International Journal of

Health, Medicine and Nursing Practice

(IJHMNP)
Role of Nursing Managers in Enhancing the Clinical
Decision-Making Skills of Critical Care Nurses in Yaoundé-Cameroon



Vol.5, Issue No.1, pp 28 – 39, 2023

www.carijournals.org

Role of Nursing Managers in Enhancing the Clinical Decision-Making Skills of Critical Care Nurses in Yaoundé-Cameroon: A Qualitative Study

1*Mispar Guinyonga Wankam

Faculty of Health Sciences, Department of Nursing and Midwifery, University of Bamenda, Cameroon

*Corresponding author's email: wankam-mispa@hotmail.com

² Mary Bih Suh Atanga

Faculty of Health Sciences, Department of Nursing and Midwifery, University of Bamenda, Cameroon

Email: maryatanga@gmail.com

³Fomba Emmanuel Mbebeb

Faculty of Education, Department of Psychology, University of Bamenda, Cameroon

Email: fombaem@yahoo.com/fombambebeb@gmail.com

Abstract

Purpose: This study aims at exploring the role of nurse managers in decision-making in 4 referral hospitals in Yaoundé-Cameroon.

Methodology: The study used a qualitative exploratory design using semi-structured interview guides as data collection instruments. The study population was made up of 15 nurse managers (frontline, middle-level, and top-level managers) from four referral hospitals in Yaoundé-Cameroon. Data were collected using a semi-structured interview guide from a purposeful sample of nurse managers. The saturation level determined the sample size for the study. Data were analyzed using inductive content analysis.

Findings: There was a diversity in the role of nurse managers in developing the clinical decision-making skills of critical care nurses. Professional recognition, advocacy, and teamwork were the categories generated from the managers' views on nurses' participation in institutional meetings. Nine managers viewed effective recognition and reward system as the main motivation system for empowering nurses in clinical decision-making. Administrative meetings and rounds, basic materials and skills, interdisciplinary collaboration and standardization of care were the main strategies used by nurse managers to support decision-making in critical care. Subordination of nurses, lack of qualified staff, and infrequent organization of seminars, and meetings involving nurses were the major challenges they faced.

Unique contributions to theory, practice, and policy: Findings from the study proposed that hospital nurse managers should employ various strategies to motivate nurses in decision-making by installing an effective recognition and reward system, involving them in institutional meetings, and creating a collaborative environment that favors nurse's autonomy in decision-making.

Keywords: Clinical decision-making skills, Critical care nurses, Nurse Managers

CARI Journals

Vol.5, Issue No.1, pp 28 – 39, 2023

www.carijournals.org

INTRODUCTION

The dynamic and uncertain nature of the critical care environment requires nurses to be competent decision-makers to meet the needs of their clients. Changing patient needs, medical technology and financial resources are creating uncertainties in the critical care units (CCU) and necessitating structural and procedural overhauls of care (Mohamed, 2018; Roghieh Nazari, 2018). As a result, nurses need varied skills and greater involvement in clinical decision-making, which leads to better outcomes. The decisions that critical care nurses make have a direct and immediate impact on the health and even survival of the patients they care for (Samuel et al., 2018). There is an established relationship between the quality of patient outcomes and nurses' decision-making, and one of the ways to improve the quality of patient outcomes is to increase nurses' involvement and engagement in decision-making related to nursing interventions (Samuel et al., 2018). However, the involvement of nurses in organizational decision-making varies depending on many factors, including the influence of the nurse manager and the management process (Krairiksh & Anthony, 2001; Mohamed, 2018).

The role and influence of frontline nurse managers are becoming increasingly important in today's complex and ever-changing healthcare organizations. As a result, their function and scope of practice have evolved, increasing accountability, authority, and responsibility for unit management, patient care, and staff development. In the face of these changing roles, nurse managers must continue to lead their staff in achieving the patient, nurse, and critical care unit goals, involving nurses in decisions that directly or indirectly affect patient care (Krairiksh & Anthony, 2001; Mohamed, 2018)

Although researchers believe that the managerial role of the nurse manager is inherent in their professional role, little research has been done on nursing management roles in intensive-care units (ICUs) in Cameroon and the diversity of this role remains low and unclear (Roghieh Nazari, 2018). This ambiguity is important because efforts to improve critical care management will be futile without an understanding of the managers' roles and the challenges they face (Roghieh Nazari, 2018). Despite a rich heritage of rational approaches to understanding decision-making in the nursing literature, Thompson & Gopal, 2006) argued that there are still central empirical and theoretical questions left unanswered in decision-making. This makes it clearer that management strategies influence the decision-making process.

Herzberg's two-factor theory was used as a theoretical framework for the study. Motivation factors according to Herzberg's theory are intrinsic to the job and lead to positive attitudes toward the job because they satisfy the need for growth or self-actualization. A person's motivation factors for working include career advancement, the work itself, and the opportunity for growth, responsibility, recognition, and accomplishment (Hasani, 2020; Wen et al., 2022). On the contrary, Hygiene factors are related to the work environment and include interpersonal relationships, rights, organizational policies, and management, relationships with supervisors, and working conditions (Alshmemri et al., 2017).

Statement of the Problem



Vol.5, Issue No.1, pp 28 – 39, 2023

www.carijournals.org

Almost every country and health care system at one moment have witnessed a growing demand for health care services. In Cameroon, the healthcare systems and especially the public ones are facing an increasing number of challenging factors such as limited financial resources, socio-demographic changes, rising healthcare costs, increasing healthcare demands, and increased public expectations (Keshk et al., 2018 a, 2018b). Healthcare institutions are therefore looking for strategies to more appropriately utilize the workforce for maximum output and thus technological developments have taken place in the critical care units (Keshk et al., 2018b; Maharmeh et al., 2016). While these developments provide the potential for significant improvements in health care, the devices alone cannot affect these changes and therefore effective use of assessment information through effective decision-making skills is essential to improve the outcome of care (Keshk et al., 2018b). Nursing managers play an important role in shaping these decision-making skills through regular supervision, organizing training workshops, and capacity building for ICU nurses. The role and influence of first-line nurse managers are becoming increasingly important in today's complex and continually changing healthcare organizations. Thus, the function and scope of their practice also have evolved, increasing their accountability, authority, and responsibility for unit management. patient care, and staff development (Delaney, 2017; Drucker & Oster, 2015).

Research questions

What are the roles of nursing managers in the development of the decision-making skills of critical care nurses?

What are the strategies used in supporting clinical decision-making in critical care?

What are the challenges encountered by nurse managers in decision-making in critical care?

Objective

To explore the roles of nursing managers in the development of the decision-making skills of critical care nurses

To outline the strategies used by nurse managers in supporting clinical decision-making in critical care

To identify the challenges encountered by nurse managers in their managerial processes when it comes to decision-making in critical care.

MATERIALS AND METHODS

Study Area

The study was carried out in the adult intensive-care units in four reference hospitals in Yaounde City: Jordan Medical Services (JMS), Essos Hospital Center (CNPS); central Hospital (HCY), and Gyneco-Obstetric Hospital (HGOPY). The reason for choosing these hospitals was that they represented major referral centers in Yaoundé and are comparable in terms of the depth and breadth of intensive-care services provided. These hospitals also serve as training grounds for students and professionals from various health and science fields coming from different cities and regions of Cameroon. Specifically, the study took place in the



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

medical critical care units of each hospital where decisions making skills are practiced by head nurses and staff nurses.

Study Design

A qualitative exploratory design was used for this study with the inductive content analysis used to get in-depth information on the roles of nurse managers in enhancing the clinical decision-making skills of critical care nurses.

Sampling and Sample Size Estimation

The study sample consisted of 15 nurse managers (frontline, middle and top-level managers) working in four referral hospitals (two public, one para-public, and one private hospital) in the capital city of Yaoundé Cameroon. Participants who had managerial experience for at least one year were chosen through the purposive sampling method.

Data collection instrument

Data were collected using a semi-structured interview guide from March 2022 to May 2022.

Data analysis

The demographic data were analyzed using descriptive statistics and the interview data were analyzed using inductive content analysis.

Ethical considerations

Ethical clearance was obtained from the Institutional Review Board of the University of Bamenda and the regional ethical committee for the central region. An authorization letter was obtained from the ethics committee of the selected hospitals.

Confidentiality, privacy, and anonymity were maintained by ensuring that interviews are completed anonymously so that data cannot be traced back to the respondent.

Participants' written informed consents were obtained, and they were guaranteed that they have no obligation to participate in the research and can withdraw at any time. The electronic data were saved on a hard disk, and only the researcher could have the computer password to ensure confidentiality. The participants were assured that all data will be destroyed after five years.

RESULTS

Participant's demographic profile

The table below shows that the age ranged from 33 to 55. Looking at the educational level, five had a master's degree, 3 were senior nurse technicians, 3 Bachelor's degrees, 2 Ph.D. students, and 2 state registered nurses. The positions they occupy are not dependent on the level of education as we had 7 head nurses, 4 general supervisors, 3 coordinators, and 1 assistant head nurse. The experience ranged from 3 years to 11 years and 7 were men while 8 were females.

Table 1: Profile of nurse managers

Variable	Criteria	Frequency	Percentage	
----------	----------	-----------	------------	--



Vol.5.	Issue	No.1.	pp 28 –	- 39.	2023
, 01.0,	10000	_ , _ , _ ,	PP = 0	,	

Vol.5, Issue No.1, pp 28 – 39, 2023		<u>\</u>	www.carijournals.org		
Age	30-40	7	46.7%		
	41-50	4	26.7%		
	> 50	4	26.7%		
Educational level	Ph.D./Student	2	13.3%		
	Masters	5	33.3%		
	Bachelor	3	20.0%		
	Diploma	2	13.3%		
	Senior nurse technician	3	20.0%		
Gender	Male	7	46.7%		
	Female	8	53.3%		
Experience	3-4yrs	5	33.3%		
	5-6yrs	6	40.0%		
	>6yrs	4	26.7%		
Position	General supervisor	4	26.7%		
	Coordinator	3	20.0%		
	Head nurse	7	46.7%		
	Assistant head nurse	1	6.7%		

Role of Nurse Managers in the Development of Decision-Making Skills of Nurses

The nurse managers had diverged opinions on their role in the development of the decisionmaking skills of nurses when it came to involving nurses in institutional meetings, motivating nurses in decision making and the strategies and resources used to enhance the decision-making skills of nurses.

Involving Nurses in Institutional Meetings

Many reasons were outlined by the nurse managers on the importance of including nurses in these meetings with four categories: professional recognition, professional role, advocacy, teamwork, and transformation.

Professional Recognition



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

Nurse Managers stressed that if ICU nurses are allowed to participate in board meetings, they will grow professionally and personally and they will offer a lot of feedback on their activities. This was reflected in the following participant's words:

"Participating in institutional meetings is a way for nurses to grow professionally and personally and to give back. Many nurses report they feel they receive so much more than they give when serving on diverse board meetings, and it enables them to bring fresh perspectives and insights to their units. It is often energizing, impactful, and inspiring." (Manager 15)

Professional role

Some nurse managers consider nurses to be skilled communicators and allowing them to participate in institutional meetings will enable them to express the concerns of their colleagues which might facilitate their transition to new roles in the future. One manager reported:

ICU nurses are versed in communication skills and they play an important role by serving as the primary link between physicians, family members and patients. If allowed to participate in institutional meetings, they can express the concerns of their other nurses to board members easily and this might later facilitate their colleagues' transitions into new roles.

Advocacy and teamwork

Some of the managers thought that if nurses are allowed to participate in board meetings, they will integrate into the multidisciplinary teams and may propose better treatment options, legal options, and payment solutions for patients if they feel they are being offered unfair options. One of the nurse managers confirmed this in the statement:

"According to the organizational chart, there are team leaders and head nurses, so I think this is very important. By attending the meeting, nurses can be integrated into an interdisciplinary team to instantly identify patient problems and suggest better treatment options, thus defending the right of the patients" (manager 5)

Transformation

While some managers thought that allowing nurses to serve on boards will improve outcomes and quality care, others thought that if nurses participate on boards, they will be able to partner with other leaders to promote change both internally and externally as stated by one *manager*:

"It is important to call a nurse to work on board, as nurses provide a unique perspective in healthcare. Board services allow nurses to work with other leaders to drive change and promote health" (manager 13)

Motivating nurses in decision-making

Managers outlined various categories of motivations in the ICU ranging from *effective* recognition and reward systems, material and human resources, and supportive leadership.

Effective recognition and reward system



Vol.5, Issue No.1, pp 28 – 39, 2023

www.carijournals.org

The nurse managers as motivational to the nurses identified four types of rewards: financial compensation and benefits, acknowledgment and respect, collaboration and empowerment, and professional development. One manager in her statement reported:

"In our context, we must motivate nurses by providing them with appropriate cote part and risky benefits and compensation and promoting a positive work environment that includes supportive supervision Money is one of the most powerful motives. Indirect financial incentives such as bonuses, profit sharing, retirement benefits, vacation allowances, medical insurance, free medical services, or other benefits with cash flow from the organization to employees give nurses value within the health care system." (Manager 4)

Materials and human resources

While some managers thought having basic equipment and materials would help the nurse in decision-making, others thought that having the basic skills is of paramount importance. This was the case with *manager 6* who said:

"An important element is sometimes the tools that are around if they have all the tools, the materials and everything can allow them to make decisions better because they have all the necessary tools around them to improve their decision-making skills. I also wanted to say that the basic skill is also essential because eeeth we take the example if it is a nurse assistant or state registered nurse, the basic skill depends on everyone's level. There is also experience that can lead them to make firmer decisions, i.e. how they have done in the past." (manager 6)

Supportive leadership

For some managers, their attitudes towards the nurses count most in supporting them in decision-making. One manager confirmed that in her statement:

"The motivation of a nurse depends on the attitude of the particular nurse manager. For example, recognizing each staff as a unique individual motivated by various things identifies the unit's individual and collective value, implements an appropriate reward system when problems arise, listens carefully to the individual, and identify unmet needs that can create dissatisfaction. Create an environment that "stretches" nurses to encourage self-growth and self-fulfillment, maintain a positive and enthusiastic image as a role model for their subordinates, and spend time and energy to support and encourage discouraged nurses (manager 14)

Role in Supporting Clinical Decision-Making

Strategies and resources

The nurse managers as supporting the nurses in their decision-making process outlined a good number of strategies and resources: *capacity building, scientific approach, lack of input and support, and organizational approach.*

Capacity building



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

Managers at the supervisory level declared they organized conferences, seminars on some sensitive topics, and case presentations both internally and externally. According to a coordinator,

"Case presentations in the conference room, seminars, and refresher courses on particular sensitive nursing topics, among other things, are the programs that we typically organize for the continuous training of nurses. Additionally, we encourage nurses to attend national and international conferences. The majority of the time, they must pay for some of these programs, which makes it difficult for them to attend"

Scientific approach

In using the nursing process, a nurse obtains information on clients' responses to health problems, thus facilitating the planning of appropriate care. One general supervisor confirmed:

"For us, we have a conceptual model that nurses use to come out with a nursing care plan for the patients. Since in the nursing process, nurses can make decisions autonomously, this can foster their decision-making skills" (manager 6)

Organizational approach

For some head nurses, having the basic materials and skills are important in fostering the decision-making skills of nurses as these can help them to recognize changes in the patient. According to one head nurse,

"When taking care of patients, nurses have access to a variety of fundamental tools. Some, for instance, are outdated, but there are guidelines. Additionally, there are glucometers and blood pressure monitors that enable nurses to observe changes in patients."

Lack of input and support

Some managers complained of a lack of support and input on the part of the administration to enhance the decision-making skills of nurses. They have been working for years without a single workshop organized as stated by a charge nurse:

"Unfortunately, the administration has not taken any special steps to update the knowledge and skills of its staff. No workshops have been held in the past and the knowledge of the most staff is not up to date. We have repeatedly called for basic and advanced CPR and trauma emergency training, but the government says there is no budget for the workshop. How can staff make the right clinical decisions and do the right thing for the patient if their knowledge and skills are not up to date?" (manager 3)

Challenges Encounter in Decision-Making

Analysis of the interviews from the nurse managers yielded four categories as outlined below:

Human resources challenges

CARI Journals

Vol.5, Issue No.1, pp 28 – 39, 2023

www.carijournals.org

Hiring staff who do not have the necessary expertise and skills in the ICU is a major challenge that has influenced the experience of managers in clinical decision-making. Commented one of the coordinators:

"Our greatest obstacle is a lack of qualified staff. More than half of the employees are nursing assistants. The issue is that assistant nurses who specialize in their specialties are not qualified to work in the intensive-care unit. Now, we are expected to work with them just like professional nurses do, who take on specific roles or learn specific things to help them make better decisions. Because you can't do it, it's very hard."

Organizational culture challenges

Subordination of nurses and the authority given to physicians is a major challenge seen by some nurse managers. The role of the nurse is not recognized as important in the organization and thus they are not involved in decision-making. One general supervisor reported:

"Key challenges, such as the professional awareness of nurses and the power of physicians, continue to complicate nurses' full involvement in decision-making. We need a team of professionals who understand the important role nurses play in providing care and their most important role in helping patients make decisions." (manager 6)

Inadequate building of capacity

Some of the nurse managers outlined that their major challenge is the infrequent organization of training programs for nurses. One manager confirmed this by saying:

"We face many challenges, but the biggest challenge is the slow pace at which caregivers are continuously trained. Continuing education programs should be organized in the hospital at least every 6 months to keep nurses up to date. However, these programs are held every two years. Hospital management complains about the lack of resources to organize training. As a result, most care protocols are not updated regularly" (manager 8)

Professional incapability

Some managers assume that though the most important capabilities of critical nurses are to make quick and correct clinical decisions, they lack enough clinical knowledge and skills, especially in the domain of physiopathology of diseases and pharmacology. One manager confirmed that by saying:

"One of the most important professional skills that critical care workers need to make quick and accurate clinical decisions is clinical knowledge. Unfortunately, some of my colleagues here do not have sufficient clinical knowledge. For example, they do not know much about the pathophysiology or pharmacology of the disease. If they don't know the cause and cure for an illness, how can they make the right clinical decisions and take effective clinical actions?" (Manager 1)

DISCUSSIONS

Professional recognition (self-identity, indispensability, and accessibility), advocacy (primary liaison for patients and colleagues), and teamwork (team integration) were the



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

categories and themes generated from the managers' views on nurses' participation in institutional meetings. According to the Nurses on Board Coalition (Serve on a Board to Make an Even Greater Impact as a Nurse, n.d.) nurses are the most trusted professionals and to exercise public trust in the form of service in communities across the country, nurses can choose to volunteer on the boards of various non-profit organizations and foundations and bring a nursing voice to the table.

Nine managers viewed effective recognition and reward system as the main motivation system for empowering nurses in clinical decision-making i.e., financial compensation and benefits, acknowledgment and respect, collaboration and empowerment, and professional development. Gaughan et al. (2021) carried out a similar study on rewarding and recognizing frontline staff for success in infection prevention and both managers and frontline staff discussed how successful efforts to control nosocomial infections were rewarded with both tangible rewards and intangible recognition.

Organizational approaches i.e., administrative meetings and rounds, basic materials and skills, interdisciplinary collaboration and standardization of care were the main strategies used by nurse managers to enhance the decision-making skills of nurses. Scholl et al. (2018) carried out a study on Organizational- and system-level characteristics that influence the implementation of shared decision-making and strategies to address them, and six main categories of organizational characteristics were described as influential to nurses' decision-making skills: organizational leadership, culture, teamwork, resources, priorities, and workflows.

Human resources challenges e.g., lack of qualified staff, dissatisfaction, disagreement, and a heavy workload were the major challenges faced by nurse managers in decision-making. According to (Rasooli et al., 2013; Zamanzadeh et al., 2020), human resources are regarded as the main capital of an organization, so in the field of human resources, organizations must take a variety of actions concerning the achievement of their mission, goals, and strategies.

CONCLUSION

This study provides substantial evidence supporting the need for strategies to overcome barriers to nurses' participation in clinical decision-making and their involvement in institutional meetings. Such strategies should focus on the collaboration of different fields of expertise: in policy, in community, in organizations and interpersonal theories. Mechanisms that inform and empower nurses and patients are also needed, e.g., organizations or managers need to develop strategies to improve decision-making skills through training, workshops and seminars to improve nurses' decision-making skills and ultimately improve the work environment and quality of care.

RECOMMENDATIONS

The following strategies are important on the part of the managers:

 Nursing managers must ensure that nursing is involved in decision-making at all levels of policy development and implementation, and address barriers to achieving nursing autonomy, particularly medical dominance.



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

- o Nursing managers must focus on the needs of each nurse and employ motivating and empowering strategies appropriate to each person and situation.
- Using the shared governance model, which is a formal structure that codifies the rights, responsibilities and authority of nurses to make decisions.

REFERENCES

- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's Two-Factor Theory. *Life Science Journal*, *14*(5), 12–16.
- Delaney, L. J. (2017). Patient-centred care as an approach to improving health care in Australia. *Collegian*.
- Drucker, J., & Oster, H. (2015). *Patient-centred care: improving healthcare outcomes*. 30(March), 2015.
- Gaughan, A. A., Walker, D. M., DePuccio, M. J., MacEwan, S. R., & McAlearney, A. S. (2021). Rewarding and recognizing frontline staff for success in infection prevention. *American Journal of Infection Control*, 49(1), 123.
- Giroux, C.-R. (1960). The Motivation to work, by F. Herzberg, B. Mausner and B.-C. Snyderman, John Wiley & Sons, New York, John Wiley & Sons, 1959. *Relations Industrielles-Industrial Relations*, 15(2), 275.
- Hasani, F. A. (2020). Herzberg's theory and job satisfaction of school nurses in bahrain. *Life: International Journal of Health and Life-Sciences*, 6(1), 01–16.
- Keshk, L. I., Ahmed, S., Qalawa, A., & Aly, A. A. (2018a). Clinical Decision-making Experience of the Critical Care Nurses' and Its Effect on Their Job Satisfaction: Opportunities of Good Performance. *American Journal of Nursing Research*, Vol. 6, 2018, Pages 147-157, 6(4), 147–157.
- Keshk, L. I., Ahmed, S., Qalawa, A., & Aly, A. A. (2018b). Clinical Decision-making Experience of the Critical Care Nurses' and Its Effect on Their Job Satisfaction: Opportunities of Good Performance. *American Journal of Nursing Research*, Vol. 6, 2018, Pages 147-157, 6(4), 147–157.
- Krairiksh, M., & Anthony, M. K. (2001). Benefits and outcomes of staff nurses' participation in decision making. *Journal of Nursing Administration*, 31(1), 16–23.
- Maharmeh, M., Alasad, J., Salami, I., Saleh, Z., & Darawad, M. (2016). Clinical Decision-Making among Critical Care Nurses: A Qualitative Study. *Health*, 08(15), 1807–1819.
- Mohamed, N. T. (2018). Relationship between leadership styles and clinical decision-making autonomy among critical care nurses. *Egyptian Nursing Journal*, 15(2), 102.
- PR ACTICE GUIDELINE. (n.d.). Retrieved January 10, 2023, from www.cno.org
- Rasooli, A. S., Zamanzadeh, V., Rahmani, A., & Shahbazpoor, M. (2013). Patients' Point of View about Nurses' Support of Individualized Nursing Care in Training Hospitals



Vol.5, Issue No.1, pp 28 - 39, 2023

www.carijournals.org

- Affiliated with Tabriz University of Medical Sciences. *Journal of Caring Sciences*, 2(3), 203.
- Roghieh Nazari, Z. V. S. M. K. E. H. (2018). The meaning of managerial competency of ICU Head Nurses in Iran: A Phenomenological Study.
- Samuel, H., Sehar, S., Afzal, M., & Amir Gilani, S. (2018). Influence of Supportive Leadership on Nursing Clinical Decision making in Critical Care Units at Tertiary Care Hospital Lahore. *International Journal of Nursing*, *5*(2), 2373–7670.
- Scholl, I., LaRussa, A., Hahlweg, P., Kobrin, S., & Elwyn, G. (2018). Organizational- and system-level characteristics that influence implementation of shared decision-making and strategies to address them a scoping review. *Implementation Science*, *13*(1), 1–22.
- Serve on a Board to Make an Even Greater Impact as a Nurse. (n.d.). Retrieved August 27, 2022, from https://nursesusa.org/article_serve_on_board_to_make_even_greater_impact_as_nurse.a sp
- Thompson, J., & Gopal, S. (2006). Nurses, information use, and clinical decision making—the real world potential for evidence-based decisions in nursing. *BMC Bioinformatics*, 7(1), 145.
- Wen, D., Yan, D., & Sun, X. (2022). Employee satisfaction, employee engagement, and turnover intention: The moderating role of position level. *Human Systems Management*, 41(3), 407–422.
- Zamanzadeh, V., Valizadeh, L., & Neshat, H. (2020). Challenges of human resources management in nursing in Iran: A qualitative content analysis. *Nursing Open*, 7(1), 319.