Kwadwo Awuah-Baffour. Nursing handover influences on safety of patient care. Acta Scientiae et Intellectus, 8(1); 2022, 40-47.

NURSING HANDOVER INFLUENCES ON SAFETY OF PATIENT CARE

Kwadwo Awuah-Baffour

*Eastern New Mexico University, **USA***

Corresponding author: Michael.Shaughnessy@enmu.edu

ABSTRACT

Handoffs are a common occurrence in the hospital setting. They are an opportunity for the exchange of information between clinicians and nurses. During this time, nurses need to transfer complete and accurate information. This literature review examines various research papers about handoffs and patient safety. Research shows that ineffective communication during handovers contributes to patient harm. Consequently, nurses need to pay keen attention to multiple details during this process to ensure patient safety. Various research shows that standardized communication tools and bedside handoffs help to improve patient safety during handover. Some of the tools used during handover include the Situation Background Assessment and Recommendation (SBAR) communication tool. The use of these strategies showed improved patient safety metrics and several self-reported advantages by the nurses.

Key words: *Nursing handovers, patient safety, communication frameworks, SBAR communication tool, umbrella review*

INTRODUCTION

Nursing handover refers to transferring patient care responsibilities from one clinician or nurse to another (Friesen et al., 2008). It promotes continuity of care for patients. Nurses work in shifts because it is tedious to work long shifts and overworking and stress can decrease the quality of patient care. Consequently, nurses must hand over the care of their patients to other nurse practitioners. The handovers are integral components of healthcare because they are involved with the transfer of critical information. Different terms refer to nursing handovers,

depending on the organization and location of the healthcare unit. Some of the words that are synonymous with nursing handovers are handoffs, shift reports, cross-coverage, sign-out, and sign-over. Nursing handovers are areas of concern for patient safety.

Ineffective handoffs are associated with wrong-site surgery, medication errors, and patient deaths (Friesen et al., 2008). Handoffs are more prone to contribute to gaps in patient care today, unlike in the past. This is because many clinicians are involved in patient care. In the past, only a few clinicians were involved in patient care. However, with advances in healthcare, many teams and personnel are involved in patient care. Consequently, the hospital needs to have a robust system of information transfer from one person to another. This research examines how nursing handover influences the safety of patients. The author will use various journal articles and research reports to present information on this topic. This review will prove that nursing handover influences patient safety and elucidate how it does this. Additionally, it will recommend methods to improve patient safety during handoffs.

LITERATURE REVIEW

The decreased mortality rate due to an improvement in healthcare services means that many people need these services. This puts pressure on the healthcare systems globally, as evident in the increase in avoidable injuries occurring in healthcare places. Recent research puts the rate at ten percent in developed countries (Eggins & Slade, 2015). The study also showed that ineffective communication contributes to hospital patient harm, especially during clinical handovers. Handovers occur over 200 million times in a year, making them the most frequent communication time between healthcare workers. Some of the problems associated with nursing handover include incomplete handovers, over-dependence on memory, lack of explanation about what has or will happen with the patient, and low-quality medical records. Others include lack of patient involvement in the handover process and participation of multiple clinicians in caring for a single patient (Eggins & Slade, 2015).

The World Health Organization (WHO) recommends using standardized handover protocol to curb communication problems during nursing handovers. This protocol emphasizes the inclusion of the patients and their caregivers during handover. Eggins and Slade (2015) examined several audio and video recordings of nursing handovers in multiple hospitals across Australia as a way of developing evidence-based policies for improving patient safety. This research showed that effective nursing handovers involve two types of communication, i.e., informational and interactional. Nurses and patients are encouraged to ask

questions and participate during the process. It is not a listening event but requires everyone's participation. Additionally, the use of a standardized protocol helps communicate complex information. Lastly, the research recommended that clinicians receive training on clinical handover strategies and frameworks (Eggins & Slade, 2015). This will ensure that all nurses are conversant with tools such as the Situation Background Assessment Recommendation (SBAR) communication tool.

Another research examined nursing shift handovers in the surgical units, specifically the relationship between communication and patient safety (Telles et al., 2020). This study was conducted in a public university hospital in Rio de Janeiro, Brazil, from April to July 2019. The hospital provides medium and high-complexity healthcare. The research was a quantitative and observational study. According to this study, ineffective communication contributed to over 60% of errors in the healthcare sector. Since the main objective of nursing handover is to ensure continuity of quality care, improper communication during this stage is detrimental. The researchers cited a study conducted in Australia involving 459 patients. This study focused on handing over patients from various departments within the hospital to the Intensive Care Unit (ICU). The study results showed a 30% transfer rate without transfer phenomenon (Telles et al., 2020). In this phenomenon, clinicians transfer patients across departments without giving adequate information about their care. This contributed to significant adverse effects in the hospital.

Telles et al. (2020) sought to examine the factors that contributed to the interference of communication between nursing teams in surgical wards during handover. The research involved nurse professionals who took part during the handover process. The researchers used two methods to gather the information: questionnaires and observation. The total number of participants was 123 nurse practitioners, and the research made 54 handing over observations. The questionnaire results showed that most respondents indicated an omission of information during handover leading to gaps in inpatient care. During the observational studies, some of the factors that interfered with communication during handover included a delay of nurse practitioners, noises, incomplete information, handoff method, inattentiveness of the professionals, and lack of participation in the handover process (Telles et al., 2020). The researchers recommended using a standardized tool during handover, improved team participation, and minimization of noise.

Another journal article addressed how to undertake an effective handover in the healthcare setting (Ballantyne, 2017). The report provides a detailed description of the handover process, the various types, and the barriers to effective handovers. According to the article, the handover process is critical to patient

safety and requires the same attention as other nursing tasks. The primary functions of handover are to share information about a patient and to ensure continued care. Other benefits include offloading emotional burdens and providing a learning opportunity for nurses. Handovers can either be verbal or in written form. Verbal handovers are more prone to omission or miscommunication. Consequently, written documents are better suited to ensure higher quality care. The other types of handovers are office-based handovers and bedside handovers (Ballantyne, 2017). In office-based handovers, the process takes place away from the patients in a private room. This type of handover is associated with benefits such as sharing confidential information and minimization of interruptions. Additionally, nurses can discuss sensitive information such as Do Not Resuscitate (DNR) orders.

Bedside handovers take place in the presence of the patient just beside their hospital bed. This type of handover is gaining popularity. Some countries, such as Sweden, say that it is a legal right for patients to participate in this process (Ballantyne, 2017). It places the patient at the center of the handover process and keeps them abreast with their care. This form of handover has often proven to increase patient satisfaction in the treatment. Some barriers to effective handovers include interruptions from patients, lack of clarity about nurses' responsibility, use of unit-specific terms and abbreviations, and inadequate training. Hospitals have communication frameworks and tools that guide the handover process. These tools are essential in standardizing the handoffs. Some of the frameworks include the SBAR framework and the Areas and Allocation; Beds and Bugs; Colleagues and Consultant on-call; Death, Disasters and Deserters; and Equipment and External (ABCDE) events template (Ballantyne, 2017). In conclusion, this article emphasized the high-risk nature of handovers to patient safety. Consequently, nurses have a professional duty to ensure that the transfer is complete and provides accurate information.

A different study examined the impact of the SBAR handoff tool in improving patient safety (Müller et al., 2018). Several studies have recommended the use of this tool as a means of standardizing handoffs across healthcare systems. Müller et al. (2018) define patient safety as the reduction of unnecessary harm to the patient. The study cites poor communication as a significant hindrance to patient safety, especially during handoffs. Consequently, communication health exerts developed communication strategies to mitigate the risks to patient safety. Although they take time and effort to complete, these strategies are essential in gathering complete patient information and reducing the margin of error. The SBAR tool and its derivatives are strategies clinicians employ to ensure patient safety during handovers (Müller et al., 2018). This tool is helpful in the transfer of patients between nurses and other healthcare teams. This tool is well structured,

and it ensures the collection of all relevant information. This tool requires prior preparation before use, thus orienting the mental process. Since it is standardized, both parties during handover are familiar with the terms and concepts of the handoff tool.

Although some studies have investigated the impact of the SBAR tool on interdisciplinary communication and employee satisfaction, few studies have investigated the impact of the communication tool on patient safety. This means that clinicians assume that the device improves patient safety without literature evidence. Müller et al. (2018) sought to examine the impact of the SBAR handoff tool on patient safety as evidenced by the incidence of adverse outcomes. The study was a systematic review study that involved relevant articles from various databases, namely CINAHL, PUBMED, EMBASE, and Cochrane Library. The researchers searched for these articles in January 2017. After different inclusion and exclusion criteria, the researchers used eleven papers in this systematic review. Of the eleven studies, three had a 'strong' study design because they were controlled clinical trials. The others used a before after study design.

All eleven studies examined the effect of the SBAR tool on various outcomes of inpatients. Three studies investigated the general outcomes while the other eight had specific outcomes, e.g., cardiac-related, patient falls, and anticoagulation-related. Twenty-six different patient outcomes were investigated in the studies. The analysis showed that nineteen patient outcomes improved significantly after the implementation of the tool. Six outcomes did not have any change. Unfortunately, one study showed an increase in the incidence of adverse events. Generally, there was no significant reduction in patient safety after the use of the handoff tool. In summary, this study showed that implementing the SBAR handoff tool has potential benefits in communication and during handovers. However, the articles the researchers utilized in the systematic review were of low quality, and more research needs to be done on this topic (Müller et al., 2018).

Taylor (2015) researched to examine the effect of standardized bedside handoff and walking rounds on patient safety. This study was inspired by a 2009 publication by the Joint Commission that recommended utilizing a standardized handoff tool to minimize communication errors. According to the journal article, using non-standardized handoff tools lacking important patient information has been associated with near misses and sentinel events among nurses. This is especially important because transfers and handoffs involve up to 70% of the inpatient population. The Joint Commission recommended interactive communication during the handovers together with the use of a standardized tool containing patient information such as anticipated services, treatments, care, and anticipated changes (Taylor, 2015). Pre-printed information forms can help ensure the completeness of data. Bedside handoffs improve patient satisfaction by

involving patients in their care and enhancing patient-nurse relationships. Bedside handoffs are associated with faster discharge processes because patients understand their care.

The researcher aimed to identify how bedside handoffs can improve patient satisfaction and safety on an inpatient surgical oncology unit (Taylor, 2015). The researcher followed up the transition of office handoffs to bedside handoffs in a 43-bed melanoma, sarcoma, gastric, and colorectal carcinoma inpatient surgical oncology unit. Before the handovers, each nurse would get a printed document containing pertinent patient information, e.g., diet, comorbidities, activity level, and laboratory results. These interactive handoffs would last approximately three to four minutes for each patient. The researcher collected qualitative data four years after the implementation of the new handoff system. Twelve of the seventeen nurses interviewed reported that they were moderately satisfied with the walking rounds and bedside handoffs (Taylor, 2015). Only two nurses said that they were delighted with the rounds. The self-reported benefits of bedside handoffs included introducing the patient and caregivers, task prioritization by viewing the patient, and improved nurse-to-nurse communication. After implementing the new handoff method, patient benefits are enhanced communication and introduction to the nurse (Taylor, 2015). This survey also recorded improved patient safety metrics; for instance, medication errors decreased from 32 to 27.

Another research examined the impact of intra-shift processes on the efficacy of handoffs (Birmingham et al., 2014). This qualitative study sought the perspectives of medical and surgical nurses about the processes that promoted or hindered patient safety intra-shift and during handoffs. To explore the nurses' views, the researchers used constructivist grounded theory. The research showed that when off-going nurses understood the patient's cases intra-shift, this information would be conveyed accurately during handoffs. However, there would be omissions and miscommunication when the nurses did not understand the cases. This would hinder patient safety.

Ofori-Atta et al. (2015) focused on the bedside shift report and its implication on patient safety and quality of care. The article gives an overview of how shift reports have metamorphosed from the nurse's station to the patient's bedside. Traditionally, the shift report took place at the nurses' station. The patients knew the time for the handover, and for an hour or two, patients were 'alone' in the wards. Most adverse events occurred during this time. The transition to Bedside Shift Report (BSR) eliminates this alone time and makes patients feel part of their care process.

Additionally, communication with the patient and family about all components of their care is an essential feature of a safety culture. BSR is also an opportunity for nurses, patients, and caregivers to improve safety and quality of

care. According to the article, BSR increases accountability, improves the quality of care, and increases patient safety

(Ofori-Atta et al., 2015). The authors recognized that implementing BSR in hospitals can be daunting and recommended using small steps. Agency for Healthcare Research and Quality (AHRQ) recommends starting the change on a small scale and then seeking the staff buy-in by presenting how the process will work and introducing relevant tools like the SBAR (Huang et al., 2007). Nurses can also be trained on using SBAR by learning the standard concepts applicable in the process. This article modifies the SBAR tool by advising nurses to thank the patient after the procedure is over. Although the report recognizes potential barriers and challenges, implementation of BSR has more benefits than harm (Ofori-Atta et al., 2015).

A different study also examined the impact of bedside nursing handoffs on patent safety (Maxson et al., 2021). This study had a pre and post-implementation survey. The researchers used a sample of thirty patients each before and after the implementation of the bedside handoffs. All nurses were invited to participate. Nurses and patients filled out a questionnaire before and after the implementation of the practice. Fifteen nurses participated. The results of this research showed increased patient satisfaction and increased staff accountability, thus increasing patient safety.

Bressan et al. (2019) conducted an umbrella review to investigate the relationship between nursing handovers and patient safety. An umbrella review describes a review of reviews. This type of research examines other systematic reviews about the same topic. The researchers used CINAHL, Cochrane Library, and PUBMED to find the relevant review articles. Ultimately, the researchers identified 17 reviews. The research results indicated that alternating nursing handoffs to improve patient safety is a complex procedure because it involves the change of an entire culture and system. Consequently, education and the use of a tailored approach are necessary for the success of the program.

CONCLUSION

Nursing handovers are areas of concern in nursing because they constitute moments of information transfer between healthcare teams. Research has shown that over 60% of avoidable injury in the health sector occurs due to poor communication, especially during handoffs. This literature has demonstrated that various strategies can improve patient safety during handoffs. These strategies include the use of a standardized communication tool and bedside handoffs.

REFERENCES

1) Ballantyne, H. (2017). Undertaking effective handovers in the healthcare setting. *Nursing Standard*, *31*(45), 53-62. DOI: 10.7748/ns. 2017.e10598
2) Birmingham, P., Buffum, M., Blegen, M., & Lyndon, A. (2014). Handoffs and patient safety. *Western Journal of Nursing Research*, *37*(11), 1458-1478. DOI: 10.1177/0193945914539052
3) Bressan, V., Mio, M., & Palese, A. (2019). Nursing handovers and patient safety: Findings from an umbrella review. *Journal of Advanced Nursing*, *76*(4), 927-938. DOI: 10.1111/Jan. 14288
4) Eggins, S., & Slade, D. (2015). Communication in clinical handover: Improving the safety and quality of the patient experience. *Journal of Public Health Research*, *4*(3). DOI: 10.4081/jphr.2015.666
5) Friesen, M., White, S., & Byers, J. (2008). Chapter 34 - Handoffs: Implications for nurses. *Inpatient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK2649/
6) Huang, D. T., Clermont, G., Sexton, B. J., Karlo, C. A., Miller, R. G., Weissfeld, L. A.,... & Angus, D. C. (2007). Perceptions of safety culture vary across the intensive care units of a single institution. *Critical Care Medicine*, *35*(1), 165-176.
7) Maxson, P., Derby, K., Wrobleski, D., & Foss, D. (2021). Bedside nurse-to-nurse handoff promotes patient safety. *Medsurg Nursing*, *21*(3). Retrieved from http://blog.aahs.org/wp-content/uploads/Bedside-Nurse-to-Nurse-Handoff-Promotes-Patient-Safety.pdf
8) Müller, M., Jürgens, J., Redaèlli, M., Klingberg, K., Hautz, W., & Stock, S. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: A systematic review. *BMJ Open*, *8*(8), e022202. doi: 10.1136/bmjopen-2018-022202
9) Ofori-Atta, J., Binienda, M., & Chalupka, S. (2015). Bedside shift report. *Nursing*, *45*(8), 1-4. DOI: 10.1097/01.nurse.0000469252.96846.1a
10) Taylor, J. (2015). Improving patient safety and satisfaction with standardized bedside handoff and walking rounds. *Clinical Journal of Oncology Nursing*, *19*(4), 414-416. DOI: 10.1188/15.cjon.414-416
11) Telles, V., Fassarella, C., Silva, R., Almeida, P., & Camerini, F. (2020). Nursing shift handover in surgical clinics: The interface between communication and patient safety. *Revista Enfermagem UERJ*, *28*, e48402. DOI: 10.12957/reuerj.2020.48402