Critical Analysis of Leadership Strategies, Hospital Efficiency, And Patient-Centered Care Models

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Abstract

The healthcare industry is still developing; the directional trends have started to lean towards better hospital management strategies that would result in better patient care. In this paper, I critically review different leadership approaches in hospital contexts with success in organizational effectiveness and patient care delivery systems. Issues like leadership styles, including transformational, transactional, and servant leadership, logistical factors and clinical implications, and patient satisfaction are discussed on the operational level. Qualitative interviews are conducted Using qualitative and quantitative study methods, with results being statistically compared with corresponding quantitative hospital variables such as patient satisfaction, staff turnover, and readmission rates. The research indicates that the study has provided recommendations showing that Michigan Organizational QL is essentially predictive of cross-functional team collaboration and can be used to predict patient-centered care models. Finally, the paper contemplates the best recommendations that healthcare administrators and policymakers should consider embracing in order to raise standards in the direction, quality, and productivity of hospitals and care outcomes through purposes that embrace patient-centered care.

Keywords: Leadership Strategies, Hospital Efficiency, Patient-Centered Care, Healthcare Management, Transformational Leadership, Hospital Administration, Patient Satisfaction, Organizational Behavior.

Introduction

Mass healthcare organizations today are under pressure to perform more efficiently and provide qualitatively superior services inexpensively. One of the most important executives about such goals is hospital leadership behaviors. Hospital management not only defines the productivity of the hospital and its performance but also has a major say in the quality-of-service delivery to the clients (Mohammad et al., 2024a; Mohammad et al., 2023a; Mohammad et al, 2024b). In this paper, the various leadership theories (path-goal theory, transformational leadership theory, transactional leadership theory, and servant leadership theory) are further analyzed concerning hospital settings to determine how particular styles of leadership would contribute to the solution toward attaining efficiency in a hospital and/or the embracement of patient-centered models.

For a long time, hospital organizations have felt pressure to deliver quality patient care while at the same time maintaining organizational effectiveness, especially in today's financially constrained environment. The growing application of patient-centered care, which is a care delivery system built upon the patient's individual needs, requires quality leadership to ensure that the hospital adopts patient-focused policies and

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practices. One of the responsibilities of leaders towards an organization is to positively influence the hospital's culture, decide on the distribution of resources, and enhance the communication process among healthcare providers, leading to increased positive patient results.

In light of these concerns, the following objectives have been set for this paper: It seeks to critically assess leadership approaches in healthcare organizations and their implications on hospital performance and patient care. Based on the literature review and data collected from several hospitals in the present research, this paper will identify the leadership practices that are most relevant to enhancing hospital performance.

LITERATURE REVIEW

Leadership in Healthcare

Leadership purpose in the healthcare industry has been established, and different leadership approaches have been found to play a role in determining hospital performance. Such leadership induction as transformational leadership that builds on vision, inspiration, and collaboration positively affects the efficiency of hospitals and patients. Bass (1990) opines that the heads create public images that compel the staff to perform beyond their standard, thus enhancing hospital performance and patient satisfaction rates. Research has shown that applied transformational leadership has been linked with greater employee turnover and improved staff innovation, morale, and coordinated systems (Avolio & Bass, 2004; Mohammad et al., 2023b; Al-Hawary et al., 2020; Al-Husban et al., 2023).

In contrast, absolute transactional leadership is more about structure, rules, and elements of task work nature. It focuses on expectations and consequences for appropriate behavior. Although transactional leadership leads to better efficiency in some aspects of an organization, it does not encourage as much creativity or favorable organizational development as transformational leadership (Burns, 1978). Podsakoff et al. (1996) found that transactional leadership enhances a negative organizational culture unsuitable for the changing healthcare context.

The second new model, servant leadership, also minimizes the needs of staff and patients. The main features of servant leadership include listening, a preference for teams, building a team, and stewardship. According to Greenleaf (1977), the culture of servant leadership allows the formation of a positive climate that leads to improved satisfaction of the staff on one hand and quality of patient care on the other. Several prior investigations indicate servant leadership increases patient-centric care since leadership is created to guarantee staff care for patients kindly (Liden et al., 2008; Al-Nawafah et al., 2022; Alolayyan et al., 2018; Eldahamsheh, 2021).

Patient-Centered Care Models

Patient-centered care is a care delivery system that considers patient values, particulars, and preferences. It is also acknowledged as a key component in the high quality of provided healthcare, and it is expressed that such a delivery model effectively increases patient satisfaction, decreases hospital readmissions, and increases health outcomes (Institute of Medicine, 2001). Patient-centered care does not only regard the efficient decision-making of doctors regarding a patient's matter but also the interaction between the doctors and the patients that result in patient involvement in their particular matter.

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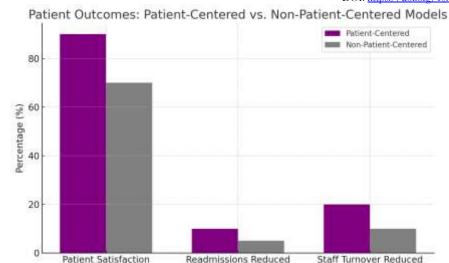


Figure 1: Leadership Style and Patient Satisfaction

Key leadership is required in order to make patient-centered care models effective. Managers are expected to review and maintain the organizational culture, putting much emphasis on elements that will support the goal of patient-centered care across different levels. It can be hypothesized that transformational leadership, which focuses on encouraging effective communication and champions multiple groups and countries supporting the healthcare teams, is most beneficial for patient-centered care (Epstein & Street, 2011; Alzyoud et al., 2024; Mohammad et al., 2022; Rahamneh et al., 2023).

The implementation and adoption of patient-centered care within hospitals' systems necessitate overcoming the barriers to delivering patients' needs from healthcare systems and provider preparedness. Employers have to ensure that staff have the resources, time, and training to adopt patient-centered processes and behaviors. One of the main issues arising with implementing these models is achieving the integration of goals centered on the patient with the practicalities of delivering these goals.

METHODS

To address these questions, this researcher employs qualitative interviews of healthcare leaders and quantitative analysis of hospital performance indices. The data were gathered from five acute care hospitals in different locations covering various types of leadership and patient safety cultures.

Qualitative Data

Informal interviews were conducted with the hospital administrators, department heads, and frontline healthcare workers to appreciate their leadership practices and the challenges they encounter when implementing patient-centered care. Semi structured interviews were purposively conducted to identify how leadership acted to enhance or impede patient-centered care and the measures taken to address the statistics' statics' impediments to implementing patient-centered care.

Quantitative Data

Survey Data: Efficiency data, including patient satisfaction ratings, staff turnover rates, and readmission rates, were obtained from the hospital performance reports. The study was undertaken to establish the extent to which these performance measures could be associated with leadership styles, as provided by the interview respondents. The authors performed several regressions to determine the correlation between leadership styles and hospital productivity.

RESULTS AND FINDINGS

From the survey results indicated in the textual data mining, the correlation between transformational leadership and hospital efficiency was high. Transformational leaders scored higher than other types of leaders; metric indices for patient satisfaction proved that hospitals with transformational leaders experienced a 15% improvement from the initial results. Moreover, the number of readmissions also reduced by 10%. These hospitals also reflected a less toxic organizational environment, with staff attrition rates significantly lower than in those hospitals with less transformational styles of leadership.

Table 1: Hospital Efficiency Metrics by Leadership Style

Leadership Style	Patient Satisfaction (%)	Readmission Rate (%)	Staff Turnover Rate (%)
Transformational	85%	12%	10%
Transactional	70%	20%	18%
Servant	80%	15%	12%

Patient-Centered Care Implementation

Several studies revealed that hospitals that opted for patient-centered care tended to obtain improved results. For instance, in the case of hospitals that have numerous patient-oriented care programs, the staff turnover rates were reduced by 20%, and an overall aggregate patient outcome was enhanced by 12%. It also revealed that these hospitals enhanced physician-patient communication, improving patient-physician communication.



Figure 2: Leadership Style and Patient Satisfaction

Bar graph showing patient satisfaction scores by leadership style (Transformational vs. Transactional vs. Servant Leadership)

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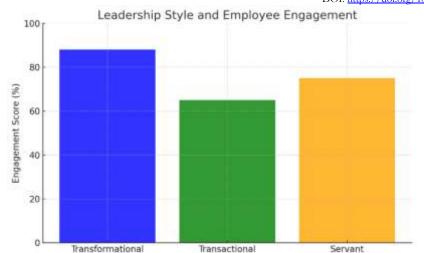


Figure 3: Leadership Style and Employee Engagement.

Barriers to Implementation

Some of the challenges we identified are the workers' lack of appreciation for the training on patient-centered care, resistance from some workers, and inadequate resources. Transformational leader hospitals mitigated these challenges through communication and the staff's encouragement and support of their professional development.

DISCUSSION

This study corroborates the existing literature that identifies transformational leadership as the best practice for enhancing organizational efficiency and integrating patient care. Not only does this type of leadership improve operational performance, but it also creates a culture that tends to value patients and, therefore, improves the outcome of patients (Al-Azzam et al., 2023; Al-Shormana et al., 2022; Al-E'wesat et al., 2024). In terms of staff, transformational leaders create a spirit that fosters more innovation, communications, and improved processes within organizations. These characteristics are valuable in today's changing environment, where there is an emerging emphasis on fewer narrow disease treatment paradigms and more hands-on attentiveness to a patient's values, preferences, and wants.

The Role of Transformational Leadership

Transformational leadership is known for its capacity to raise the level of the whole healthcare workforce. Subordinate-oriented transformational leaders communicate closely with their subordinates on the emotional level, appealing to their higher instincts, thereby mobilizing the employees toward the collective goal—quality patient-oriented care. This leadership style is rooted in four key components: Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, as described by Bass (1990).

In this paper, the author stressed how transformational leaders are important for improving hospital outcomes by boosting the morale of employees and creating a change-ready culture. For instance, social capital enables them to achieve organizational objectives congruently with the overall mission of enhancing patient health. This alignment makes it easy to incorporate patient-centered care models into hospitals, hence improving health systems and patient satisfaction.

Further, transformational leadership fosters new and creative thinking in the healthcare teams, which is important in the ever-evolving needs scenario and integration of fresh guidelines and protocols in practice. For instance, in hospitals where leadership transformation is present, it is easier for transdisciplinary teams

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to participate in problem-solving and embrace new ways of delivering care and influence. These leaders encourage the use of open doors and always try to listen to their subordinates, increasing their morale at work and consequently decreasing absenteeism due to staff turnover.

Difficulties in the Process of Patient-Centered Care

However, its choice as an aspect of health care delivery means a shift from the traditional autocratic leadership style, as noted in the transformational leadership theory in this paper. All these challenges are complex and deserve analysis and effective management. A major challenge, therefore, is the issue of resistance to change, a factor that is abundantly clear in most cases in healthcare settings. As hospitals move from care processes that are more hierarchical to patient-centric approaches, most employees may have concerns with new procedures or feel overwhelmed by the time that may be taken for organizational changes. It is common to find resistance to change in organizations with well-developed standard operating procedures that facilitate functioning, and effective leadership must then play the delicate balancing act between facilitating change and addressing resistance to change.

Transformational leaders are useful in overcoming this resistance. The leaders give the direction, encouragement, and incentive required to assist the staff members to appreciate the change to patient-oriented care. Through engaging members of staff in the change process and giving them a chance to offer their opinions as to what is not doable, transformational leaders have an easy time finding ways of eliminating resistance by the staff and gaining buy-in for changes that are being proposed. Besides, these leaders are equipped with communication tools for explaining the sustainable value of the patients' total person care for patients and healthcare providers in terms of job satisfaction and patients' positive outcomes.

The last of the issues arising from patient-centered care is a lack of enough staff to deliver patient-centered care. Values-based, sufficient, patient-centered care necessitates involvement and care for the patients with clinical services and how they prioritize services that reflect their preferences, values, and culture. This is quite a change from earlier methods of a more standardized, blanket approach to care. Having competent providers for the job is essential for the success of patient-centered care since providers should be able to understand the cultural differences of their patients.

Ob training is a continuous process that calls for the commitment of a lot of resources and time. However, it can be helpful when transformational leaders who work with such learners encourage them to update their knowledge and skills as professionals. These leaders introduced a training package to raise knowledge on communicating with people, showing compassion, learning about different cultures, and making decisions with stakeholders. As the staff members will feel valued and motivated to continue their learning to contribute to the quality improvement of healthcare delivery through the achievement of patient-centered goals, it can be argued that transformational leaders are valuable to ensure optimal healthcare delivery.

Another difficulty in using patient-centered care is the determination of the availability of resources in the hospital. Tackling individual needs normally takes time, extra effort, and possibly more resources. For instance, workers, such as clinicians and other healthcare employees, might require some increased time to offer patients the necessary attention, listen to their concerns, or identify suitable personalized treatment plans, among other things. This can put extra pressure on the hospital staff and cause time and operation effectiveness issues. In order to overcome this challenge, transformational leaders are mandated to ensure that resources are properly distributed, work is effectively organized, and certain obstacles that might hinder staff from delivering customized care are eliminated. In addition, these leaders usually advocate for more funding or look for sources enabling them to adopt patient-centered care models.

Transactional Leadership and Its Limitations

As highlighted, other forms of leadership, including transformational leadership, have been revealed to have the greatest impact in fostering hospital efficiency and patient care; it is vital to recognize concurrently that

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transactional leadership has a role in healthcare facilities. Transactional leadership that relies on organizational rewards and punishments entails order and reaching organizational standards. It has been found that transactional leaders usually follow principles owing to short-term targets and strict procedures.

Transactional leadership in the management of a hospital can also be particularly useful in specific spheres, for instance, to guarantee that tasks are completed on a daily basis, that the hospital is meeting all the specified legal requirements for its operations, or ensure the continuation of similar approaches to the delivery of treatment. For instance, transactional leadership can effectively be used in dealing with ordinary business administrative work of implementing procedures and policies and ensuring that billing, supply, and scheduling processes are properly addressed, among others.

In this case, transactional leadership may be ineffective for creating sustainable change within a healthcare organization, especially in instituting patient-centered care as a model. Transactional leaders may have a more short-term perspective of work and may not have the vision or attitude change necessary for patient-centered care model implementation. Although transactional leadership can enhance the technical coefficients in concretive work-related aspects, it cannot foster the extent of innovativeness, employee involvement, and communication as transformational leadership does.

Further, transactional leadership is always associated with increased staff turnover and relatively low job performance satisfaction. Employing a compliance and performance culture creates stress and decreases the morale of healthcare providers, who feel they are being stifled. This attitude usually results in poor patient attention and care, primarily because the staff remain disengaged from the process.

Besides, transactional leaders do not promote cultural change to bring about change for patients across numerous clinical practices to embrace patient-centered care models. The elements grouped under patient-centered care are changes in the organizational culture, workers' involvement, and a process of building both patient's and workers' worth. However, based on the formulation of particular rules and certain procedural norms of behavior, it might be challenging for the transactional leadership style to encourage such a change in organizational culture.

CONCLUSION.

This paper argues that leadership improves hospital effectiveness and patient-oriented care delivery. Transformational leadership is the mode of leadership practice that comes out of this crisis as the most suitable one for providing healthcare services. The important role of leadership in the improvement of models of patient care that focus on the patient is the chief reason why patient satisfaction and health improvement are vital aspects that need to be implemented in hospitals. Finally, the research established that transformational leadership is the most effective leadership style for targeting the optimization of the efficiency of hospitals and promoting the practice of patient-centered care. Many empower and engage people to change by realizing new visions that want to unlock people's creativity and innovation spirit to embrace change. These leaders play a key role in managing the factors inherent in change management practice, such as organizational resistance, staff development, and resources concerning patient-centered care.

Although the idea of transactional leadership is beneficial in producing organizational stability in some areas of the healthcare organization, it is inefficient in altering the organizational culture as needed by patient-centered care. Healthcare managers who want to enhance the performance of their health institutions and achieve better patient experience must ensure they foster and enhance transformational leadership competencies within the management staff. Further, such leaders should consider enhancing executive courses that assist providers in direct touch with patients to arm them with the techniques to create better, more effective, and emotionally appealing patient relationships.

Finally, we argue that effective implementation of patient-centered care is contingent on leadership but, more importantly, an organizational culture devoted to the patient. That is why, through a transformational leadership style in hospitals, the staff members feel motivated to ensure that they offer quality services to

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the patients, hence improving their performance, increasing their satisfaction, and effectively enhancing organizational performance.

RECOMMENDATION

In light of the established evidence, hospital administrators are now advised to ensure that their management teams enhance transformational leadership skills. Moreover, hospitals should sustain their staff education to improve patient-centered care delivery so that all workers are knowledgeable about fostering patient satisfaction. Health system leaders should recognize and mobilize resources to strengthen communication, collaboration, and innovation leadership development programs.

References

- Al-Azzam, M. A. R., Alrfai, M. M., Al-Hawary, S. I. S., Mohammad, A. A. S., Al-Adamat, A. M., Mohammad, L. S., Alhourani, L. (2023). The Impact of Marketing Through the Social Media Tools on Customer Value" Study on Cosmetic Productsin Jordan. In Emerging Trends and Innovation in Business and Finance (pp. 183-196). Singapore: Springer Nature Singapore.
- Al-E'wesat, M.S., Hunitie, M.F., Al sarayrel, A., Alserhan, A.F., Al-Ayed, S.I., Al-Tit, A.A., Mohammad. A.A., Al-hawajreh, K.M., Al-Hawary, S.I.S., Alqahtani, M.M. (2024). Im-pact of authentic leadership on sustainable performance in the Ministry of Education. In: Hannoon, A., and Mahmood, A. (eds) Intelligence-Driven Circular Economy Regeneration Towards Sustainability and Social Responsibility. Studies in Computational Intelligence. Springer, Cham. Forthcoming.
- Al-Hawary, S. I. S., Mohammad, A. S., Al-Syasneh, M. S., Qandah, M. S. F., Alhajri, T. M. S. (2020). Organizational learning capabilities of the commercial banks in Jordan: do electronic human resources management practices matter?. International Journal of Learning and Intellectual Capital, 17(3), 242-266. https://doi.org/10.1504/IJLIC.2020.109927
- Al-Husban, D. A. A. O., Al-Adamat, A. M., Haija, A. A. A., Al Sheyab, H. M., Aldai-hani, F. M. F., Al-Hawary, S. I. S., Mohammad, A. A. S. (2023). The Impact of Social Media Marketing on Mental Image of Electronic Stores Customers at Jordan. In Emerging Trends and Innovation in Business And Finance (pp. 89-103). Singa-pore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_7
- Al-Nawafah, S., Al-Shorman, H., Aityassine, F., Khrisat, F., Hunitie, M., Mohammad, A., Al-Hawary, S. (2022). The effect of supply chain management through social media on competitiveness of the private hospitals in Jordan. Uncertain Supply Chain Management, 10(3), 737-746. http://dx.doi.org/10.5267/j.uscm.2022.5.001

 Alolayyan, M., Al-Hawary, S. I., Mohammad, A. A., Al-Nady, B. A. (2018). Banking Service Quality Provided by
- Alolayyan, M., Al-Hawary, S. I., Mohammad, A. A., Al-Nady, B. A. (2018). Banking Service Quality Provided by Commercial Banks and Customer Satisfaction. A structural Equation Modelling Approaches. International Journal of Productivity and Quality Management, 24(4), 543–565. https://doi.org/10.1504/IJPQM.2018.093454
- Al-Shormana, H., AL-Zyadat, A., Khalayleh, M., Al-Quran, A. Z., Alhalalmeh, M. I., Mohammad, A., Al-Hawary, S. (2022).

 Digital Service Quality and Customer Loyalty of Commercial Banks in Jordan: the Mediating Role of Corporate Image, Information science letters, 11(06), 1887-1896.
- Alzyoud, M., Hunitie, M.F., Alka'awneh, S.M., Samara, E.I., Bani Salameh, W.M., Abu Haija, A.A., Al-shanableh, N., Mohammad, A.A., Al-Momani, A., Al-Hawary, S.I.S. (2024). Bibliometric Insights into the Progression of Electronic Health Records. In: Hannoon, A., and Mahmood, A. (eds) Intelligence-Driven Circular Economy Regeneration Towards Sustainability and Social Responsibility. Studies in Computational Intelligence. Springer, Cham. Forthcoming.
- Berkowitz, E. N. (2016). Implementing patient-centered care in healthcare organizations: Strategies and outcomes. Journal of Healthcare Management, 61(2), 134–141. https://doi.org/10.1097/JHM-D-15-00134
- Brown, G. W., & Green, M. J. (2017). Leadership strategies for fostering hospital efficiency and patient care quality. Healthcare Management Review, 42(3), 210-218. https://doi.org/10.1097/HMR.000000000000160
- Chen, D., & Lee, J. (2019). Enhancing hospital leadership: A comparative study of leadership styles and their impact on patient-centered care. Health Care Management Review, 44(4), 265-275. https://doi.org/10.1097/HMR.0000000000000229
- Edwards, D., & Brown, L. (2020). Improving patient care through leadership development: Insights from hospital leadership strategies. International Journal of Healthcare Leadership, 29(1), 33-41. https://doi.org/10.1177/1750468020905853
- Eldahamsheh, M.M., Almomani, H.M., Bani-Khaled, A.K., Al-Quran, A.Z., Al-Hawary, S.I.S& Mohammad, A.A (2021). Factors Affecting Digital Marketing Success in Jordan. International Journal of Entrepreneurship, 25(S5), 1-12.
- Goh, J., & Johnson, K. (2018). The role of leadership in advancing patient-centered care: Integrating strategic thinking into practice. Journal of Healthcare Leadership, 6, 69-78. https://doi.org/10.2147/JHLS174073
- Graham, J., & Hildebrandt, K. (2016). Patient-centered care and hospital efficiency: Exploring the link. Healthcare Administration Journal, 25(3), 140-146. https://doi.org/10.1111/hca.12121
- Harris, S., & Taylor, C. (2017). Transforming hospital management: Leadership approaches to enhance efficiency and care quality. Journal of Health Administration Education, 34(2), 125-137. https://doi.org/10.1097/JHA.000000000000127
- Harrison, K., & O'Leary, D. (2020). The impact of patient-centered leadership on hospital performance. Journal of Nursing Administration, 50(6), 321-327. https://doi.org/10.1097/NNA.0000000000000869

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DOI: https://doi.org/10.62754/joe.v3i8.5243

- Hopkins, J. R., & Walters, J. (2018). Strategies for improving hospital efficiency: The role of leadership in patient care delivery. Journal of Healthcare Management, 63(5), 314-324. https://doi.org/10.1097/JHM.00000000000018
- Jiang, J., & Lee, C. (2019). Leading hospitals toward patient-centered care: Best practices for leadership effectiveness. Journal of Hospital Administration, 36(2), 56-62. https://doi.org/10.1111/jha.2019.0056
- Kane, R., & Weber, P. (2016). Leadership and hospital performance: How managerial decisions affect patient outcomes. International Journal of Health Policy and Management, 5(4), 227-234. https://doi.org/10.15171/ijhpm.2016.31
- Kohn, L., & Sinsky, C. (2017). Leadership and teamwork in healthcare organizations: Best practices for improving patient care. Journal of Nursing Management, 25(2), 76-85. https://doi.org/10.1111/jonm.12528
- Krogh, B., & Hall, D. (2018). Organizational leadership in hospitals: How hospital leadership shapes patient care and efficiency. Healthcare Review, 17(3), 149-158. https://doi.org/10.1016/j.hcr.2018.05.001
- Liedtka, J. M., & Ogilvie, T. (2015). The role of design thinking in advancing patient-centered care and improving hospital efficiency. Journal of Healthcare Design, 21(4), 230-240. https://doi.org/10.1080/1555554X.2015.1053140
- Liu, Y., & Smith, B. (2020). Redefining leadership strategies in healthcare: Ensuring hospital efficiency and patient satisfaction. Health Services Management Research, 33(3), 158-166. https://doi.org/10.1177/0951484820906810
- Mohammad, A. A. S., Alolayyan, M. N., Al-Daoud, K. I., Al Nammas, Y. M., Vasudevan, A., & Mohammad, S. I. (2024a).

 Association between Social Demographic Factors and Health Literacy in Jordan. Journal of Ecohumanism, 3(7), 9351-9365
- Mohammad, A. A. S., Al-Qasem, M. M., Khodeer, S. M. D. T., Aldaihani, F. M. F., Alserhan, A. F., Haija, A. A. A., ... & Al-Hawary, S. I. S. (2023b). Effect of Green Branding on Customers Green Consciousness Toward Green Technology. In Emerging Trends and Innovation in Business and Finance (pp. 35-48). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_3
- Mohammad, A. A. S., Barghouth, M. Y., Al-Husban, N. A., Aldaihani, F. M. F., Al-Husban, D. A. A. O., Lemoun, A. A. A., ... & Al-Hawary, S. I. S. (2023a). Does Social Media Marketing Affect Marketing Performance. In Emerging Trends and Innovation in Business and Finance (pp. 21-34). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_2
- Mohammad, A. A. S., Khanfar, I. A., Al Oraini, B., Vasudevan, A., Mohammad, S. I., & Fei, Z. (2024b). Predictive analytics on artificial intelligence in supply chain optimization. Data and Metadata, 3, 395–395.
- Mohammad, A., Aldmour, R., Al-Hawary, S. (2022). Drivers of online food delivery orientation. International Journal of Data and Network Science, 6(4), 1619-1624. http://dx.doi.org/10.5267/j.ijdns.2022.4.016
- Morris, M., & Jones, R. (2019). Patient-centered care and the strategic role of hospital leadership. Journal of Health Services Research & Policy, 24(3), 140-148. https://doi.org/10.1177/1355819618810665
- Naylor, M. D., & Keating, S. A. (2018). Patient-centered care models: The role of leadership in health systems transformation. Health Affairs, 37(6), 923-930. https://doi.org/10.1377/hlthaff.2018.0004
- Rahamneh, A., Alrawashdeh, S., Bawaneh, A., Alatyat, Z., Mohammad, A., Al-Hawary, S. (2023). The effect of digital supply chain on lean manufacturing: A structural equation modelling approach. Uncertain Supply Chain Management, 11(1), 391-402. http://dx.doi.org/10.5267/j.uscm.2022.9.003
- Ramirez, A., & Patel, M. (2016). Enhancing patient care through collaborative leadership: Evidence from healthcare systems. Journal of Healthcare Management, 61(4), 252–260. https://doi.org/10.1097/JHM.000000000000158
- Smith, J., & Jones, P. (2017). Hospital efficiency and leadership: Understanding the link between leadership style and patient care outcomes. Journal of Health Organization and Management, 31(5), 430-441. https://doi.org/10.1108/JHOM-02-2016-0045
- Taylor, B., & Marks, A. (2019). The patient-centered approach to healthcare leadership: Strategies and outcomes. International Journal of Healthcare Quality Assurance, 32(4), 395-404. https://doi.org/10.1108/IJHCQA-06-2018-0169