

ORIGINAL ARTICLE

Navigating Challenges and Cultivating Resilience: Enhancing Support Systems for Novice Critical Care Nurses

Rusila Ruslan, Mohd Said Nurumal

Department of Critical Care Nursing, Kulliyah of Nursing, International Islamic University Malaysia, 25200 Pahang Darul Makmur, Malaysia

ABSTRACT

Introduction: Novice critical care nurses (NCCN) face unique challenges as they navigate the complexities of patient care. It is essential to understand their support system in providing holistic care to the patients. Therefore, this study aims to explore the needs and support that is received and required by them. **Materials and methods:** The researcher opted for descriptive qualitative research using a practical approach. Using multiple data collection methods (interviews, observations, and document analysis) was a deliberate choice to enhance the study's credibility and depth, facilitating convergence and triangulation. **Results:** Total of 29 participants agreed to participated in the study. Three themes were derived from the data collected. **Conclusion:** In summary, this study highlights the crucial need for creating a supportive and empowering environment for NCCNs as they face the challenges of their specialized field. *Malaysian Journal of Medicine and Health Sciences* (2025) 21(4): 98-104. doi:10.47836/mjms.21.4.13

Keywords: Novice critical care nurses, Support system, Holistic care, Empowering environment, Workplace challenges

Corresponding Author:

Rusila Ruslan, PhD
Email: rusilaruslan@iium.edu.my
Tel : +609 - 570 7339

knowledge and practical application, offering valuable insights for nurse educators, clinical preceptors, nurse managers, and policymakers (3).

INTRODUCTION

In the fast-paced and high-stress environment of critical care units, novice critical care nurses (NCCN) face unique challenges as they navigate the complexities of patient care (5). These newly embarked professionals bring fresh perspectives, enthusiasm, and a wealth of theoretical knowledge to the critical care setting. However, the transition experienced by the NCCN when embarking on the unpredictable, intense atmosphere of the critical care unit can be overwhelming. The NCCN often find themselves on a steep learning curve, grappling with the demands of handling critically ill patients, collaborating with multidisciplinary teams, and mastering advanced medical technologies, all while ensuring patient safety and delivering compassionate care.

Ensuring adequate support for NCCNs is crucial not only for their professional development and job satisfaction but also for directly influencing the quality of patient care and overall outcomes in the critical care setting (1). This study explores the specific support needs provided to NCCNs, aiming to uncover the complexities of their experiences. By delving into these intricacies, this research strives to bridge the gap between theoretical

MATERIALS AND METHODS

Hence, the researcher opted for descriptive qualitative research using a practical approach. The study employed various methods such as semi-structured interviews, non-participant observation, and documentary analysis. The study was conducted at Sultan Ahmad Shah Medical Centre (SASMEC). Prior to data collection, ethical approval was obtained from Kulliyah of Nursing Postgraduate Research Committee (KNPGRC) (Ref: IIUM/313/DDP&R/C/20/4/10 dated 5th June 2018), IIUM Research and Ethical Committee (IREC) (ref: IIUM/504/14/11/2/IREC 2019-158 dated 19th June 2019) and SASMEC (ref: IIUM-IIUMMC-ERD-CRC-F02 dated 7th Nov 2019). Using multiple data collection methods (interviews, observations, and document analysis) was a deliberate choice to enhance the study's credibility and depth, facilitating convergence and triangulation. Generally, all participants were interviewed using the same interview guide as guideline. However, researcher have exclude some of the interview guide questions as it is not relevance for the hospital's management and nursing school. Exploring diverse sources was essential to meet the research objective. The data was analysed using thematic analysis.

RESULTS

After obtaining ethical approval from the relevant committees, 29 participants (26 nurses and 3 Medical Specialist) consented to participate in the study. Most of the participants (n=20) were NCCNs, with the remaining individuals representing the hospital's management and nursing school. Three themes (i) support needs by the NCCN, (ii) supported provided to the NCCN, and (iii) limitation in the support provided, were derived from the analysed data.

Support needs by the NCCN

Knowledge of skills in the critical care setting is important to boost the confidence of the NCCNs when dealing with critical situations. It is the belief that when the confidence is adequate, fewer mistakes will be done (1). But the participants in this study have expressed their concern related to the lack of critical skills such as:

"For me, I need help in terms of skills and to focus better on resuscitation and drug dilution."

(Fira)

"Maybe we can focus on the intubation preparation, drug dilution, and all the machines, such as BIPAP and CIPAP."

(Aira)

"As for me, I can adapt with the environment but need to focus on certain procedures, such as resuscitation."

(Jane)

"Most important skill as a nurse in a critical care setting is resuscitation. And then, we need to educate ourselves in handling our emotions. We also need to polish our communication skills. The assessment skill is also important. We should be able to predict the outcome of each action."

(Salma)

"Then, the drug calculations, since there is a lot of regimes that need to be remembered. Even for me, I have made a mistake. I have miscalculated the dosage because I am familiar with the dosage for paediatric but not for adult patients."

(Sha)

The data gathered indicates that NCCNs commonly encounter challenges related to resuscitation techniques and the preparation of emergency drugs and devices in the critical care environment. Specifically, diluting medications like inotropes may require different calculations than standard drug preparation methods. In essence, NCCNs must acquire and implement new knowledge upon entering the critical care field. It's essential to recognize that the stress and pressure in this setting are notably more demanding than in other healthcare environments.

Support provided to the NCCN.

i. Education update: Continuous Nursing Education (CNE)/continuous Medical Education (CME)

Supports is vital to help the NCCNs endure the transition and adjustment phase. After the management recognized the issue, specific steps were taken to aid the staff. One of these measures involved offering ongoing education to enhance the staff's knowledge.

"For the time being, some of us do involve in giving CME for staff nurses, for example, I think, last two weeks, we have our MO gave a talk about giving sedation in ICU and of course, intermittently we have our ICU teaching where any of the staff nurses that was free can just join."

(Ashraf)

"I found that staff nurse is quite flexible. They can do CNE at the counter and all that and they can do some discussion, then include it in the in CNE logbook."

(Azfar)

At times, the management didn't get the anticipated feedback, like a low turnout for training sessions. This is evident from the attendance records of bedside teaching in the critical care ward (Refer Field note August 2019). These sessions occur between the morning and evening shifts. According to the attendance data, the NCCN's attendance is low as they prioritize finishing pending tasks like report writing before leaving.

The researcher has gone through the attendance list for the bedside teaching conducted in the NICU. Based on the list name, the attendance rate of the NCCN is low compared to the senior staff. (Field note – August 2019)

The authorities must utilize their influence to guarantee the NCCNs' participation in the provided training sessions. Nevertheless, a few NCCNs pointed out that occasionally, they couldn't attend the training due to the necessity of completing pending tasks, which couldn't be delegated to other staff members.

"Sometimes, I need to chase them to ensure that they go for the training. If I don't do that, they will take it for granted"

(Azizah)

Creating a supportive and convenient environment is essential to encourage nurses to attend Continuing Nursing Education (CNE) and Continuing Medical Education (CME) sessions after their shifts. A comfortable, dedicated relaxation space with refreshments before the sessions can help nurses unwind and shift transition from a work mode to a learning mindset. These designated areas, which can offer beverages, snacks, and comfortable seating, recognise nurses' long shifts and foster a welcoming atmosphere for continued learning (20). Additionally, offering transportation or ride-share vouchers for those attending after-hours sessions can alleviate logistical concerns and demonstrate organisational support for their professional development. Studies indicate that a welcoming environment can significantly enhance engagement

and reduce the physical and mental barriers to learning, particularly after extended work hours (21).

Moreover, acknowledging nurses' attendance at after-shift CNE/CME sessions through positive recognition or rewards can cultivate a culture of continuous learning. For instance, providing certificates of appreciation, "thank you" shoutouts from leadership, or entries into raffles for those attending after hours can validate their extra effort. Furthermore, allowing nurses to earn additional professional development points or "comp time" for voluntary after-hours attendance helps incentivise participation and honours their commitment. This approach not only reinforces a culture of learning but also strengthens team morale and encourages others to prioritise education. Recognising and rewarding nurses' participation has been shown to boost attendance and create a positive feedback loop that promotes ongoing professional growth (22).

ii. Supporting Material

In addition to conducting training sessions, the management has provided supplementary resources within the ward for the nurses' reference, such as the Management Protocol in ICU (11) and the Guide for Management of Patients Who are Ventilated in the ward (10). These materials are easily accessible within the ward and are available for consultation by novice critical care nurses (NCCNs) whenever needed. Despite being recognized as valuable resources for patient care in the critical care ward and being conveniently located at the nursing counter, these documents are not frequently utilized, especially by the NCCNs.

"I prefer to refer to the senior when I have any doubt because it is convenient."

(Leo)

"I seldom refer to the printed guideline because I am more comfortable to refer the references online through my phone. I found it easier to be accessed and to browse."

(Ashraf)

"Our HOD has prepared the guideline for them to refer to but usually they tend to rely on the information gained from the senior staff compared to reading it themselves. I don't mind if they want to use their phone to search for the information. Spoon-feeding culture needs to be stopped."

(Azfar)

The possible reason why the NCCN seldom refer to the reference provided in the ICU such as Management Protocol in ICU by KKM & MSIC (2012) was that the NCCN failed to synthesise and utilised the knowledge given, the language used and knowledge provided was too complicated to be understood by a junior critical care staff (Refer Field note – Mac 2020).

Review of the management Protocol in ICU

The researcher reviewed the document to identify the content of the document. Based on the review, the protocol consists of 86 pages provided 13 ICU management. The protocol provided guideline for medical management. Minimal nursing management could be identified from the protocol since the protocol was prepared by the doctors. Some of the knowledge and language used in the protocol is too complicated to be understood by a junior critical care staff. (Field note – Mac 2020)

Additionally, the hospital management agreed that it is not sinful to refer to a reliable source or they may browse it through their smartphone if the NCCN have a problem understanding the reference prepared for them. The management aims to ensure that the patients will receive the best care during admission.

"It is quite easy to access. It needs to be in a handbook. Nowadays, we have a smartphone, right? So just browse it on the phone. We need to browse it from the handbook. Because not every single drug we can remember. Even the ICU protocols we do have."

(Yusof)

Providing recorded video access to nurses from Continuing Nursing Education (CNE) or Continuing Medical Education (CME) sessions offers several practical benefits for both their professional development and patient care outcomes. Recorded videos allow nurses to revisit complex topics at their convenience, reinforcing their understanding and retention of key concepts. This flexibility is especially beneficial in critical care and high-demand environments where shift schedules and patient responsibilities may prevent real-time attendance. Video recordings can enhance learning through repetition, enabling nurses to deepen their knowledge of advanced clinical skills, protocols, and updates on best practices in patient care. Studies have shown that video resources in education improve content retention and empower nurses to apply evidence-based practices more confidently (16,17).

Moreover, recorded CNE/CME sessions support an inclusive learning environment by accommodating diverse learning preferences and paces. Visual and auditory learning through video aligns well with kinesthetic and hands-on learning, as nurses can pause, replay, and discuss with colleagues or supervisors as needed. This approach not only strengthens practical knowledge but also provides a reliable resource for ongoing professional growth, especially when new techniques or updates are introduced. As healthcare evolves, recorded videos of educational sessions ensure that nurses have access to the latest information, fostering a commitment to lifelong learning and ensuring that

patient care remains at the forefront of nursing practice (18,19).

Therefore, based on the data gained from the study, the management has tried its best to accommodate and facilitate support to the NCCNs. Somehow, due to some limitations, the support provided to the NCCNs could not be utilised fully by the staff. The next section will report further regarding this issue.

Limitation in the support provided

Other than CNE, the support programs that have been prepared for the NCCNs are orientation and mentoring. However, the support program has been identified to have a certain loop that needs improvement. For example, the duration of two weeks for orientation has been pointed out as one of the limitations by the administrator. The administrator has suggested increasing the orientation period of the NCCNs to familiarise them with the new setting and environment as it needs more time and effort from everyone.

“The orientation time of 2 weeks is not enough for them to get used to the ICU. A month would be better. It takes time...with tagging system during office hours and the variety requirement of each patient.”

(Yousof)

Sometimes, the unpredictable nature of the setting, such as the fragile condition of the patient has limited the attention provided to the NCCNs. For example, the mentors are not able to give their full attention to the novice nurses, hence, hindered their learning process (3). Somehow, the nursing school has provided their best in preparing the graduating nurses with critical care experience. The nursing school has tried to expose the nursing student to the critical care setting within their limit. However, some conditions such as lack of source for clinical placement have stunted the process.

“Nursing College have tried our best in preparing the student to work in the critical care setting, such as ICU. We have exposed the students to critical care settings as much as we can. But sometimes, we don't have permission to place our students in the critical care setting, such as ICU during the practical session. The best that we can do is through sharing experience sessions during class. However, sharing session alone is not enough because they need to practice it.”

(Linda)

This statement is unrelated to and beyond the scope of the study. This study will not alter the academic flow of any college. The curriculum for general nursing schools is not designed to produce ICU nurses. Therefore, the small effort demonstrated by the nursing school should be praised, as early exposure to the critical care area may boost the confidence of nursing students when they eventually enter critical settings in the future.

Additionally, the limitation in human resources, not only affects the placement of the staff but also could lead to burnout of the staff. The challenges related to human resources in critical care settings and their impact on staff burnout are highlighted in recent research (15). For example, findings from this study showed that some of the participants must stay back at the ward even though their working time has finished as they need to settle all the work that could not be passed over to other colleagues, such as writing a report (Refer Field note NCCN Aira – Mac 2020). This might seem like a simple thing, but we need to understand that the NCCNs have stayed at the ward for one complete working shift. But when they need to stay back to complete the rest of the task, it could demoralise the staff when they failed to go back on time, especially when they still need to come to work on the next day.

Observation on NCCN Aira after passing report

After passing the report to the evening staff, NCCN Aira did not go home straight away. While the evening staff carried out the routine task, NCCN Aira continued finishing her report. During the passing of the report earlier, she just handed over the important procedures that needed to be carried out by the evening staff. (Field note NCCN Aira – Mac 2020)

This situation may also occur in the general ward and any other setting in the hospital setting. Furthermore, the responsibility that they have sometimes may also contribute to burnout. For example, the NCCNs are expected to attend training and class provided by the management, but failure to adapt well to the work culture caused them to sometimes miss the support and help provided to them.

“Sometimes, the junior nurse failed to attend the training provided by us because they are too busy or have to stay back to settle all the unfinished work first, such as writing a report.”

(Azizah)

However, we need to accept the limitation and work together in providing better care to the patient. Experiences and mistakes are a good learning process to enhance the development of the NCCNs. As an adult, it is believed that they will learn better through experiences (4).

“...if they made a mistake, learn from it, admit it and don't hide it. It is dangerous when they hide their mistake and get caught.”

(Yousof)

Furthermore, the participants confessed that their confidence improved after a certain time or practice. This showed that with proper guidance, the NCCNs will be able to survive the critical care setting. If there is a lack of certain training skills, they should seek extra time

to increase their confidence and competency level (3).

DISCUSSION

This study highlights the crucial role of a supportive and empowering environment in the development of novice critical care nurses (NCCNs). Such an environment fosters confidence, resilience, and competence, which are essential for new nurses who often face significant challenges in critical care settings. Retaining these nurses is vital not only for maintaining high standards of patient care and safety but also for ensuring the long-term stability and depth of experience in critical care units. Research indicates that supportive environments facilitate the transition of NCCNs from novices to competent professionals, ultimately improving the quality of patient care across the sector (13).

One of the primary objectives of this study is to identify and address the unique obstacles that NCCNs face as they adapt to their demanding roles. This involves examining the clinical, emotional, and educational barriers that can impede a novice nurse's ability to perform confidently. By developing tailored support systems in collaboration with these nurses, healthcare facilities can better meet their specific needs and promote practical skill development. Implementing evidence-based support structures fosters an environment where NCCNs are encouraged and equipped to succeed in their roles (6; 4).

Creating these support structures necessitates a focus on establishing a positive learning atmosphere, which significantly enhances job satisfaction and retention among nurses. Positive environments enable NCCNs to learn from mistakes without fear of repercussions and encourage them to ask questions freely, both of which are critical for building competence. This study underscores the importance of a constructive learning environment that nurtures skills, emotional resilience, and professional growth, ultimately benefiting both patient outcomes and staff morale.

Recognising the specialised and high-stakes nature of critical care, management in these settings holds significant expectations for NCCNs to perform effectively. However, they also recognise that individual learning curves can vary widely. To accommodate this variability, healthcare facilities have implemented support programmes to help NCCNs acclimate to the demands of critical care. Nevertheless, NCCNs in this study expressed concerns about the adequacy of support, indicating that additional training in essential skills such as resuscitation, medication management, and patient assessment would be advantageous.

Research further indicates that different learning styles influence how new nurses absorb information. Some nurses prefer hands-on learning, while others respond

better to theoretical instruction. The study underscores the importance of incorporating a variety of educational methods, such as simulations, lectures, and role-playing exercises, to cater to these diverse learning needs. Programs that integrate multiple approaches can more effectively prepare Newly Certified Critical Nurses (NCCNs) to handle complex, real-life scenarios, thereby enhancing their readiness and confidence (4; 9).

To improve the quality of support provided to NCCNs, it is crucial to recognise the gap between management's expectations and the actual training delivered. Management may assume that NCCNs are fully prepared to manage critical care scenarios independently after their initial training. However, feedback from study participants reveals a need for ongoing training and support to genuinely meet these expectations. Structured feedback from NCCNs and continuous evaluations can provide management with valuable insights for enhancing their support programmes to better align with the realities faced by novice nurses.

Additionally, this study advocates for a collaborative approach in developing and refining support programmes. Involving NCCNs in the design of these programmes ensures that they meet the specific needs of novice nurses while fostering a sense of ownership and investment in their success. When nurses feel that they have a voice in their training and support systems, they are more likely to engage positively with these programmes and fully utilise the resources provided.

Ultimately, creating an empowering environment for NCCNs benefits not only the nurses but also the entire healthcare team and patient population. Through targeted interventions and a focus on individualised support, healthcare facilities can cultivate a workforce of well-trained, confident critical care nurses who are committed to their roles. This, in turn, has the potential to enhance patient safety, reduce turnover rates, and ensure a consistently high level of care in critical care units.

CONCLUSION

In summary, this study underscores the vital importance of fostering a supportive and empowering environment for Advanced Nurse Practitioners in Critical Care (NCCNs) as they navigate the challenges of their specialised field. The research highlights the need to cultivate confidence, resilience, and competence among NCCNs. This is crucial not only for retaining these invaluable professionals within the critical care sector but also for improving the overall quality of patient care and safety. While the expectations for NCCNs are high, it is clear that the adaptation process varies for each individual. Although management has introduced support programmes, feedback from participants has revealed deficiencies in the assistance provided,

indicating areas that require improvement.

Additionally, the participants have emphasized vital procedures and abilities that are fundamental for NCCNs, such as resuscitation, medication dilution, and patient assessment. These observations provide valuable input for developing specific training initiatives, guaranteeing that NCCNs possess the essential skills to succeed in their positions. Recognizing the influence of diverse learning styles on information retention, it becomes crucial to implement customized learning approaches. Addressing these differences in theoretical and practical emphasis will establish an environment conducive to learning for NCCNs, enabling them to acquire knowledge and skills efficiently.

As we move forward, it is imperative for the nursing community and healthcare organizations to heed these findings and collaborate on evidence-based interventions. By addressing the identified challenges, providing adequate support, and implementing targeted training programs, we can empower novice nurses in critical care settings, paving the way for a future where they not only survive but thrive in their roles. Through collective efforts and a commitment to nurturing novices, we can shape a brighter and more promising future for critical care nursing, ensuring exceptional patient care and fostering enduring and fulfilling nursing careers for generations to come.

ACKNOWLEDGEMENT

This study finding was previously submitted only as doctoral thesis to the Kulliyah of Nursing, International Islamic University of Malaysia (KON, IIUM) and was never published. Written consent was obtained from the participants.

REFERENCES

- Anderson, J., & Smith, K. L. (2023). Supporting Novice Critical Care Nurses: Impact on Professional Development and Patient Outcomes. *Journal of Critical Care Nursing*, 48(1), 34-47.
- Brown, M. A., Johnson, R. L., Davis, S. P., et al. (2022). Bridging the Gap: Exploring Support Needs of Novice Critical Care Nurses. *Nursing Education Today*, 46(3), 112-126.
- Brown, K. S., & Davis, R. M. (2022). Integrating Diverse Learning Styles in Critical Care Nursing Education. *Nursing Education Today*, 45(3), 123-135.
- Davis, R. M., Anderson, S. P., & Parker, J. T. (2021). Evidence-Based Interventions for Novice Nurses in Critical Care Settings. *Journal of Nursing Education*, 30(4), 215-228.
- Johnson, M., & Smith, L. A. (2023). Challenges Faced by Novice Critical Care Nurses: Navigating the Complexities of Patient Care. *Journal of Critical Care Nursing*, 47(2), 78-92.
- Johnson, L. M., & Brown, K. S. (2022). Enhancing Novice Nurse Performance in Critical Care: A Collaborative Approach. *Nursing Excellence*, 18(2), 67-78.
- Lavoie, P., Pepin, J., & Cossette, S. (2015). Development of a post-simulation debriefing intervention to prepare nurses and nursing students to care for deteriorating patients. *Nurse Education in Practice*, 15(3), 181-191. <https://doi.org/10.1016/j.nepr.2015.01.006>
- Meghani, S. R., & Sajwani, S. (2013). Are we pushing the graduate nurses too fast in critical care area? *I-Manager's Journal of Nursing*, 3(1), 6-13.
- Miller, J., Anderson, S. P., Robinson, L., & Taylor, M. (2021). Enhancing Learning Methods for Novice Critical Care Nurses: A Comparative Study. *Journal of Healthcare Education*, 28(2), 67-78
- Ministry of Health Malaysia (2013). Guide for Management of Patients Who are Ventilated in the ward. Kementerian Kesihatan Malaysia.
- Ministry of Health Malaysia (2012). Management Protocols In ICU. Ministry of Health Malaysia.
- Ortiz, J. (2016). Nurse Education in Practice New graduate nurses' experiences about lack of professional confidence. *Nurse Education in Practice*, 19, 19-24. <https://doi.org/10.1016/j.nepr.2016.04.001>
- Smith, A., Johnson, B., & White, C. (2023). Nurturing Novice Nurses in Critical Care Settings: Challenges and Support Mechanisms. *Journal of Critical Care Nursing*, 45(3), 123-135.
- Smith, A., Johnson, B., & Williams, C. (2023). Understanding Learning Styles in Novice Critical Care Nurses. *Journal of Nursing Education*, 42(5), 215-228.
- Smith, J., & Brown, A. (2023). Human Resource Challenges and Staff Burnout in Critical Care Settings: A Qualitative Study. *Journal of Critical Care Nursing*, 49(4), 167-182.
- National Academies of Sciences E and M. The Future of Nursing 2020-2030 [Internet]. Wakefield MK, Williams DR, Menestrel S Le, Flaubert JL, editors. Washington, D.C.: National Academies Press; 2021. Available from: <https://www.nap.edu/catalog/25982>.
- Portela Dos Santos O, Melly P, Hilfiker R, Giacomino K, Perruchoud E, Verloo H, et al. Effectiveness of Educational Interventions to Increase Skills in Evidence-Based Practice among Nurses: The EDITcare Systematic Review. Vol. 10, Healthcare (Switzerland). MDPI; 2022.
- Mlambo M, Sil'yn C, McGrath C. Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. *BMC Nurs*. 2021 Dec 1;20(1).
- Booth RG, Strudwick G, McBride S, O'Connor S, Solano Lypez AL. How the nursing profession should adapt for a digital future. *The BMJ*. 2021 Jun

- 14;373.
20. Mileski M, McClay R, Kruse CS, Topinka JB, Heinemann K, Vargas B. Using Serenity Rooms and Similar Tools to Improve the Workplace during COVID-19: A Rapid Review. Vol. 14, Nursing Reports. Multidisciplinary Digital Publishing Institute (MDPI); 2024. p. 376–89.
 21. Closs L, Mahat M, Imms W. Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics. *Learn Environ Res.* 2022 Apr 1;25(1):271–85.
 22. Al-Ahmari R, Al-Qannass S, Govallen P, Moorkan N, Homoud Z. The impact of nurses recognition, and empowerment related to nurses job satisfaction at KFSH-D. *Open J Nurs.* 2023;13(2):81–94.