

University of New Mexico

UNM Digital Repository

Theoretical Foundation in Advanced Practice
Nursing

Health Sciences Center Student Scholarship

8-5-2022

Nursing Burnout During the COVID-19 Pandemic

Noreen Rizvi

Follow this and additional works at: https://digitalrepository.unm.edu/hsc_advpracticenursing

Nursing Burnout During the COVID-19 Pandemic

Noreen Rizvi

N501- Theoretical Foundations of Advanced Nursing

University of New Mexico

August 5, 2022

Abstract

Nursing burnout continues to rise as the COVID-19 pandemic amplifies environmental stressors in the workplace. This paper explores the application of Callista Roy's adaptation model in preventing nursing burnout during the pandemic using four modes of adaptation: role-function, interdependence, physiological/physical, and self-concept or group identity. The presented solution to alleviate nursing burnout examines the implementation of Roy's adaptation model through proposed resiliency initiatives, leadership and management modifications, and state legislature regulation. These interventions aim to reduce anxiety, moral distress, and compassion fatigue, along with increasing support for nurses.

Key words: nursing burnout, COVID-19, Callista Roy adaptation model, resiliency initiative, environmental stressors.

COVID-19 and Nursing Burnout

Nurses are the backbone of healthcare, functioning as advocates for diverse patient populations and playing a pivotal role in patient care and safety, often serving as the final line of defense against mistakes and potential harm. The nursing profession is demanding and can be rather stressful. Nurses must be capable of overseeing various tasks, juggling multiple priorities, and dealing with the stress of providing care for patients and families as they cope with illness (McEwen & Wills, 2019). Nurses are responsible for ensuring patient rights are protected and that each patient receives the highest quality of care. Notably, nurses face numerous challenges, including working long hours, often on their feet for extended periods. As they manage the health of sick patients and their families, nurses witness the effects of disease and injury firsthand. They may also encounter exposure to hazardous materials and infectious diseases in the clinical setting. All of these factors can contribute to physical and emotional exhaustion.

More recently, with the COVID-19 pandemic and global nursing shortage, extra stressors have surfaced in addition to those already in the nursing occupation. First, the demand for nurses has increased as more individuals become ill with the virus. This patient surplus has led to longer work hours, greater nurse-to-patient ratios, and extra shifts for nurses to work, with some hospitals demanding mandatory overtime. Second, the pandemic has changed how nurses care for patients. For example, nurses may find their pediatric home unit is now an adult COVID-19 unit, with an entirely different patient population whose care and treatment are new and unfamiliar. Third, the pandemic has resulted in a shortage of nursing supplies, such as PPE, making it difficult to care for their patients. Finally, the pandemic has created excessive stress and anxiety for nurses as they worry about becoming sick or spreading the virus to their family members (Galanis et al., 2021).

Additional stressors associated with the global pandemic have significantly increased nursing burnout, leading to severe consequences if left unchecked (Galanis et al., 2021). Nurse burnout is a state of physical, emotional, and mental exhaustion caused by prolonged or frequent exposure to stressful working conditions. The effects of nurse burnout can be both physical and psychological. Physical effects of nurse burnout may include fatigue, insomnia, headaches, and gastrointestinal problems. Psychological effects can include anxiety, depression, irritability, and a general feeling of unhappiness, leading to job dissatisfaction, decreased job performance, and absenteeism (Galanis et al., 2021). In severe cases, nurse burnout can lead to thoughts of suicide.

As nurses experience moral distress, anxiety, compassion fatigue, and a lack of support, decreased quality of care, increased errors, and a higher risk of patient mortality occurs in the clinical setting (Galanis et al., 2021). It is, therefore, essential that nurses take steps to prevent and manage burnout. Strategies to attain this task may include practicing self-care, seeking support from colleagues or management, and using stress-management techniques. Most importantly, however, nurses must learn how to effectively manage these unique stressors and develop suitable coping strategies to assist them in adapting to an increasingly stressful nursing environment. While there have been brief periods of adequate staffing and supplies in the hospital during the pandemic, as COVID-19 cases begin to rise again, hospitals continue to experience shortages, requiring nurses to acclimate to ever-changing work conditions effectively. The most effective means by which staff can remain successful during this period is by applying the adaptation mode concepts of interdependence, role function, self-concept, and physiologic needs.

Callista Roy's Adaptation Model

The Roy adaptation model, developed by Callista Roy in the 1970s, is a conceptual framework that provides a method of thinking about how humans adapt to stressful or potentially stressful events (Roy, 2011). When an individual experiences a change in their environment, they may experience stress. Stress is the body's response to a change that requires adjustment or adaptation. An individual responds with coping mechanisms to deal with the stress and adapt to the change.

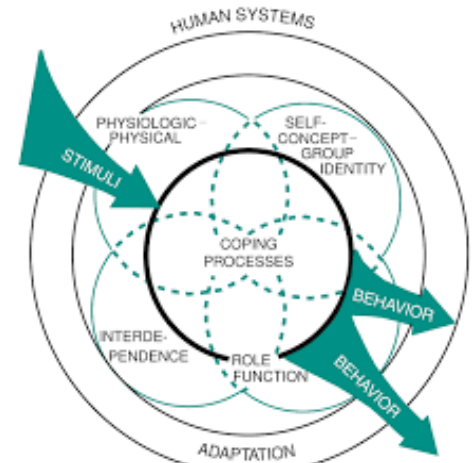


Figure 1.0 Representation of Roy's Adaptation Model. (Source: Roy, C. & Andrews, H. A. (1999) The Roy adaptation model (2nd ed). Stamford, CT: Appleton & Lange).

Callista Roy, a nurse researcher, teacher, writer, and lecturer, asserted five major concepts in her adaptation model: adaptation- the goal of nursing, environment- which is constantly producing stimuli; health- the outcome of adaptation, person- the adaptive system, and nursing- the means of promoting adaptation and health (Browning, 2020). Adaptation refers to how an individual can utilize conscious awareness, choice, and self-reflection to respond positively to environmental changes. The environment creates positive or negative stimuli producing an adaptive response to a particular circumstance. The environment consists of three types of stimuli: focal, contextual, and residual. Focal stimuli confront an individual directly and typically require the most significant amount of energy. Contextual stimuli are all the impulses in the environment that contribute to the focal stimuli. Residual stimuli include all the factors in the situation whose effects are unclear. Health encompasses the health-illness continuum, referring to a state in which an individual can cope with unavoidable stresses. Person refers to the adaptive system constantly interacting with the environment, which uses innate and acquired mechanisms to adapt. Lastly, the final concept of nursing helps

facilitate adaptation through four different modes: interdependence, role function, self-concept, and physiologic needs (Qian et al., 2021). The nursing process aids in developing favorable outcomes by intervening to encourage positive responses to stimuli while preventing negative responses. Completion of a thorough assessment of behaviors aids in achieving this task.

Roy's adaptation model assumes that adaptation is a dynamic process occurring over the lifespan. An individual constantly interacts with an environment that is changing. In order to cope with this ever-changing environment, acquired and innate mechanisms, which are psychological, social, and biological in origin, are established. Another critical assumption in this model is that health and illness are a continuum. Illness and the existence of negative stressors at some point in life are unavoidable (Browning, 2020). Therefore, the objective should never be to avoid stressors and illness altogether; rather, it should be to have the tools and skill-set necessary to adapt effectively to the various trials and tribulations one will eventually encounter.

As figure 1.0 displays, there are four modes by which adaptation occurs. The physiological-physical mode involves the physical responses of an individual to environmental stimuli. This mode consists of nine physiologic requirements: oxygenation, nutrition, elimination, activity and rest, senses, protection, fluid-electrolyte and acid-base balance, endocrine function, and neurologic function (Browning, 2020). The self-concept mode is associated with feelings and beliefs about oneself, considering personal identity. Personal identity assembles through spirituality, thoughts, and moral ethics. The role function mode has to do with one's role in society. These roles divide into three separate categories: primary roles- the roles of gender, secondary roles- various roles (sister, aunt, mother, grandmother, etc.), and tertiary roles- (founder of an organization, etc.). The fourth and final mode is the interdependence mode. This mode considers an individual's relationships, considering support

systems, trust in relationships, and effective coping mechanisms during separation and loneliness.

In addition to Roy's four adaptation modes, she correspondingly proposes two subsystems. The first of the two is the cognater subsystem, which entails excitement, learning, problem-solving, memory, attention, and defense status. The second is the regulator subsystem, comprised of endocrine and neurochemical responses (Qian et al., 2021). The internal and external stimuli consist of psychological, physical, and social factors.

The conceptual framework of the adaptation model developed by Callista Roy originates from a nursing background. This theory will illuminate how to prevent burnout among nurses working during the COVID-19 pandemic by implementing the concepts of adaptation modes presented in Roy's model. Nurses encounter different stimuli in a continually changing work environment, creating a stress response. Acquiring the strategies to construct positive coping mechanisms will decrease the frequency of compassion fatigue, anxiety, moral distress, and job dissatisfaction from a lack of support.

Intervention

Several resources are available to patients and family members in the hospital setting as they navigate through unexpected trials and tribulations associated with illness and hospitalization. Chaplains, social workers, and counselors are readily available and significantly reduce the tensions and anxiety related to hospital stays (Tenaglia & Bishop, 2022). What would happen if these same resources were available to nurses who spend considerable time exposed to the complex stresses in the clinical environment? Utilizing resources the hospital already has to enforce resiliency initiatives can considerably lessen anxiety, compassion fatigue, and moral distress. Additionally, developing healthy work environments through modifications in

management and leadership, along with the regulation of state legislature, can assist in constructing a sense of support for nurses.

In the context of Roy's adaptation model, nurses are an adaptive system, constantly responding to environmental stimuli (Roy, 2011). During the pandemic, focal stimuli may present as a nurse having to get off orientation early due to a decrease in staffing and an increase in hospitalizations from COVID-19. Contextual stimuli could comprise a lack of experience and knowledge in caring for COVID-19 patients. Lastly, residual stimuli may involve the fear of contracting COVID-19 or taking it home and spreading the infection to loved ones (Tenaglia & Bishop, 2022). Resiliency initiatives have the potential to provide nurses with the tools and resources necessary to adapt effectively in response to stimuli encountered by a nurse working during the pandemic.

Implementing Roy's Adaptation model to support nurses in the hospital through interventions provided in a theory-based approach can dramatically increase nurses' overall well-being (Browning, 2020). The facilitation of resilience initiatives can be led by experienced nurses trained to provide nurses with support, counselors, or chaplains. The project would aim to have an advocate readily available for each unit 24/7 to provide counseling for nurses at any time during their shift, employing Roy's four adaptation modes to respond to environmental stimuli effectively.

A hospital-wide resilience initiative will create a safe environment for nurses to share their goals and visions through reflective practices, including journaling, analyzing experiences, and receiving feedback, strengthening their role function as nursing professionals.

Psychological/physical adaptation can enhance with the collaboration of leadership and management in assuring that nurses have access to breaks, meals, and other forms of support to

reduce the job's physical demands and prevent burnout, improving the overall health of staff. Management would again play a role in enforcing policy changes that guarantee nurses are working safe hours without demanding overtime due to a lack of staffing. Furthermore, the project can provide opportunities and a safe space for individualized debriefing to aid in reducing anxiety after an adverse or stressful situation experienced by a nurse.

Nurses and counselors in the resilience initiative can provide screenings for symptoms of depression or compassion fatigue and aid in instilling self-awareness and confidence in nurses. Again, leadership and management would play a big role in identifying strong core values of the nursing team and a shared goal, aiding in constructing a positive group/self-identity. The group identity fosters a strong sense of community and camaraderie among nurses as they feel supported and less isolated in their work, increasing a sense of support and producing a positive work environment. Lastly, interdependence in a resilience initiative may empower nurses by supplying a means by which they feel secure in their environment. Nurses frequently deal with death and unfavorable outcomes, which can be challenging to cope with. A chaplain to address spiritual distress and a counselor to provide emotional support when needed can significantly reduce moral distress and compassion fatigue (Browning, 2020).

While resiliency initiatives and modifications in leadership and management can help nurses adapt to their environment effectively, the immediate and most practical solution to nursing burnout is a systems approach at a state level, considering the legislature's regulation. Hospital initiatives and leadership can only do so much if nurses are subject to stress and burnout due to flawed policies. The state must be held liable for establishing minimum staffing ratios for nurses in hospitals and other healthcare facilities. Furthermore, the state should implement policies that prevent nurses from working excessive hours, place restrictions on mandatory

overtime, and provide incentives for hospitals to promote better working conditions. These interventions will aid in developing an environment that is more likely to create positive and decrease negative stimuli, fostering a supportive atmosphere for nurses.

Strengths and weaknesses

Callista Roy's adaptation model has several strengths that make it practical in preventing nurse burnout. The theory is relevant cross-culturally, recognizing that nurses experience constant physical and psychological stressors in their work environment, regardless of their background. The concepts of adaptation, person, health, environment, and nursing can be applied to any culture. The model considers the individual differences among nurses, which is vital because not all nurses will respond to stressors similarly. Roy's adaptation model contributes to the discipline of nursing by providing a framework for nurses to identify and manage stressors, clearly stating four modes of adaptation that occur in response to specific stimuli (Roy, 2011). For example, if a nurse experiences stress due to conflicts or disagreements with a colleague, adaptation would occur utilizing the interdependence mode. The nurse can then implement practical conflict resolution skills and develop mutual respect with the colleague to cope with the situation effectively. The model helps nurses tailor their coping strategies to their individual needs. Implications for nursing related to implementing this theory involve decreased nursing burnout through specific interventions based on the stimuli encountered in the work environment by utilizing one of the modes of adaptation. The theoretical framework of Roy's model emphasizes that an individual's goal should never be to avoid stressors but rather to accept and manage them positively. In nursing, it is impossible to avoid stressors due to the fast-paced environment and acuity of conditions. Providing nurses with the tools and methods to adapt

effectively to various stimuli that lead to stress can significantly reduce nurse burnout and improve patient outcomes.

While Roy's model has several strengths, a few limitations impact its effectiveness in preventing nurse burnout, as it is not socially relevant. The model does not consider how individuals interact with each other or account for the role of personal factors in burnout. Instead, it emphasizes a nurse's reaction to stimuli, identifying whether it is adaptive or ineffective. The model does not address the social implications of job satisfaction, which is not related to a lack of support. If a nurse is dissatisfied with their chosen specialty or lacks the motivation to go to work, burnout is much more likely to occur. Finally, the model does not consider the role of work-life balance in preventing nurse burnout. Work-life balance is essential for nurses, who often work long hours and have little time for themselves. If nurses do not have a reasonable work-life balance, they are more likely to experience burnout. Laschinger's Nursing Work-life Model would be more appropriate for assessing these factors. The model includes four key components: job control, social support, professional development, and work-life balance. By promoting these four factors, the model can help nurses to maintain a healthy work-life balance and prevent burnout (Nursalam et al., 2018).

Conclusion

Nurses continue to serve on the front lines as they care for and treat patients amidst a global pandemic, functioning to provide the highest quality of care. The profession has encountered immense challenges as nurses bear an increased workload, longer work hours, supply shortages, and decreased staffing. The continuous exposure to infectious diseases, poor working conditions, and extra work hours has increased the frequency of anxiety, moral distress, compassion fatigue, and an experienced lack of support, ultimately leading to burnout. While

these additional stressors may have temporarily faded periodically, there is no guarantee that nursing will be the same as it was pre-pandemic. Hence, the only solution to this issue is to empower nurses with the tools and resources necessary to adapt to the external stimuli encountered in the clinical setting to reduce burnout.

Callista Roy's Adaptation Model provides a means by which nurses can effectively adapt to their ever-changing environment. Roy provides a method in which individuals can positively respond to environmental stimuli through reflection, awareness, and choice. Adapting Roy's model in the clinical setting can be achieved by implementing resilience initiatives. Furthermore, environmental stressors can be reduced through the regulation of state legislature.

Resilience initiatives can aid nurses in appropriately adapting to stressful or potentially stressful events by using the four modes of adaptation: interdependence, role function, self-concept/group identity, and physiological needs. With the assistance of experienced nurses, counselors, and chaplains, in collaboration with leadership and management, nurses can manage their unique stressors and learn techniques to adapt to their challenges. Physiological modes of adaptation can be made available to nurses through policy changes and leadership in ensuring safe working hours along with designated areas for breaks and self-care during the shift, reducing anxiety. Self-concept can enhance through guided self-reflection, assessments by a professional in the program for depression, and the degree of adaptation of a nurse. Role function can strengthen through the availability of a place to share goals, receive constructive feedback, and develop a sense of essence as a nurse, creating a feeling of support. Lastly, nurses can adapt to the interdependence mode through emotional and spiritual support provided by a counselor or Chaplin, reducing moral distress and compassion fatigue. The presence of a member of the resilience initiative for each unit available 24/7 would significantly increase the likelihood of a

nurse seeking help. Furthermore, nurses would have available resources when experiencing stressful situations during their shifts. Taking part in the resilience program would decrease nursing burnout by increasing support and reducing anxiety, moral distress, and compassion fatigue.

Support can further be increased by setting up nurses for success within their work environments. This task can be accomplished by regulating state legislature, ensuring appropriate systems and policies are in place to protect nurses' rights, wellness, and safety. When hospitals and healthcare facilities are held accountable for staff work conditions, unfavorable climates are less likely to occur.

Much future work can be done with Roy's adaptation model to prevent nurse burnout. Continued research on introducing the model in different clinical settings (hospitals, clinics, nursing homes, etc.) can help corporations include resilience initiatives in their companies to retain staff and improve patient outcomes. Some specific areas of improvement for applying this theory include developing a better understanding of the factors that lead to nurse burnout, implementing interventions to address those factors, and evaluating the effectiveness of those interventions so that they can be of use to nurses in the hospital. Additionally, it would be advantageous to continue researching the role of resilience in nurse burnout and how to promote resilience among nurses during their hospital shifts.

References

- Browning Callis A. M. (2020). Application of the Roy Adaptation Theory to a care program for nurses. *Applied nursing research: ANR*, 56, 151340. <https://doi.org/10.1016/j.apnr.2020.151340>
- Galanis, P., Vraika, I., Fragkou, D., Bilali, A., & Kaitelidou, D. (2021). Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of advanced nursing*, 77(8), 3286–3302. <https://doi.org/10.1111/jan.14839>
- McEwen, M., & Wills, E. M. (2019). Theoretical basis for nursing. Lippincott Williams & Wilkins.
- Nursalam, N., Fibriansari, R. D., Yuwono, S. R., Hadi, M., Efendi, F., & Bushy, A. (2018). Development of an empowerment model for burnout syndrome and quality of nursing work life in Indonesia. *International journal of nursing sciences*, 5(4), 390-395.
- Qian, W., Qian, L., Xu, Q., & Lu, L. (2021). The effects of Roy's adaptation model and the forgetting curve in the clinical instruction of operating room nursing interns. *American journal of translational research*, 13(7), 8214–8220.
- Roy C. (2011). Extending the Roy adaptation model to meet changing global needs. *Nursing science quarterly*, 24(4), 345–351. <https://doi.org/10.1177/0894318411419210>
- Tenaglia , H., & Bishop, P. (2022). Covid-19 and post-traumatic stress disorder among nurses: A descriptive cross-sectional study in a covid hospital. *La Medicina del lavoro*. Retrieved July 16, 2022, from <https://pubmed.ncbi.nlm.nih.gov/34142675/>

