



COMPLEXITY IN HEALTHCARE: EMERGING CHALLENGES FOR HEALTHCARE LEADERSHIP ROLES

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Abstract: Healthcare industry is continuously evolving to adapt to pandemic, epidemic, demographic and societal shifts challenges. There is an emerging leadership challenges due to COVID-19 pandemic for healthcare managers. To respond to the present COVID-19 pandemic challenges, health leaders and managers must develop capabilities. The success of an organization relies heavily on the efficient and effective processes of its management team. An integral part of a strategy to improve an organization's leadership process is the identification of individuals who have the capability to be effective leaders at all levels of an organization. The aim of the paper is to examine the complexity in healthcare institutions, current and emerging challenges for health leadership in healthcare organizations.

Index Terms - Complex adaptive systems, Patient safety Culture, Patient Outcomes, and Nursing Leadership.

I. INTRODUCTION

The healthcare system is burdened by rising costs and poor patient outcomes. The employment of conventional leadership approaches in healthcare organizations, such as leader-centricity, linear thinking, and a lack of innovation readiness, is a major contributor to these challenges (Weberg, 2012). Emerging technologies, as well as political, economic, social, and environmental realities, have culminated in a complex global health agenda (Senkubuge, Modisenyane, Bishaw, 2014). The ability to define healthcare and healthcare quality priorities, ability to guide to the strategic direction to numerous actors within the health system, and build commitment throughout the health sector to address those priorities for enhanced health care is at the heart of health leadership (Reich, Javadi, Ghaffar, 2016; Waddington, et al., 2007)

II. Complexity in Healthcare Institutions

According to complexity thinking, relationships between pieces are more significant than the parts themselves, and that minimum requirements lead to more innovation than thorough blueprints. In health care, 'hospitals are considered as complex adaptive systems which allows for a new and more productive leadership management styles to emerge' (Plsek, & Wilson. 2001). Complexity leadership approaches, as opposed to transactional and transformational leadership principles, have the potential to reduce healthcare costs, patient safety culture, patient outcomes, patient satisfaction and healthcare quality. Collaboration, complex systems thinking, and innovation mindsets are all part of the complexity leadership philosophy, which views leadership as a continuous process. Transactional, transformational, and breakthrough leadership styles have been identified in the literature. "Self-interest is the primary motivator for alliances in transactional leadership, which focuses on transactions or trades between leaders and people". Transformational leaders, on the other hand, "build a leadership culture for all team members, fostering empowerment, individualism, open communication, and inclusive decision-making". Breakthrough leadership has been defined as a "form of leadership that blends role modeling and respect for others' perspectives to reach a negotiated vision".

The complexity in healthcare institutions has increased post Covid-19 pandemic in terms of emerging clinical evidence reviews creating optimum challenges of balancing speed vs. quality of clinical reviews, emerging COVID-19 public health priorities, challenges for financing for innovative health technologies, managing healthcare needs of emerging aging population, demand for accelerated regulatory approvals for COVID-19 vaccines and other drugs, challenges for developing innovations to meet challenges of Covid-19 pandemic, development of precision medicine, achieving health equity and minimizing health disparities and inequalities in accessing healthcare, value assessment of new therapies, challenges of promoting of universal health coverage and meeting sustainable development goals, Improving better outcomes in pragmatic and other alternative clinical trial designs, providing accessibility of digital therapeutics and wearable's, maintaining healthcare pricing transparent and minimizing healthcare costs, developing Health Technology Assessment (HTA) and payer cooperation across countries, focusing on performance-based contracting, development of real-world evidence based medicine guidelines for use in clinical decision making, developing health data infrastructure and interoperability, promoting patient engagement in healthcare research, developing standards for health data privacy, applying Artificial Intelligence (AI) in healthcare delivery and advanced analytics, etc., makes healthcare delivery systems more complex.

Maintaining high quality health services in compliance with accreditation standards that reflect the needs of the patient's safety and good patient outcomes has proven to be a serious challenge to healthcare managers all over the world. Healthcare organizations have flattened their structures, with fewer administrative jobs and broader spheres of influence, in an ongoing effort to cost containment. As a result, managers now oversee many departments and are in charge of a larger number of employees. As a result, healthcare managers' conventional mentoring, motivating, coaching, and reviewing functions were significantly weakened.

Individuals at all levels of a health-care institution, from the executive suite to those who deal directly with patients, are required to lead. Leadership is also expected in hospital settings such as: inpatient units, clinics for ambulatory operations, long-term care facilities, or at home. Health-care executives' leadership styles can have a positive or adverse impact on patient outcomes. Understanding the factors that influence leadership is critical in building organization culture which promotes healthcare quality and patient safety. A primary responsibility of a leader in today's healthcare environment is to provide resources and manage a support system that enables maximum patient outcomes. This is critical to improving executive leadership in the administrative setting which enhances the leadership process and enables transformational leaders to achieve their highest potentials.

III. Nursing Leadership is must to promote Patient Satisfaction

Leadership referred to the individuals' ability to influence others toward the attainment of relevant organizational goals by establishing standards and clear expectations, as well as providing resource support. Effective nursing leadership is critical for establishing practice environments with adequate staffing levels that aid nurses in reducing preventable mortality.

Positive relationship between transformational nursing leadership and improved patient outcomes, patient satisfaction and reduced patient adverse events and complications shows a relationship presumably mediated by the influence of staff performance (shortell, et al., 1991). Nurses' perceptions of unit effectiveness were considerably influenced by transformational leadership. The degree of unit efficacy was calculated using measures that assessed patient perceptions of care quality, the seriousness of the service delivered in patient's treatment, patient clinical outcomes and the nursing unit's capacity to satisfy the demands of family members (Stordeur, et. al., 2000). Effective leadership is critical in maintaining and supporting experienced employees, as experienced employees help to lower mortality rates (Tourangeau, et. al., 2002).

Relationship-oriented leaders employ techniques that improve information flow and change, foster interpersonal relationships among employees, and promote a range of cognitive viewpoints, all of which contribute to better patient outcomes. Effective management techniques influence outcomes by establishing system parameters for self organization, which refers to a person's ability to adapt his or her behaviour in response to changing environmental demands. Positive leadership practices, communication openness, formalization, participation in decision-making; relationship-oriented leadership, and lower prevalence of adverse events in nursing home residents all have a significant relationship, highlighting a

strong link between leadership and safer patient care environments. Through an effect on nurse performance, effective leadership may be linked to patient outcomes indirectly (Anderson, et al., 2003).

Through greater staff knowledge and stability, there is a considerable indirect relationship between leadership and fewer patient falls and medication errors. By supporting better nursing knowledge through enhanced staff stability and lower turnover, empowering leadership may have a positive impact on patient outcomes. The patient mortality study revealed that the link was indirect, since it was linked to stronger staff expertise and stability, which in turn was linked to lower patient mortality (Houser, 2003). In a study of patient complication rates, greater leadership evaluations were linked to a lower incidence of neonatal periventricular haemorrhage / periventricular leukomalacia PIVH/PVL (Pollack and Koch, 2003).

The impact on patient mortality and adverse events was investigated in Boyle's, (2004) study, which used the Aiken, et al., (1997) conceptual model of organizational features. Nurse manager/organizational support, a subscale of a four-factor version of the Nursing Work Index revised NWIR, was used to assess leadership in this model. The supply of human and material resources for care, as well as support for nurses' participation in decision-making that affects patient care, which shows strong nursing leadership promotes better patient outcomes.

In today's patient safety-conscious organization climate, provider views of patient outcomes should be created to better reflect provider concerns and issues, keeping in mind that there may be significant disparities in how patients and providers perceive what outcomes are relevant (Jennings McClure, 2004). Organizations are complex entities, and the relationship between contextual elements like leadership and patient outcomes is unlikely to be described using a simple set of bivariate relationships (Mark, et al., 2004).

IV. Developing Contemporary Leadership Roles in Complex Healthcare Organizations

The changing context in which health care is given is reflected in current leadership roles in health care organizations. The development of leadership roles in four key contexts has influenced the development of leadership roles in health care policy, organization nursing, and patient attention. A research on health-care outreach teams found that increased connectedness across organizational and professional boundaries improved clinical outcomes, reduced communication barriers, and had a positive impact on ward staff clinical skills, confidence, and education. The World Health Organization (WHO, 2021) has identified communication as a key factor in improving patient outcomes and patient safety.

The empowerment of leadership roles of nurses and doctors has been stressed in order to achieve improved detection of diagnosis and to take care of patients who deteriorate in health care units. The link between teamwork and professional autonomy is synergistic rather than antagonistic (Rafferty, Ball & Aiken, 2001). There is need to improve the quality and safety of patient outcomes for all critically sick patients admitted in healthcare institutions. The urgent goal is to improve care transitions through better leadership and communication among all parties involved in patient care. Health-care nursing has evolved from a privileged position of generally 1:1 nurse-to-patient ratios to a higher number of assistant practitioners. These changes highlight the importance of strong leadership positions for better patient outcomes.

In hospitals, there has been a significant investment in the development of strategic leadership roles for nursing staff. The issue for the next decade in health care settings is twofold: developing evidence-based leadership career pathways and identifying and providing the preparation mentorship and development required for the next generation of health care leaders.

V. Conclusion

In complex healthcare organizations, there is a strong link between leadership and patient outcomes because leaders are responsible for managing the staffing and financial resources which are needed to provide high-quality, cost-effective treatment and addressing service quality gaps. The mechanism of leadership has a more indirect relationship with patient outcomes through staff. One must be able to understand the myriad of factors that determine how leaders are able to influence the delivery of healthcare services in complex healthcare organizations, resulting in improved patient satisfaction, patient outcomes and staff performance.

REFERENCES

- [1] Aiken L.H., Sochalski J. & Lake E.T. (1997). Studying outcomes of organizational change in health services. *Medical Care* 35 (11 Supplement), NS6–NS18.
- [2] Anderson R.A., Issel L.M. & McDaniel R.R. (2003). Nursing homes as complex adaptive systems. *Nursing Research*, 52 (1), 12–21.
- [3] Boyle S.M. (2004). Nursing unit characteristics and patient outcomes. *Nursing Economics*, 22 (3), 111–123.
- [4] Houser J. (2003). A model for evaluating the context of nursing care delivery. *Journal of Nursing Administration*. 33 (1), 39–47.
- [5] Jennings B.M. & McClure M.L. (2004) Strategies to advance health care quality. *Nursing Outlook*, 52 (1), 17–22.
- [6] Mark B., Hughes L.C. & Bland Jones C. (2004). The role of theory in improving patient safety and quality health care. *Nursing Outlook*, 52 (1), 11–16.
- [7] Plsek PE, Wilson T. (2001). Complexity, leadership, and management in healthcare organizations. *BMJ*, 323(7315):746-9.
- [8] Pollack M.M. & Koch M.A. (2003). Association of outcomes with organizational characteristics of neonatal intensive care units. *Critical Care Medicine*, 31 (6), 1620–1629.
- [9] Rafferty A.M., Ball J. & Aiken L.H. (2001). Are teamwork and professional autonomy compatible, and do they result in improved hospital care? *Quality in Health Care: QHC* 10, ii32–37.
- [10] Reich MR, Javadi D, Ghaffar A. (2007). Introduction to the special issue on “effective leadership for health systems”. *Health Syst Reform*, 2(3):171–5.
- [11] Senkubuge F, Modisenyane M, Bishaw T. (2014). Strengthening health systems by health sector reforms. *Glob Health Action*, 7(1):23568.
- [12] Shortell S.M., Rousseau D.M., Gillies R.R., Devers K.J. & Simons T.L. (1991). Organizational assessment in intensive care units (ICUs): construct development, reliability, and validity of the ICU nurse-physician questionnaire. *Medical Care*, 29 (8), 709–726.
- [13] Stordeur S., Vandenberghe C. & D’horre W. (2000). Leadership styles across hierarchical levels in nursing departments. *Nursing Research*, 49 (1), 37–43.
- [14] Tourangeau A.E., Giovannetti P., Tu J.V. & Wood M. (2002). Nursing-related determinants of 30-day mortality for hospitalized patients. *Canadian Journal of Nursing Research*, 33 (4), 71–88.
- [15] Waddington C, Egger D, Travis P, Hawken L, Dovlo D. (2007). World Health Organization. Towards better leadership and management in health: report of an international consultation on strengthening leadership and management in low-income countries, 29 January-1 February. Ghana: Accra.
- [16] Weberg D. (2012). Complexity leadership: a healthcare imperative. *Nursing forum*, 47(4), 268–277. <https://doi.org/10.1111/j.1744-6198.2012.00276.x>
- [17] World Health Organization (WHO). (2021). World patient safety day goals 2021-2022: safe maternal and newborn care. Geneva: Licence: CC BY-NC-SA 3.0 IGO.