership assessment is also vital because leaders can influence and create healthy work environments for staff and help design institutional and healthcare policies for various hospital organizations. Executives play an important role in building positive communication and harmonious relations, promoting leadership and safety of patient care, effective practice environments for nurses, and the effective and successful performance of organizations and business entities in the healthcare industry. Hence, the findings recognized in this study can be used as valuable references for future educational trainings for healthcare professionals and leaders to understand the areas where executives need improvement regarding their leadership competencies, particularly in terms of communication and relationship building, knowledge of the healthcare environment, leadership, and business skills. For nursing practice, this study also indicates that nurses who want to be promoted to nurse executive positions should work on their leadership competencies relevant to this leadership role's requirement.

Addition in Existing Literature

The systematic review offers valuable insights for systematically analyzing the prevailing leadership competencies essential for healthcare professionals in Saudi Arabia. It aims to

bridge the existing gap in educational and healthcare institutions involved in delivering healthcare services and professional development programs. By leveraging these findings, policymakers, educational institutions, and healthcare organizations can formulate strategies to develop leadership competencies directly linked to performance within Saudi Arabia's healthcare sector.

Limitations

The current study also has limitations that may serve as the basis for improvements in future research related to leadership competencies and their influence on healthcare performance in Saudi Arabia. The papers analyzed were from specific time frames, Thus, the study relied solely on the available responses of nurses and executives, and this might have reduced the power of the generalizability of this quantitative study to those non-represented regions. The research was based on the self-assessment of nurse leaders and executives, and this might have caused some degree of bias in answering the surveys.

Conclusion

The study's results indicated that healthcare executives demonstrated leadership competencies across diverse domains and at varying levels, suggesting the need for targeted efforts to enhance these competencies. Furthermore, the findings underscored the significance of pinpointing particular areas for developing and refining the leadership skills of executives and healthcare professionals. Additionally, various personal attributes that notably impacted the leadership competencies of nurses and executives were identified, based on demographic factors such as age, highest level of education attained, current role and tenure as a nurse executive, monthly salary, nationality, and participation in leadership and management seminars/training.

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