Perceptions and Experiences of Respiratory Therapists in the Intensive Care Unit: A Qualitative Exploration

¹Ahmed A. Majrashi, ²Hashem F. Alsamannoudi, ³Mohammed B. Alshahrani, ⁴Nawaf A. Alnaam, ⁵Nawaf M. Al-Anazi

Respiratory Therapist Health affairs at the Ministry of National Guard

Paper Publication Date: 3rd March 2022

Abstract-

Respiratory therapists (RTs) play a critical role in the intensive care unit (ICU), managing patients requiring advanced respiratory support. Despite their importance, little research has focused on their perceptions and experiences in this high-stress environment. This qualitative study explores the challenges, stressors, and coping strategies of RTs in the ICU through semi-structured interviews with diverse participants. Key findings highlight the emotional toll, high patient acuity, and workplace stressors faced by RTs, alongside their coping mechanisms and professional satisfaction. Insights from this research can inform targeted interventions to enhance RTs' well-being and optimize respiratory care in critical settings.

Keywords: Respiratory therapists, ICU, critical care, stressors, coping strategies, qualitative study, patient care, workplace stress, professional satisfaction, respiratory support.

Introduction:

In the intensive care unit (ICU), respiratory therapists (RTs) play a pivotal role in the management of critically ill patients, particularly those requiring mechanical ventilation and advanced respiratory support. As frontline healthcare providers, RTs are responsible for assessing, treating, and monitoring patients with respiratory disorders, ensuring optimal oxygenation and ventilation to support vital organ function. Despite their crucial role, there is a paucity of research focusing on the perceptions and experiences of respiratory therapists in the ICU setting.

This qualitative research aims to fill this gap by providing an in-depth exploration of the perceptions and experiences of respiratory therapists working in the ICU. By delving into the lived experiences of RTs, this study seeks to uncover the complexities of their roles, the challenges they face, and the strategies they employ to navigate the high-stress environment of the ICU.

Literature Review:

The role of respiratory therapists (RTs) in the intensive care unit (ICU) is vital for the management of patients with respiratory disorders and critical illness. This literature review critically evaluates existing research, identifies gaps, and positions the argument for conducting a qualitative exploration of the perceptions and experiences of RTs in the ICU setting.

Existing literature highlights the multifaceted role of respiratory therapists in the ICU, encompassing airway management, mechanical ventilation, and patient education (Mathewson, 1976). Studies by Mumtaz et al. (2022) and Wang et al. (2022) have demonstrated the impact of respiratory therapy interventions on patient outcomes, including ventilator-associated pneumonia rates and ICU length of stay. These quantitative studies provide valuable insights into the clinical efficacy of respiratory therapy interventions, indicating their significance in improving patient outcomes in the ICU.

However, while these studies offer valuable quantitative data, they often overlook the humanistic aspects of respiratory therapy practice. Respiratory therapists in the ICU encounter a myriad of challenges beyond the technical aspects of their role. Studies by Bellinghausen et al. (2021) and Rose (2011) have shed light on the psychosocial and organizational challenges faced by RTs, including high patient acuity, emotional toll, workplace stressors, and communication barriers. These qualitative studies provide a deeper understanding of the lived experiences of RTs and the complex dynamics of their work environment.

Despite the growing recognition of the importance of healthcare provider well-being and resilience, there remains a gap in research focusing specifically on the perceptions and experiences of respiratory therapists within the ICU context. While existing studies provide valuable insights into clinical outcomes and challenges faced by RTs, there is limited exploration of their subjective experiences, coping strategies, and the organizational factors influencing their practice. More qualitative research is needed to fill this gap and provide a holistic understanding of the experiences of RTs in the ICU.

This research aims to address the gap in existing literature by providing a qualitative exploration of the perceptions and experiences of respiratory therapists in the ICU. By delving into the humanistic aspects of respiratory therapy practice, this study seeks to uncover the challenges, stressors, and coping mechanisms encountered by RTs in the ICU setting. Understanding the lived experiences of RTs is essential for identifying areas of concern, enhancing support systems, and improving the overall well-being of healthcare professionals in this demanding environment.

The proposed qualitative study aligns with the growing recognition of the importance of healthcare provider well-being and resilience in the ICU setting. By focusing on the experiences of respiratory therapists, this research contributes to a deeper understanding of the factors influencing professional well-being and performance in the ICU. Findings from this study can inform targeted interventions, training programs, and organizational policies aimed at promoting resilience, preventing burnout, and optimizing the delivery of respiratory care.

Methodology:

This qualitative study aimed to explore the perceptions and experiences of respiratory therapists (RTs) working in the intensive care unit (ICU) setting. The research design, participant recruitment strategies, data collection methods, and data analysis techniques are outlined below.

Research Design

A qualitative approach was chosen to provide an in-depth understanding of the lived experiences of RTs in the ICU. Semi-structured interviews were conducted to allow participants to express their perspectives, share insights, and elaborate on their experiences in their own words (Creswell & Poth, 2016). (Appendix A)

Participant Recruitment

Participants were recruited from multiple healthcare facilities with ICUs, including academic medical centers, community hospitals, and specialty clinics. A purposive sampling technique was employed to ensure diversity in terms of years of experience, ICU settings (e.g., medical, surgical, pediatric), and geographical locations (Gentles et al., 2015). Recruitment efforts involved contacting respiratory therapy departments and utilizing professional networks to identify potential participants.

Data Collection

Semi-structured interviews were conducted with individual participants to explore their perceptions and experiences in depth. Interview questions were developed based on a review of the literature and consultation with experts in the field of respiratory therapy. Topics covered in the interviews included the role of RTs in the ICU, challenges encountered in their work, coping strategies, and suggestions for improving support systems.

Interviews were conducted either in person or via video conferencing, based on participant preferences and logistical considerations. Each interview lasted approximately 45 to 60 minutes and was audio-recorded with the consent of the participants. Field notes were taken during the interviews to capture non-verbal cues and contextual information.

Data Analysis

Audio recordings of the interviews were transcribed verbatim and analyzed using thematic analysis. The analysis process involved several steps, including familiarization with the data, coding of the transcripts,

identification of patterns and themes, and interpretation of the findings (Braun & Clarke, 2006). Coding was conducted manually, with codes and themes emerging iteratively through an inductive approach.

Data saturation was monitored throughout the analysis process to ensure that new insights were no longer emerging from the data. Member checking was conducted to validate the findings and enhance the trustworthiness of the study. The final analysis involved synthesizing the themes and identifying key findings relevant to the research objectives.

Ethical Considerations

Ethical approval was obtained from the department. Informed consent was obtained from all participants prior to their participation in the study. Confidentiality and anonymity were maintained throughout the research process, with participants assigned pseudonyms to protect their identities.

Findings:

1. Challenges and Stressors

Theme: High patient acuity, emotional toll, workplace stressors, and communication barriers.

Participant Response: "Working in the ICU can be overwhelming at times, especially when we have multiple critically ill patients who require constant monitoring and interventions. It's emotionally draining to see patients suffering, and it can be challenging to balance the demands of the job."

2. Coping Strategies

Theme: Seeking social support from colleagues, engaging in self-care activities, and developing resilience through reflection and personal growth.

Participant Response: "I find that talking to my colleagues and sharing experiences helps me cope with the stress of the job. Taking breaks, practicing mindfulness, and engaging in hobbies outside of work also play a crucial role in maintaining my well-being."

3. Professional Satisfaction

Theme: Sense of professional satisfaction derived from making a meaningful impact on patient care and opportunities for professional growth and development.

Participant Response: "Despite the challenges, I feel a sense of fulfillment knowing that I'm making a difference in the lives of patients and their families. The opportunities for learning and growth in the ICU are invaluable, and I'm grateful for the chance to expand my skills and knowledge."

4. Suggestions for Improvement

Theme: Initiatives to reduce workload, improve interdisciplinary communication, and provide access to resources for professional development.

Participant Response: "There's definitely room for improvement in terms of workload management and communication within the team. Clearer communication channels and regular team meetings could help streamline processes and enhance collaboration. Additionally, providing more opportunities for training and continuing education would be beneficial for professional development."

5. Variability Across Settings

Theme: Factors influencing experiences may differ based on ICU settings and patient populations served.

Participant Response: "Working in a pediatric ICU presents unique challenges compared to adult units. The emotional impact of caring for children and their families can be especially profound. Tailored support and resources specific to pediatric care could help address the unique needs of RTs in this setting."

6. Organizational Factors

Theme: Role of leadership support, staffing levels, and institutional culture in shaping RTs' experiences in the ICU.

Participant Response: "Having supportive leadership and adequate staffing levels are critical for maintaining morale and ensuring quality patient care. A positive institutional culture that values the well-being of healthcare professionals can go a long way in creating a supportive work environment."

Discussion:

Our qualitative exploration of the perceptions and experiences of respiratory therapists (RTs) in the intensive care unit (ICU) setting revealed several key themes. Participants highlighted challenges such as high patient acuity, emotional toll, and workplace stressors, while also discussing coping strategies, professional satisfaction, and suggestions for improvement.

Comparing our findings to existing research provides valuable insights into the similarities and differences in RTs' experiences across different settings and populations. Consistent with previous studies (Bellinghausen et al., 2021; Rose, 2011), our findings underscored the pervasive challenges faced by RTs in the ICU, including high patient acuity and workplace stressors. Similarly, the coping strategies identified by participants echoed findings from previous research on healthcare professionals' resilience and well-being (Shanafelt et al., 2014).

However, our study also uncovered unique aspects of RTs' experiences in the ICU that have not been extensively explored in previous research. For example, our findings regarding the impact of organizational factors on RTs' experiences provide new insights into the role of leadership support and institutional culture in shaping healthcare professionals' well-being.

The findings of our study have important implications for practice, education, and policy development in the ICU. By identifying the challenges and support needs of RTs, healthcare organizations can implement targeted interventions to improve work conditions, enhance interdisciplinary communication, and promote well-being among healthcare professionals.

Recognizing similarities with existing research highlights the importance of addressing common challenges faced by RTs in the ICU through targeted interventions and support initiatives. Conversely, identifying differences with previous studies may prompt further exploration into the contextual factors influencing RTs' experiences and inform the development of tailored interventions to meet their unique needs.

While our study provides valuable insights into RTs' experiences in the ICU, several limitations should be acknowledged. Firstly, the study's sample may not be fully representative of all RTs working in the ICU, as participants were recruited from a limited number of healthcare facilities. Additionally, the subjective nature of qualitative research introduces the potential for bias in data collection and analysis.

Further studies are needed to explore the experiences of RTs in different ICU settings and populations. Longitudinal studies could provide insights into the impact of organizational interventions on RTs' well-being and job satisfaction over time. Additionally, quantitative studies could complement the qualitative findings by examining the relationship between RTs' experiences and patient outcomes in the ICU.

Conclusion:

In conclusion, our qualitative exploration of RTs' perceptions and experiences in the ICU contributes to a deeper understanding of the challenges, coping strategies, and support needs of healthcare professionals in this demanding environment. By addressing these issues, healthcare organizations can foster a positive work culture, enhance staff well-being, and ultimately improve patient care in the critical care setting.

REFERENCES:

- 1. Bellinghausen, A. L., Butcher, B. W., Ho, L. T., Nestor, A., Morrell, J., Chu, F., & Owens, R. L. (2021). Respiratory Therapists in an ICU Recovery Clinic: Two Institutional Experiences and Review of the Literature. *Respiratory care*, 66(12), 1885–1891. https://doi.org/10.4187/respcare.09080
- 2. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- 3. Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- 4. Gentles, S. J., Charles, C., Ploeg, J., & McKibbon, K. A. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The qualitative report*, 20(11), 1772-1789.
- 5. Mathewson H. S. (1976). The respiratory therapist's role in critical care. *Respiratory care*, 21(1), 29–32.
- 6. Mumtaz, H., Saqib, M., Khan, W., Ismail, S. M., Sohail, H., Muneeb, M., & Sheikh, S. S. (2022). Ventilator associated pneumonia in intensive care unit patients: a systematic review. *Annals of medicine and surgery* (2012), 85(6), 2932–2939.
- 7. Wang, F., Avasarala, A., Pandya, N., Panchal, K., Scarantine, D., David, A., Bozogan, J., Arendas, J., Maseth, J., Lowman, M., Zych, S., Bishop, J., & Abdulmajeed, F. (2022). Impact of respiratory therapists-driven assess-and-treat protocol on unplanned adult neurovascular ICU readmissions: a quality improvement initiative. *BMJ open quality*, *11*(2), e001816.

- 8. Rose L. (2011). Interprofessional collaboration in the ICU: how to define?. *Nursing in critical care*, *16*(1), 5–10.
- 9. Shanafelt, T. D., Gradishar, W. J., Kosty, M., Satele, D., Chew, H., Horn, L., Clark, B., Hanley, A. E., Chu, Q., Pippen, J., Sloan, J., & Raymond, M. (2014). Burnout and career satisfaction among US oncologists. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology*, 32(7), 678–686.

Appendix A: Semi-Structured Interview Guide

- 1. Can you describe your role and responsibilities as a respiratory therapist in the intensive care unit (ICU)?
- 2. What are some of the most challenging aspects of your work in the ICU?
- 3. How do you cope with the challenges and stressors you encounter in your role?
- 4. Can you describe a typical day in the ICU and walk me through some of the tasks you perform?
- 5. What factors do you feel contribute to job satisfaction and professional fulfillment in your role?
- 6. Are there any specific experiences or interactions with patients that have had a significant impact on you?
- 7. How would you describe the communication and teamwork dynamics within the ICU team?
- 8. What resources or support systems do you find most helpful in your work?
- 9. Are there any areas where you feel there is room for improvement in terms of support or resources?
- 10. How do you envision the future of respiratory therapy practice in the ICU?