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RESILIENCE AMONG NURSE MANAGERS: A NARRATIVE LITERATURE REVIEW ON INFLUENCING FACTORS AND STRATEGIES FOR STRENGTHENING RESILIENCE

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Abstract

Healthcare systems worldwide experience challenges and crises that include pandemics, emergency events, wars, and so on. During these events, nurse managers are required to provide a professional response. handle many burdens, resolve continuous pressures, make determined decisions, and cope with uncertainty and rapidly changing situations. This might undermine the nurses' personal resilience. Nevertheless, the empirical literature about nurse managers' resilience is limited, and studies focus more on nursing staffs and less on their managers. When the world continues coping with wars and emergency situations, it is highly important to explore how nurse managers address the meaningful challenges that are likely to affect their personal resilience.

This narrative review aims to investigate available literature dealing with resilience in the healthcare system, identifying the state of knowledge about personal resilience, as well as strategies for enhancing personal resilience in order to handle crises at work. The literature review illustrates that exposure to emergency situations, workloads, and insufficient resources, constitute factors that affect nurse managers' resilience. The strategies identified as promoters of nurse managers' resilience are: creating a balance between work and life, establishing positive relationships and communication with colleagues, training designed to improve resilience, offering social support, and thinking positively in times of crisis.

Keywords: personal resilience; nurse managers; resilience-enhancing strategies; crises; emergency situations

JEL Classification: I11; I118; M1; M12.

1. INTRODUCTION

In recent years, mankind has witnessed a high number of crises, the most devastating among them being crises resulting from endless wars waged around the globe. Throughout the crisis, managers are supposed to manage the situation.

Nevertheless, every crisis management differs from the other and it has its own uniqueness. In states of crisis, communication has a meaning prior to, during, and following the crisis. Thus, it is important to be deeply acquainted with the organization's culture, properties, and values of the population that experiences the crisis (Zamoum and Gorpe, 2018).

Healthcare systems around the globe have experienced severe crises and upheavals throughout the last decade. These upheavals attributed an increasingly growing attention to the concept 'resilience' in the worldwide healthcare system. It has been argued that building up the resilience of the healthcare systems will reduce their vulnerability to crises, by ensuring a better comprehension and more effective response to the crisis (Barasa *et al.*, 2018). Crisis is a negative event or consequence that encompasses the element of surprise or disruption, threatening people's resources and well-being. Usually, it starts with a meaningful event that might be a catastrophe or a series of pressure factors that have an accumulated effect (Rajabipoor Meybodi and Mohammadi, 2021).

2. LITERATURE REVIEW

The impact of nursing staffs' psychological trauma, as well as the effect of terrorism or war on healthcare systems were the focus of a limited number of studies (Al-Hawdrawi *et al.*, 2017). Exposure to emergency situations is associated with lower levels of resilience at work, a factor that is particularly important for healthcare institution workers in the course of emergency situations that involve high demands and strong pressure (Shmul *et al.*, 2024).

Nurse managers cope everyday with the responsibility of supervising the staff, ensuring high quality of care on the unit's level, and mediating between the nursing staff and senior management. As managers, they play a positive role in the promotion of positive working climate that can serve as a factor that protects against their subordinates' burnout at work. Consequently, nurse managers' professional well-being and psychological safety are crucial. This is important particularly during periods of crisis, when they are expected to offer support and guidance under unusual conditions (Labrague *et al.*, 2018).

Difficulties at work are an issue that invokes an increasing attention in the international literature dealing with nurses. Extensive literature attests to the industrial and organizational challenges faced by nurses in numerous places around the world. Nurses handle a wide variety of problems and challenges during the course of their work. These difficulties include a severe shortage of experienced nurses, aging workforce, health and occupational security problems, and continuous challenges (Jackson *et al.*, 2007).

Nurse leaders are coping today with an increasingly growing responsibility and with challenges that involve many continuous pressures that might have an adverse impact on leaders' ability to succeed. The nurse leaders play a key role in the tutoring of their staffs under conditions of high tension (Abd-El Aliem and

Abou Hashish, 2021), as well as making decisive yet informed decisions, while coping with uncertainty and rapidly changing situations (Alazmy *et al.*, 2022).

Nurse leaders in the current healthcare environment must work incessantly in complex situations. They are expected to do more with less means, maintain quality of care standards, and preserve satisfied human resources. A growing pressure on all levels requires a set of well-equipped leadership skills, resilience being one of the most important competences of this leadership. Nurse leaders' personal resilience, combined with the ability to promote the resilience of a group and an organization, enhances considerably the success and long-range functioning of the group or the organization (Cline, 2015).

In spite of the growing interest in the concept of resilience, there are but a few evidences regarding the way of creating or strengthening resilience in healthcare systems or in other sectors. The empirical literature that discusses resilience is mainly conceptual, focusing on terms and principles. Nevertheless, understanding what makes systems strong in the real world is crucial and important, and so it the development of strategies for promoting their resilience (Barasa *et al.*, 2018). The challenge of managing staffs in emergency times, coping with an increasing sense of burnout, and dropping out from the profession is extensive, and there are several gaps in the research of this topic around the world (Heeb and Haberey-Knuessi, 2014). Furthermore, there is insufficient research of nurses' accumulated experience in caring for the wounded at times of war (Rahimaghaee *et al.*, 2016), and nurse leaders frequently lack the management and leadership training required during war crises (Warshawsky and Cramer, 2019).

This narrative review aims to explore the available empirical literature dealing with the concept resilience with respect of nurse managers, the factors that affect nurse managers' resilience, and the strategies for improving personal resilience for the purpose of handling crises at work.

3. RESILIENCE OF NURSE MANAGERS

Resilience is defined as the ability to overcome distress, be developed, and get reinforced by the experience (Thomas and Revell, 2016). This is a process of negotiations, management, and compliance with meaningful or traumatic sources of tension, in which assets and resources in individuals' life and the environment, facilitate the ability to adjust to and cope with various states of discomfort. Resilience is the capability of overcoming trauma, accompanied by a positive and optimistic approach towards the future. Healthcare workers' resilience is defined as a personal capacity that helps them in resolving difficulties and overcoming demands at their place of work (Handini *et al.*, 2020). This is a process that is activated as a response to complex events and challenges and is usually described as the ability to recuperate from negative occurrences. Moreover, the term resilience in a process of adjustment is

associated with people's ability to accomplish their essential goals under given or accepted conditions (Aryuwat *et al.*, 2023); assist them in the confrontation with factors of pressure and distress (Sihvola *et al.*, 2022); as well as be renewed and re-build a stable psychological and physical situation when coping with extensive adverse events (Rajabipoor Meybodi and Mohammadi, 2021).

Resilience at work is described as an index of recovery from work demands, degree of involvement in the work, extent of physical health, and indices of chronic exhaustion and impaired sleep, and it is considered as a competence that can be taught, exercised, and developed (Carpio *et al.*, 2018). Moreover, it was recommended as a personality trait that can serve as a defense mechanism against burnout at work (Labrague *et al.*, 2018).

There is no clear definition of nurse managers' resilience, since only a few studies have explored this topic. Based on previous studies, nurse managers' resilience encompasses the ability to cope with distress at work, combined with their personal resilience (Sihvola *et al.*, 2022). Hospitals, as permanent and specialized centers for granting medical services, with their availability of facilities and experienced human resources, constitute one of the important elements of the process of response to unexpected events, being responsible for maintaining the patients' life and health (Rajabipoor Meybodi and Mohammadi, 2021).

Current studies have identified the resilience's role of protection against burnout among healthcare professionals. In a cross-sectional study of 1061 nurses, conducted by Luo *et al.* (2022), the participants who reported low level of resilience, demonstrated more burnout symptoms, among them emotional fatigue, cynicism, and reduced professional efficiency. Furthermore, evidences showed a close relation between leadership and resilience among nurse managers, and nurse managers with low level of resilience manifested a less empowering leadership (Luo *et al.*, 2022).

The relationships between nurse managers' organizational support, leadership, resilience and burnout are complex and insufficiently understood. Studies (e.g.. Luo *et al.*, 2022) have indicated that organizational support has a positive impact on the enhanced psychological resources of nurse managers, such as leadership. Nevertheless, there are limited evidences that back up the positive role of organizational support, leadership, and resilience with respect of nurse managers' burnout, since most studies have focused mainly on bedside nurses and head nurses (Luo *et al.*, 2022). On the global level, nurse leaders have the task of ensuring high quality care, also in times of crisis that require an active problem-solving and confidence in the future (Sihvola *et al.*, 2022).

During the COVID-19 pandemic, nurse managers demonstrated different levels of resilience, ranging between intermediate to high (Sihvola *et al.*, 2022), and there are only a few studies of nurse managers' resilience during that period. Future research should provide a response to nurse leaders' personal resilience due to the relation with the nurses' resilience (Sihvola *et al.*, 2022).

Voices of criticism are hesitant about the concept "resilience", believing that it serves for hiding the responsibility for political and systemic failures. Hence, if the occupational environment fundamentally lacks resources, communication, collaboration, joint decision-making, as well as support and acknowledgement systems, it is difficult to have resilient workers. Consequently, these organizational factors cannot settle for resilience training designed for individuals; rather, they require a more systemic approach (Labrague *et al.*, 2018).

Enhancing personal resilience has become a superficial response to the preservation of nurses during a global shortage of nurses. Nurses' resilience must be considered as a dynamic process that necessitates a continuous handling and commitment, as well as an adjustment ability and flexibility vis-à-vis changing professional and personal demands. An active handling of nurse managers' need to maintain, preserve, and build their resilience, may facilitate some of the challenges of manpower preservation and recruitment, faced by nurses and leaders in the field of healthcare (Udod *et al.*, 2021a, 2021b).

Resilience is an essential element of effective nursing leadership, affecting the performance of the organization. Nurse leaders at all levels should develop these competences in order to survive and prosper in an environment of health that is increasingly becoming more complex. Today's nurse leaders need leadership skills that are constantly developed in order to manage an advanced and complex environment of health (Cline, 2015). Moreover, nurse managers' preservation is important, and it will retain stable human resources that constitute a larger pool of nurses for senior positions, promoting a nurse managers' team that benefits from job satisfaction (Carpio *et al.*, 2018).

4. THE FACTORS THAT IMPACT NURSE MANAGERS' RESILIENCE

Nurse managers are not resilient and are sensitive to work-related tension. The environment in which nurses work today is characterized by a growing complexity of the healthcare system. Insufficient number of workers, patients' changing needs, and nurse managers' expanding function have considerably contributed to their experiences of tension. Furthermore, nurse managers have to cope with several challenges, both on the high and low management levels in the organization, or in the staffs that have various perspective and contradictory values (Labrague *et al.*, 2018).

Healthcare workers frequently face challenges, heavy workload, fatigue, as well as internal and external stress factors. They must be able to balance between various stress factors present in or outside the work environment, and the services that have to be provided by professional healthcare workers (Handini *et al.*, 2020). Exposure to states of emergency are associated with lower levels of resilience at work, a fact that is particularly vital for healthcare

institution staffs during emergency situations that encompass high demands and strong tension (Shmul *et al.*, 2024).

Resilience in the field of healthcare implies the individuals' capability and its support system, designed to help the healthcare system in coping with difficulties, demands, and stress sources at work. If the healthcare system can cope with tension in the work environment, and can provide an optimal service, it is reasonable to say that the staff has a high level of resilience (Handini *et al.*, 2020). Numerous inconvenient events in the work environment endanger the nursing staff's resilience. For example, unpredicted workloads, fatigue, insufficient resources, bullying at work, and inability, can affect the staff's performance results, one of them being patients' care. Hence, it is highly important to build and reinforce resilience in the work environment. Nurses and nurse leaders function in an intensive environment and are obliged to comply with unprecedented demands, as well as with tense working conditions. As a result, nurses and nurse leaders might abandon their position, entailing a greater uncertainty of the labor force (Udod *et al.*, 2021a, 2021b).

Successful nurse leaders reflect principles of professionalism, apply efficient inter-personal communication skills, and are extensively acquainted with the healthcare system and its complexity. Nevertheless, in spite of their indepth training, nurse leaders have for a long time been a considerably unappreciated and invisible force. maintaining the health of the healthcare systems and acting as a safety net for patients and nursing staffs. During the COVID-18 pandemic, nurse leaders were under strict inspection and were more exposed to the exceptional tension associated with the challenges faced by leaders who navigated that unprecedented pandemic (Bergman *et al.*, 2024).

Resilience can serve the individuals for problem-solving (overcoming), strength and time for resolving problems (navigating), recovering from inconvenient conditions, and being resistant or resilient (Handini *et al.*, 2020). In terms of factors that enhance resilience, studies have explored the impact of physiological factors, such as protection of the body against reactions to tension. For example, the sympathetic nervous system; external factors such as social media; internal factors such as positive emotions, sense of self-efficacy, and demographic variables, e.g., years of experience. Moreover, studies have examined the protective role of various coping strategies, designed mainly for workhours, as well as the protective role of leisure-time activities. Nevertheless, the comparative efficiency of various factors that enhance nurses' resilience have not yet been examined (Manomenidis *et al.*, 2019).

Labrague *et al.* (2018) conducted a study of 291 nurses working in acute hospitals in the United States. Approximately 62% of the participants indicated their plan to dropout from work within the next 2-5 years, tension and emotional fatigue being the main reason. The research findings showed that one out of six nurse managers experienced occupational tension and emotional fatigue due to

different tension factors, among them job conflict, pressure at work/time, workload, role unclarity, insufficient social support, insufficient leadership, organizational restrictions, constant exposure and inability to manage the pressure. All these factors were associated with the individuals' adverse implications, such as fatigue, emotional exhaustion, lack of job satisfaction, intention to drop out and poor emotional health. Continued exposure to tension not only had a negative effect on the nurse managers' health, but also on their decision-making process that could have impacted the staffs and the patients (Labrague *et al.*, 2018).

Several studies (e.g., Udod *et al.*, 2021a, 2021b) illustrated that prolonged exposure and failures to manage the pressure were frequently connected to negative implications. Thus, fatigue, emotional exhaustion, job dissatisfaction, tendency to drop out, poor decision-making, reduced mental health, healthcare system complexity, and work-life balance require innovative approaches to the accomplishment and maintenance of strong and healthy work environment for nurse managers and the staff. A workplace with a continued tension can undermine the mental and physical health of nurse managers, entailing a low level of performance and adverse effects on the patients. For example: patients' satisfaction, patients' mortality rate, errors in prescribing and administering medication, use of restrictions, and infections acquired in the hospital (Udod *et al.*, 2021a, 2021b).

A qualitative study, conducted by Udod *et al.* (2021a), aimed to investigate 16 nurse managers' perceptions of the tension involved in their function, and the way their coping strategies developed their resilience in their workplaces. The findings showed that the main factors that affected their nursing managers' role comprised insufficient resources, response and adjustment to constantly changing situations, and human resources pressure. The nurse manager succeeded in coping with these factors by a proactive approach they had adopted in order to solve urgent problems by setting priorities and establishing relationships and, thus, reduced or facilitated the burden of problems or challenges. The participants applied preventive or predictive approaches that constituted one step ahead for the purpose of moderating the negative impact of a situation, loyalty to and concern for the patients and the workers, and psycho-social support and nurturing by colleagues, family and friends (Udod *et al.*, 2021a).

5. STRATEGIES OF PERSONAL RESILIENCE IMPROVEMENT FOR COPING WITH CRISES AT WORK

A crisis is an unexpected event that is meaningful, disrupting, harmful or threatening for organizations, creating confusion, uncertainty, and suffering. It can also be defined as a period of psychological imbalance that occurs as a result of a dangerous event or situation that constitutes a considerable problem the handling of which is not possible by means of familiar coping strategies. Leadership during a crisis is meant to be meticulously shaped for focusing on

meaningful, disrupting, harmful, and threatening event, based on the understanding that every state of crisis is unique and requires a flexible and special approach (Turnipseed and VandeWaa, 2022).

In recent years, humanity has witnessed a high number of crises, the most destructive among them being the endless wars waged around the world. During a crisis, managers are supposed to manage the crisis-based situation, taking into consideration that communication is meaningful before, during and following the crisis. Hence, it is vital to know in-depth the organizational culture of the organization, its properties, and the values of the population that experiences the crisis (Zamoum and Gorpe, 2018).

While resilience is sometimes an innate characteristic, it can be developed in an initiated way, guide it and teach it. Furthermore, resilience can be reinforced during a defining moment in the career of nurse managers. Unfortunately, some of these defining moments turn into a breaking point of nurse managers that decide to reject their role (Cline, 2015).

People can develop and reinforce their personal resilience by developing personal strategies and the effect of their personal injuries. In the workplace, all people have a potential of resilience; yet, its level is determined by experiences, properties, the environment and people's balance between danger and protection factors (Jackson *et al.*, 2007). In light of the attention attributed recently to tension, fatigue, compassion, and moral harassment in leadership roles, resilience as a coping strategy has become a core issue for nurse managers. Nurse leaders carry the burden of responsibility for promoting their levels of personal resilience and, at the same time, developing this property among staff members, teams, and other leaders. Managers should have high levels of resilience in order to lead efficiently and implement effective resilience approaches (Udod *et al.*, 2021a, 2021b).

Studies of nurses' resilience underscored their protective role against nurses' turnover, post-traumatic stress, emotional exhaustion, and fatigue. Moreover, resilience is associated with improvement of patients' satisfaction, sense of better quality of care, and better attitudes towards patients (Manomenidis *et al.*, 2019). As a response to the increasing pressures on nurses that work in healthcare systems that are tense and lack resources, building personal resilience was identified as essential for coping with tension and discomfort at work, maintenance of job satisfaction, engagement in self-care, and assistance in coping with problems of human resources preservation and team well-being (Udod *et al.*, 2021a, 2021b). Nurse managers' resilience can be enhanced by using evidence-based strategies in a healthcare environment that is growing more complex (Udod *et al.*, 2021a, 2021b).

Establishing positive relationships, maintaining positive attitudes, developing emotional insight, creating a balance between work and life, and reflecting successes and challenges are effective strategies for building resilience

(Cline, 2015). Analyzing and changing points of view and thinking patterns in a positive and adjusted way, as well as extending the individuals' resources for dominating themselves and overcoming problems without feeling burdened and negative, together with the use of adapted coping patterns, constitute a strategy that can be applied while coping with problems. Thus, healthcare workers can remain productive, informed, and pleased even when they cope with various problems or challenges in their work environment (Handini *et al.*, 2020).

Carpio *et al.* (2018) conducted a study of personal resilience and workplace resilience among 77 nurses. The research findings indicated that managers with a longer management seniority demonstrated a higher workplace resilience than did younger managers. The researchers explained that the difference probably stemmed from the fact that seniority years caused managers to develop a higher workplace resilience.

Another research of 1012 male and female nurses at the northern part of Greece (Manomenidis *et al.*, 2019), aimed to investigate and compare the effect of personal features, external factors, and coping strategies on nurses' resilience. The study illustrated that education level, anxiety, and the general use of mental preparation strategies (using a tool that measures resilience, anxiety and depression before the beginning of the shift) were the main predictors of nurses' resilience. More educated nurses demonstrated a higher level of resilience, lower degrees of anxiety, and more frequent use of mental preparation strategies before the beginning of their shift (Manomenidis *et al.*, 2019).

Training might improve the resilience of nurses and nurse managers. Moreover, resilient nurse managers may empower nurses by granting them self-confidence, caring for their well-being, assisting them in identifying and applying their strengths, nurturing and promoting their professional development and encouraging self-care, and preserving skills of managing relationships (Sihvola *et al.*, 2022). Expanding nurse managers, knowledge and confidence for managing disasters can provide an efficient approach to the nurses' promotion and their skills of recovering from the crisis (Sihvola *et al.*, 2022). Nurses attest to tragedy, suffering, and human distress as part of their daily work life. Thus, due to tension factors associated with helping others in overcoming distress, resilience is identified as vital for nurses' everyday work (Jackson *et al.*, 2007).

Nurses should develop competences that assist them in being more resistant and more capable of coping with and protecting themselves against effects of distress at the workplace. An increasingly growing database of evidence indicates that a personality feature of toughness helps in neutralizing stressful events or extreme distress. Toughness was described as having three dimensions: commitment to finding a meaningful goal in life, belief in the ability to influence the environment and the results of the events, and the belief in being able to learn and grow following both positive and negative experiences. This is due to

the fact that autonomy, empowerment, emotional awareness, and self-care are important factors in the development of resilience (Jackson *et al.*, 2017).

Additional strategies for improving resilience include establishing professional relationships and positive cultivators, setting up social support networks that help in the creation of professional support, maintaining positive attitudes aiming to reinforce emotional feeling and laughter. Despite the sense of distress, tension, and difficulty for the purpose of reducing the levels of tension associated with distress by reducing negative emotions and attaining a balance of life and spirituality regardless of spiritual beliefs, it is important to participate in a variety of health-oriented activities outside one's professional life. These activities should ideally comprise activities that nurture physically, emotionally, and spiritually. Thus, people can maintain a certain balance in life, even when they engage in a highly demanding career such as nursing (Jackson *et al.*, 2007).

Labrague *et al.* (2018) performed an integrative review with the aim of assessing and synthesizing empirical studies that examined sources of professional tension and coping methods used by nurse managers while coping with tension. The review found three major coping methods: (1) freedom of decision or control: four studies found that a higher control over work or decision authorities were related to lower occupational tension and a higher occupational well-being among nursing managers; (2) organizational support – was found as the most common coping method among nurse managers. It was manifested by the perception of social support from the other teams, contributing to lower levels of occupational tension and the intention of leaving the organization, as well as sufficient support of the managers of nurse managers (CEOs and medical managers); and (3) impact of nurses' characteristics on tension – nurse managers with less seniority years experienced more tension than nurse managers with more years of experience. Female nurse managers experienced more tension than did male nurses (Labrague *et al.*, 2018).

A qualitative study (Kim and Windsor, 2015) explored the way nurse managers built the meaning of resilience and its connection to life-work balance. The researchers interviewed 20 nurse managers in Korean hospitals and found that the participants perceived that resilience and life-work balance were affected by dynamic and reflective processes. The resilience-oriented contents encompassed 'positive thinking', 'flexibility', 'assuming responsibility', and 'separation between work and life'. This perception of resilience facilitated the change of focus from negative experiences to positive experiences, from rigidity to flexibility, from task-orientation to people-orientation, and from the organization to life. The researchers concluded that the importance of maintaining a home-work balance was important for nurse managers, allowing maintenance of resilience and preservation of labor force among nurse managers (Kim and Windsor, 2015).

Nurse managers can respond to reality patterns by using a positive perspective for encouraging resilience. For example, they can use positive

thinking, decision change, and organizational activities as an optimistic yet realistic approach that can lead to meaningful work, building confidence for future challenges. A cognitive change, related and adapted effort of work-life balance, as well as development of collaboration, are also identified as effective strategies for building nurse managers' resilience. Moreover, social support is important for the maintenance of mental health, and according to assumptions, social support may prevent the effect of environmental pressures in order to strengthen the resilience. Udod *et al.* (2021a, 2021b) found that positive social interactions and relationships were crucial for nurturing patterns of resilience.

Luo et al. (2022) conducted a cross-sectional study of 45 nurse managers from 13 Chinese hospitals, aiming to explore the relationship between organizational support, nurse managers' anxiety, and effects on leadership and resilience. The findings showed direct and indirect effects of organizational support on anxiety, leadership and resilience. The researchers concluded that among nurse managers, an organizational support could be serially associated with the improvement of leadership and resilience, that in its turn, is related to the reduction of anxiety (Luo et al., 2022).

Research conducted in the United States (Bergman et al., 2024) examined the experiences and scenarios that confronted nurse leaders who experienced a moral harm during the COVID-19 pandemic. Moreover, it investigated the strategies and solutions that nurse leaders used in order to strengthen their moral resilience. The findings illustrated that nurse leaders felt alone during the pandemic, felt that their voice was not heard, they could not say "no" to the management's demands, that the management attributed greater importance to the budget than to the patients' good, and that they were incapable of containing challenges and processes that occurred during the pandemic. The solutions proposed for raising the nurse leaders' sense of resilience were: creating models of common work, mainly during the decision-making process in periods of emergency; a yearly training according to a standard of care during crises in order to prepare the staff for states of emergency; formulating a recording policy for situation of care during a crisis; determining a proactive assessment in order to identify needs in the field of mental healthcare and well-being; supplying resources for mental health and well-being and proactive conducting of debates; inter-colleague support; forums of nurse leaders for discussing feelings and concerns during and following the crisis; and maintaining transparency vis-à-vis the nurse leaders regarding everything connected with the allocation of resources and funds (Bergman et al., 2024).

Nurse leaders at all levels can build and enhance resilience through self-awareness and strategic mental models that consist of several steps: assessment, acceptance, adjustment, and progress. Assessment comprises assessment of events, the environment and people, with the purpose of predicting responses to negative events; acceptance of the fact that changes, failures, and obstacles are predicted events and, hence, develop a contingency plan for the identification of

existing resources; adjustment that requires leaders to change their thinking, reframe the event, and seek creative ways for solving the crisis. Furthermore, leaders must establish positive and supportive professional relationships in the workplace, maintaining a positive approach and accomplishing life balance and spirituality (Cline, 2015).

Nurse leaders are expected to take care of the workers and provide a guidance for operating the organization, be available, be present, as well as reflect health-oriented positions and behaviors. Hence, leaders must first of all provide their basic needs and make sure that they have an available psychological support when pressures are increased. Nursing leaders' key strategies for building personal resilience include establishment of positive and nurturing professional relationships with colleagues and mentors who think like them; join them after work hours so that they serve as a source of professional and personal questions outside the hospital framework, as well as a source of discussion about challenges and problems; be aware of emotional factors and their impact, creating safe spaces at work in order to handle decision-making and difficult failures (Udod et al., 2021a, 2021b). Building and maintaining nurse managers' resilience in complex and tense work environments are a necessary need for attracting and preserving skilled and qualified managers at work. Maintaining and strengthening the resilience will enhance preservation of nurses and managers, for the patients' safety and high-quality results (Udod et al., 2021a, 2021b).

6. CONCLUSIONS

This narrative review identified complexities and challenges in the healthcare system, among them: exposure to states of emergency, crises that caused internal and external stress, workloads, insufficient resources and workers' shortage. These factors affected the level of resilience among nurse managers. Furthermore, several studies identified that seniority years, professional experience, and education were connected to the level of resilience demonstrated by nurse managers. The more seniority years, education, and experience nurses have, the higher their level of resilience is.

The strategies identified in the literature review as promoting nurse managers' resilience were: creating a work-life balance, establishing positive relationships, communication with colleagues, training for resilience improvement, social support, and positive thinking during times of crisis.

The literature review can expand the knowledge and the importance of engaging in nurse managers' resilience. It is mainly essential when this concerns a topic that has not been sufficiently examined or investigated, in spite of the major challenges faced by nurse managers around the world. It is highly important to explore what affects nurse managers in the management of crises and how their personal resilience can be strengthened so that they succeed in managing the

nursing staff during a crisis. The strategies identified in the empirical literature can assist in finding solutions for maintaining and strengthening resilience among nurse managers. This will improve this important labor force, mainly while managing crises that undermine nurse managers' resilience.

Healthcare systems around the globe have experienced meaningful crises and challenges. Nevertheless, most studies of this topic have explored the caring teams and have investigated very little the nurse managers. Consequently, it is necessary to conduct additional studies of nurse managers' resilience, as well as coping methods and strategies for maintaining the resilience, due to their considerable role of managing staffs and coping with challenges.

References

- 1) Abd-El Aliem, S.M.F. and Abou Hashish, E.A. (2021). The relationship between transformational leadership practices of first-line nurse managers and nurses' organizational resilience and job involvement: A structural equation model. *Worldviews on Evidence-Based Nursing*, 18(5), pp. 273–282.
- 2) Alazmy, A.H., Almutayri, F.G.E., Almutairi, S.G., Alharby, N.A., Aljuaid, A.M. Q., Alasmari, A.A. and Alharbi, S.H.S. (2022). Nursing Leadership in Times of Crisis: Lessons Learned And Best Practices. *Journal of Namibian Studies: History Politics Culture*, 31, pp. 782–793.
- Al-Hawdrawi, H.H., Sadeq, A.F., Diener, E., Bakey, S., Wright, V. and Alobaidi, W. (2017). The lived experience of Iraqi nurses who live and work in communities impacted by war or terrorist threat. *Research Journal of Pharmacy and Technology*, 10(7), pp. 2058–2062.
- 4) Aryuwat, P., Asp, M., Lövenmark, A., Radabutr, M. and Holmgren, J. (2023). An integrative review of resilience among nursing students in the context of nursing education. *Nursing Open*, 10(5), pp. 2793–2818.
- 5) Barasa, E., Mbau, R. and Gilson, L. (2018). What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. *International Journal of Health Policy and Management*, 7(6), p. 491.
- 6) Bergman, A., Nelson, K., Boyce, D., Hanson, G., Reina, M. and Rushton, C. (2024). Moral resilience and moral injury of nurse leaders during crisis situations: a qualitative descriptive analysis. *Nursing Management*, 55(12), pp. 16–26.
- 7) Carpio, R.C., Castro, L.P., Huerto, H.M., Highfield, M.E., and Mendelson, S. (2018). Exploring resilience at work among first-line nurse managers. *JONA: The Journal of Nursing Administration*, 48(10), pp. 481–486.
- 8) Cline, S. (2015). Nurse leader resilience: career defining moments. *Nursing Administration Quarterly*, 39(2), pp. 117–122.
- 9) Handini, F.S., Kusnanto, K. and Yuswanto, T.J.A. (2020). Role of resilience to improving the performance of health workers: a systematic review. *STRADA Jurnal Ilmiah Kesehatan*, 9(2), pp. 551–560.
- 10) Heeb, J.-L. and Haberey-Knuessi, V. (2014). Health Professionals Facing Burnout: What Do We Know about Nursing Managers? *Nursing Research and Practice*, e681814. https://doi.org/10.1155/2014/681814

- 11) Jackson, D., Firtko, A. and Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: a literature review. *Journal of Advanced Nursing*, 60(1), pp. 1–9.
- 12) Kim, M. and Windsor, C. (2015). Resilience and work-life balance in first-line nurse manager. *Asian Nursing Research*, 9(1), pp. 21–27.
- 13) Labrague, L.J., McEnroe-Petitte, D.M., Leocadio, M.C., Van Bogaert, P. and Cummings, G.G. (2018). Stress and ways of coping among nurse managers: An integrative review. *Journal of Clinical Nursing*, 27(7–8), pp. 1346–1359.
- 14) Luo, D., Song, Y., Cai, X., Li, R., Bai, Y., Chen, B. and Liu, Y. (2022). Nurse managers' burnout and organizational support: The serial mediating role of leadership and resilience. *Journal of Nursing Management*, 30(8), pp. 4251–4261.
- 15) Manomenidis, G., Panagopoulou, E. and Montgomery, A. (2019). Resilience in nursing: The role of internal and external factors. *Journal of Nursing Management*, 27(1), pp. 172–178
- 16) Rahimaghaee, F., Hatamopour, K., Seylani, K. and Delfan, V. (2016). Nurses' perceptions of care during wartime: A qualitative study. *International Nursing Review*, 63(2), pp. 218–225. https://doi.org/10.1111/inr.12240
- 17) Rajabipoor Meybodi, A. and Mohammadi, M. (2021). Identifying the components of spirituality affecting the resilience of nurses. *Journal of Nursing Management*, 29(5), pp. 982–988.
- 18) Shmul, C.S., Berzon, B. and Adini, B. (2024). Navigating crisis: Exploring the links between threat perceptions, well-being, individual and workplace resilience among general hospital staff. *Israel Journal of Health Policy Research*, 13, p. 69.
- 19) Sihvola, S., Kvist, T. and Nurmeksela, A. (2022). Nurse leaders' resilience and their role in supporting nurses' resilience during the COVID-19 pandemic: A scoping review. *Journal of Nursing Management*, 30(6), pp. 1869–1880.
- 20) Thomas, L.J., and Revell, S.H. (2016). Resilience in nursing students: An integrative review. *Nurse Education Today*, 36, pp. 457–462.
- 21) Turnipseed, D.L. and VandeWaa, E.A. (2022). Crisis leadership during and after the COVID pandemic: Astute nurse leaders make the difference. *JONA: The Journal of Nursing Administration*, 52(3), pp. 154–159.
- 22) Udod, S., Care, W.D., Marie Graham, J., Henriquez, N. and Ahmad, N. (2021a). From coping to building nurse manager resilience in rural workplaces in Western Canada. *Journal of Nursing Management*, 29(7), pp. 2115–2122.
- 23) Udod, S., MacPhee, M. and Baxter, P. (2021b). Rethinking resilience: Nurses and nurse leaders emerging from the post–COVID-19 environment. *JONA: The Journal of Nursing Administration*, 51(11), pp. 537–540.
- 24) Warshawsky, N. and Cramer, E. (2019). Describing nurse manager role preparation and competency: Findings from a national study. *JONA: The Journal of Nursing Administration*, 49(5), p. 249. https://doi.org/10.1097/NNA.00000000000000746
- 25) Zamoum, K., and Gorpe, T.S. (2018). Crisis management: A historical and conceptual approach for a better understanding of today's crises. Crisis Management Theory and Practice, pp. 203–217. https://doi.org/10.5772/intechopen.76198