ICU

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The Night in the ICU

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aring for critical care patients during the nightshift hours has many unique challenges. In order to provide high quality nursing care at the bedside, continuing education is essential for every healthcare professional, regardless of the shift they work, according to a study (2019) in the American Journal of Critical Care (AJCC). Historically, nurses on the night shift find it challenging to learn during hours when they usually sleep, and Powell (2013) discovered that educational opportunities impact job satisfaction. According to Becker (2013), turnover rates for nightshift nurses are three times higher than for nurses who work dayshift hours.

One of the challenges with nights is the lack of available resources and leadership during these twilight hours. Managers, supervisors and educators usually work normal dayshift hours, Monday through Friday. When nurses had issues that needed leadership input, they would have to wait until daylight hours for them to be addressed. The same goes for resources, as professional development and other departments are not usually represented during night hours. As we realised the need to improve our nursing engagement on nightshifts, resources and

Engaging the Night Shift Nurse With Activities & Educational Opportunities

Providing different modalities and strategies helps engage the night shift and can enhance job satisfaction, workforce commitment, and recruitment and retention of nurses.

leadership availability were offered for this specific staff population.

Yearly nursing opinion surveys were completed at a 650-bed Level 1 Trauma Center in Central Illinois. Low satisfaction scores related to professional development offerings specifically tailored for the night shift nursing professional were reported. Along with this dissatisfaction regarding lack of educational opportunities, job satisfaction scores for the night shift were down as well. To address these concerns, the Professional Development Department established a Carpe Noctem committee. Opportunities for night shift were offered including Dine and Discover teaching sessions, traveling Basic Life Support (BLS) cart, quarterly skills stations, new product in-services, simulations, celebration events, emotional intelligence sessions, and a professional development fair.

Carpe Noctem Committee

To improve nightshift engagement, the Carpe Noctem committee was established in 2016. This committee includes nightshift department supervisors and professional development staff. The committee member supervisors were surveyed to determine what specific educational activities the nurses would like to have offered on their specific units at night. Based on this information, the Professional Development Department established ways to address these needs. The challenge was to ensure this could be

completed while containing costs and utilising current resources in the medical center. Incentives were provided for professional development staff to organise and provide education at night by receiving a workfrom-home day. Subject matter experts in the medical centre were invited as speakers for events. Any refreshments provided came from the medical centre catering services. The committee had fundraisers and established their own monetary fund and the Professional Development Department provided funds for more costly events.

Nightshift Considerations

Research on addressing the engagement of nightshift workers is very limited. A comprehensive literature search completed by a medical librarian resulted in 16 articles dating from 1982-2019. Carney (2015) completed a study involving 19 affiliated United States Midwest hospitals to understand the unique problems of nightshift workers compared with dayshift workers. From the study results, they determined in order to be a nightshift friendly organisation, they needed to establish leadership presence at night, professional development that did not interrupt sleep schedules and equal perks for all shifts.

Several issues needed to be addressed to effectively provide education during the night shift. Limited coverage affected nurses' ability to leave the unit to participate in educational activities during their

shift. Patient-to-nurse ratios for nights are higher, making it more challenging. Bringing education to each unit allowed for fewer patient care interruptions. It was also discovered that more novice nurses work this shift with fewer nurse experts available. A variety of interactive teaching methods was found to be most effective. The timeframe to provide education and engagement was also considered. According to the National Sleep Foundation (2020), the adult circadian biological clock has the strongest desire to sleep from 2 to 4 a.m. This time frame may not be conducive to retention of knowledge, so the focus was on kinesthetic learning for any education during this time. Most engagement was offered from 11 p.m. to 2 a.m.

Dine and Discover Teaching Sessions

One of the first educational offerings established is a monthly Dine and Discover. Thirty-minute educational sessions are offered at three different times during the night shift. Food is provided to encourage attendance, and 0.5 continuing education unit (CEU) is given. Some of the topics covered were sleep management and wellness, first five minutes of code blue, workplace safety, patient fall prevention, surviving the night shift, legal aspects of nursing, chest tubes, hypothermia, and telehealth.

Travelling Basic Life Support (BLS) Cart

According to the American Heart Association (AHA) (2015), high-quality BLS is crucial to improve patient outcomes and mortality. Data from the defibrillators and the skills competency manikins showed that compression and ventilation skills were not high quality. To ensure nursing staff had the ability to practice and retain BLS skills, a once-a-month travelling cart with voice-activated manikins was started. Professional development BLS instructors travel with the cart from 1 to 4 a.m. and visit the nursing units. Nursing staff was able to complete the hands-on skills portion of the AHA Heart

Code BLS, ACLS or PALS course and had access to additional educational assistance.

Quarterly Skills Sessions

Another need for nights was an opportunity to provide skills education and certification renewal on hospital equipment. Nightshift staff historically would have to come in early before their shift, stay after their shift, or come in during the day hours to complete needed education. Hands-on skills stations are provided throughout the year during night hours by professional development staff to ensure proper training. Examples of skills provided are restraint use, blood glucose monitoring, intravenous pump use, automated external defibrillators (AED) operation, electronic medical record documentation/ mobile inpatient electronic health record, and emergency crash cart usage.

■ the nursing staff are significantly involved in the evaluation of the results and immediately inform a responsible medical colleague in case of changes and critical results ■ ■

New Product In-services

Change is inevitable in healthcare and this includes medical products that nurses need to provide care. As product vendors' change or new products are adopted, providing education on proper use of the products is vital for the safety of the patient. Providing education by rounding on the units during nights ensures nurses have the education they need to use the products. Examples of product-oriented education that has been provided are blood warming equipment, bag mask valve device, indwelling urology catheter kits, and non-invasive respiratory masks.

In-Situ Simulations

In-Situ (meaning in the normal location) Code Blue Simulations were created to provide the nightshift staff the opportunity to be part of an activated unannounced Code Blue, using the current activation process on the units and public access areas of the hospital during the daytime; however, many of the nightshift staff are inexperienced or in orientation and have not been exposed to a pre-arrest or cardiac arrest situation, especially outside of the intensive care units and emergency department. The Family Birthing Center also provided unannounced in situ simulation of an unexpected infant delivery from a high-risk mother during night shift quarterly or when there was an influx of new nurses to the department. It is crucial to provide the staff opportunities and experiences of a Code Blue to improve team communication and patient survival. These simulations showed multiple knowledge and system gaps that needed to be addressed. Many process improvements were created to improve the educational and system gaps.

Team Building and Celebration Events

Building team dynamics is crucial for healthcare professionals as teamwork is necessary for the delivery of effective high-quality care. Nursing has been known to have different team dynamics between day and night shift staff. In order to improve these relationships as well as night shift team camaraderie, entertaining events were planned. Friendly competitions of hospital games and "escape room" were planned to celebrate Hospital Week. For summer, a barbecue was held outside, and staff were able to attend during their meal break. Each fall, the final night of Daylight Saving Time results in healthcare workers having to work an extra hour for their shift, as clocks are turned back. To make this night less stressful and to celebrate nightshift employees, a Lag Night celebration occurs with a meal served to every staff member. Professional development staff, along with hospital leaders, served the meal and delivered meals to units that were actively involved with patient care. An opportunity to receive flu immunisation was also offered during this celebration.

Personal, Professional and Leadership Growth and Opportunities

To ensure that nurses on nights have opportunities to develop leadership skills, emotional intelligence sessions were offered. Having great emotional intelligence has shown to be vital for personal and leadership success, according to Bradberry and Greaves (2009). Sessions were offered every three weeks with six sessions from 12:30 to 1:30 a.m. Another opportunity provided was an educational session on how to create a more positive workplace environment, followed by a group discussion. To ensure nurses on nights are informed and connect with leadership, yearly education on the outlook of the medical center is offered during night sessions, and leader rounding is scheduled as well. To encourage professional growth, a yearly professional development fair is held during the night shift. The fair includes information on national certifications, local academic institutions offering BSN or MSN degrees, professional development resources and classes, with each unit able to be represented.

EKG Virtual Reality (VR) Course and Intraosseous (IO) Access Virtual Reality (VR)

Self-paced learning and the modality of the education being delivered are crucial to adult learning. Using VR technology allows staff from all shifts to access to education 24/7. The EKG VR course was created for learners and new employees in critical care or emergency medicine as an option to opt out of an eight-hour in-seat EKG course that is held only during the day. Many learners are able to take the EKG VR course to help prepare for the arrhythmia portion for ACLS or PALS certification courses. The IO course is currently being created to help prepare for the IO cadaver lab or as a refresher for IO placement. Another VR course that is being trialed is fire in the operating room.

Conclusion

Since increasing these educational and engagement opportunities specifically for night shift, job satisfaction and professional development scores have improved. Since implementation of night shift satisfaction scores in 2017, the scores increased from 4.06 to 4.2 in 2018 and to 4.25 in 2019. This demonstrated that implementation of nightshift offerings in 2017 was making an impact and scores

improved for 2019 (Figure 1).

Future strategies will be to continue these sessions, because attendance at the sessions has been strong and nightshift staff satisfaction scores and engagement scores continue to increase. Another needs assessment will be performed to determine current educational and system gaps and review 2020 nightshift staff satisfaction scores.

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Key Points

- Caring for critical care patients during the nightshift hours has many unique challenges.
- One of the challenges is the lack of available resources and leadership during these twilight hours.
- In order to provide high quality nursing care at the bedside, continuing education is essential for every healthcare professional, regardless of the shift they work
- Building team dynamics is crucial for healthcare professionals as teamwork is necessary for the delivery of effective high-quality care.



Figure 1. Nightshift Satisfaction Scores

References

Becker DM (2013) Implementing a night-shift clinical nurse specialist. Clinical Nurse Specialist, 27(1):26-30.

Bradberry T, Greaves J (2009) Emotional Intelligence 2.0. TalentSmart, San Diego, CA.

Carney ML (2015) How the other half lives. Nursing Management, 46(7):30-35.

Highlights of the 2015 American Heart Association Guidelines Update for CPR and ECC (2015) American-Heart Association.

Margretta M, Dennis M, McLaughlin DC (2019) Coffee talk: A jolt for night shift education. American Journal of Critical Care, 28(1):81-84.

Powell I (2013) Can you see me? Experiences of nurses working night shift in Australian regional hospitals: a qualitative case study. Journal of Advanced Nursing, 69(10):2172-2184.

Sleep drive and your body clock (2020) Sleepfoundation. org. Available from sleepfoundation.org/articles/sleep-drive-and-your-body-clock