

Quality and Safety Matters

TCNJ Nursing's Quality and Safety Newsletter

Volume 3, Issue 1

October 2017

Study Supports Nurses Need to Stay Up-to-date

Leann Coppola
Class of 2018

A recent study of mother-baby and postpartum nurses demonstrated inconsistency was prevalent regarding nurses' knowledge of maternal mortality and the education being offered about post birth warning signs to patients (Suplee, Bingham, & Kleppel, 2017). Three hundred and seventy-two nurses within these two fields participated in a survey to assess their knowledge and teaching abilities. Participants were asked to identify the leading causes of maternal mortality as well as significant post-partum teaching points. Although it is expected that registered nurses engage in life-long learning to maintain a continued understanding of best practices and health trends, this study supports that expectation is not always being met.

Results showed that 46% percent of the nurses surveyed were unaware of a rise in maternal mortality in the past decade (Suplee, Bingham, & Kleppel, 2017). Additionally, 88% did not know that the majority of maternal deaths occurred within the postpartum period. The study also reported that the nurses surveyed only identified hemorrhage and hypertension as leading causes of death, leaving out the third, cardiovascular disease, which is now a serious health implication for the post-partum period. Describing their individual competency to discuss the three leading causes of death, 80% of the nurses felt "very competent" discussing the risk of hemorrhage with their patients, while 66% felt "very competent" educating about hypertension and only 27% felt "very competent" in discussing the risk of cardiac events (Suplee, Bingham, & Kleppel,).

The days directly after giving birth are exhausting, emotionally charged, and physiologically draining for new mothers, therefore the education provided to them must be clear and understood. This study reported that only 65% the nurses surveyed offered education throughout their patients' stay; about 30% of nurses reported offering most of their patient teaching on the day of discharge (Suplee, Bingham, & Kleppel, 2017). On the day of discharge, 39% of the nurses reported to spending 6-10 minutes discussing post birth warning signs, while 28% described spending less than five minutes on this topic (Suplee, Bingham, & Kleppel).

Continued on p 2

Nurse Fatigue Impacts Patient Safety

Monika Chodorowski
Class of 2020

Loss of sleep results in major fatigue, leading to serious health and safety issues for nurses. Not only is this harmful to the nurse, but it can negatively affect the patient. University of Pennsylvania nurse researcher, Linda Aiken, reviewed the revised statement that the American Nurses Association (ANA) issued and she identified that nurses act as a surveillance system, constantly aware and quick to help but sometimes disregarding their own health and safety. While teamwork is important, the risk of fatigue is real. In a clinical setting patients depend on nurses to be alert, cautious, and to keep them safe, so a change must occur in the nursing perspective.

ANA President Pam Cipriano and Aiken support that not only must nurses care for patients, nurses must care for themselves as well, which they sometimes ignore or are forced to ignore due to the demands of the work (ANA, 2017). It is common for nurses to put patients first and to work overtime in order to meet patient needs and staffing requirements but patient safety may be threatened by medical error that can result from nurses' fatigue. For example, due to fatigue, a nurse may administer an incorrect medication that could result in harm. Although nurses may think they are doing their best by staying that extra hour, in actuality, they may be putting themselves and their patients' well-being and safety at risk.

Two major factors, short-staffing and long shifts, come into play that create fatigue in a work environment. Most commonly, not having enough staff may cause nurses to work longer shifts in order to provide care for each patient in the hospital (ANA, 2017). These longer hours contribute to poor working conditions which can limit the nurse's capabilities to care for patients to his or her best potential. It is estimated that 30% of nurses are affected by working conditions that cause fatigue, and 40% work over twelve hour shifts in order to deal with low staffing numbers (American Nurses Association, 2017).

Registered nurses and employers must work together to eliminate the risks of nurse fatigue resulting from long hours and shift work in order to protect patients. While this problem may be complicated by financial considerations and a nursing shortage, it is a problem that can and must be resolved in order to ensure the health of nurses and the safety of patients. Nurses hold an important role in healthcare and the protection of patients, and risking the health of nurses should not be an option when patient safety is the highest priority.

American Nurses Association. (2017). Nurse Fatigue. Retrieved September 7, 2017, from <http://www.nursingworld.org/fatigue>

Hand Hygiene in Healthcare Settings: Show Me the Science

Emily Sayed
Class of 2020

In the healthcare setting, the fast pace and competing demands can cause the most well-meaning caregivers to overlook simple, but important protective actions for patients. Hand hygiene is one of those simple actions. Studies from the Centers for Disease Control and Prevention (CDC) show that some clinicians practice the proper hand hygiene only half the times they should, and in a twelve hour shift it is common for hand washing to be necessary as many as 100 times (CDC, 2016). The practice can make such a difference that researchers in London estimated that if everyone, practitioners and patients, routinely washed their hands, a million deaths worldwide could be prevented each year (CDC, 2013).

When soap and water is not accessible or practical, the CDC recommends using a hand sanitizer with 60-95% alcohol to completely rid the surface of the skin from germs. There have been concerns that using alcohol based sanitizers may assist the development of antimicrobial resistance, thus doing more harm than good. However the facts are that alcohol targets the proteins of microbes, and is able to denature them differently from antibiotics. Without proteins, the microbes have no capability to adapt and therefore cannot develop resistance. (CDC, 2016)

Even with a sanitizer, technique is important. The thumbs, fingertips and between fingers are places that are often neglected. Hand washing/sanitizing should take no less than 15 seconds, and should always be done after wearing gloves (CDC, 2016). Gloves cannot be a substitute for clean hands, especially if there is a tear or there is soiling through use. The combination of hand washing and wearing gloves should be practiced with all patients especially those who have *Clostridium difficile*, a common hospital acquired infection, or with any illness that has similar microbial properties. Because the spores of these microbes can be spread easily across surfaces, practitioners caring for patients with these infections should always wear gloves. (CDC, 2016) The CDC estimates that proper handwashing technique and etiquette could reduce diarrheal-disease related deaths by 50% (CDC, 2013).

Ultimately hand hygiene is a protective measure for the practitioners as well as for patients. Not only does practicing proper hygiene prevent harmful microbes

from being passed between caregiver and patient and vice versa, it protects against the passing of germs from one patient to another via the practitioner. Despite hospitals being busy, simple actions like hand washing can make a big difference in promoting positive patient outcomes.

Centers for Disease Control and Prevention (CDC). (2016, April 28). Hand Hygiene in Healthcare Settings: Show Me the Science. Retrieved from <https://www.cdc.gov/handhygiene/science/index.html>
Centers for Disease Control and Prevention (CDC). (2013, July 8). Water, Sanitation and Environmentally-related Hygiene. Retrieved from https://www.cdc.gov/healthywater/hygiene/fast_facts.html

Write for the Quality and Safety Newsletter!

Inviting student writers for December 2017 now
Ideas, resources and support provided
Contact Dr. Altmiller at AltmillG@TCNJ.edu

Staying Up-to-date continued from page 1.

Most of the nurses surveyed (95%) agreed there was a relationship between postpartum education and postpartum morbidity and mortality but only 72% of nurses felt it was their responsibility to provide education to all patients on possible complications (Suplee, Bingham, & Kleppel).

Although much is learned through clinical experience, evidence-based practice and healthcare trends are constantly changing to provide a framework for offering the safest and highest-quality care. Nurses must understand the most up to date trends to ensure close monitoring for those at greater risk of complications. Additionally, they must understand which complications are more likely to occur so the nurses can identify problematic warning signs.

More research is needed regarding the best practice in providing comprehensible and holistic postpartum education to new mothers because all women are at some sort of risk of postpartum complications. It is difficult to decipher who will experience problems and who will not. Because of this, the study recommends all women be provided with standardized education on post birth complication warning signs. This study reinforces that engaging in life-long learning supports the delivery of high quality, safe healthcare. To provide the best care and education to patients, nurses must ensure they are mindful, knowledgeable, and current in practice by staying up-to-date. Suplee, P. D., Bingham, D., & Kleppel, L. (2017). Nurses' Knowledge and Teaching of Possible Postpartum Complications. *The American Journal of Maternal/Child Nursing*, 1. doi:10.1097/nmc.0000000000000371