Creating Healthy Work Environments VIRTUAL 2021

Patient Safety Culture and Patient Safety Outcomes in Saudi Arabia: Perceptions of Expatriate Nurses

Amal A. Alharbi, RN, MSN

V. Susan Dahinten, PhD, RN

School of Nursing, University of British Columbia, Vancouver, BC, Canada

Background: There has been extensive research into the effects of safety culture on patient safety internationally, but findings have been inconsistent (Lee et al. 2019), and limited attention has been given to how nurses of different nationalities or cultural backgrounds may view safety culture and patient outcomes. In Saudi Arabia, expatriate nurses form the majority of the nursing force. Although expatriate status has been studied in relation to nurse retention in Saudi Arabia (e.g., Albougami et al., 2020), we hypothesized that it may also be associated with perceptions of patient safety culture, quality of care, and patient safety outcomes.

Purpose: This study examined the relationships between perceptions of patient safety culture, quality of care, and patient safety among expatriate nurses in Saudi Arabia after controlling for nurse characteristics including nationality, and the nurses' work environment.

Methods: This correlational study used cross-sectional data collected from registered nurses working in one multi-specialty hospital in Riyadh, Saudi Arabia. Participants completed an online survey that assessed their perceptions of safety culture (using items from the AHRQ Hospital Survey on Patient Safety Culture), quality of care, and patient safety. The survey also asked about expatriate status and country where the nurses received their basic nursing education. As 97% of the respondents had been educated in India or Pakistan (36%, n=180) or the Philippines (61%, n=308), and self-identified as non-Saudi, this study focused on these two groups for a final sample of 488 expatriate nurses. (Country where basic nursing education was received was used as a proxy for nationality for expatriate nurses.) Hierarchical logistic regression was conducted to examine the relationships between nationality, safety culture, and quality of care and patient safety, after controlling for other nurse characteristics and the nurses' work environment (measured with the *PES-NWI*; Lake, 2002)

Results: T-test results showed that expatriate nurses from India/Pakistan rated patient safety culture, quality of care and patient safety significantly higher than nurses from the Philippines. They also had more years nursing experience (M = 14.3 vs 8.6) and had been working on their current unit longer (M = 8.3 vs 3.9 years), but were less likely to have a nursing degree than nurses from the Philippines (15.9% vs 99.7%). Hierarchical logistic regression results showed that nationality (OR = 5.03) and patient safety culture (OR = 2.28) were significant predictors of perceived quality of care as very good/excellent even after accounting for the nurses' work environment (OR = 2.03) and other nurse demographic characteristics. Only patient safety culture (OR = 2.43) and nurses' work environment (OR = 2.25) were significant predictors of perceived patient safety after accounting for other predictors.

Conclusion: Perceptions of patient safety culture are predictive of both perceived quality of care and patient safety, even after accounting for the broader conditions of

nurses' work environments. However, it is important to account for nationality as well as expatriate status, as cultural differences or past nursing experiences may influence expectations and perceptions of safety culture, quality of care, and patient safety.

Title:

Patient Safety Culture and Patient Safety Outcomes in Saudi Arabia: Perceptions of Expatriate Nurses

Keywords:

Expatriate nurses, Quality of care and Safety culture

Abstract Summary:

This study examined the relationships between perceptions of patient safety culture, quality of care, and patient safety among expatriate nurses in Saudi Arabia. Results indicated that differences in cultural background were significantly associated with differences in nurses' perceptions of patient safety culture, quality of care, and patient safety.

References:

- Aiken, L. H., Sloane, D. M., Barnes, H., Cimiotti, J. P., Jarrín, O. F., & McHugh, M. D. (2018). Nurses' and patients' appraisals show patient safety in hospitals remains a concern. Health Affairs, 37(11), 1744-1751.
- Albougami, A. S., Almazan, J. U., Cruz, J. P., Alquwez, N., Alamri, M. S., Adolfo, C. A., & Roque, M. Y. (2020). Factors affecting nurses' intention to leave their current jobs in Saudi Arabia. International Journal of Health Sciences, 14(3), 33-40.
- Aljuaid, M., Mannan, F., Chaudhry, Z., Rawat, S., & Majeed, A. (2016). Quality of care in university hospitals in Saudi Arabia: a systematic review. BMJ Open, 6, e008988. doi:10.1136/bmjopen-2015-008988
- Alquwez, N., Cruz, J. P., Almoghairi, A. M., Al-Otaibi, R. S., Almutairi, K. O., Alicante, J. G., Colet, P. C. (2018). Nurses' perceptions of patient safety culture in three hospitals in Saudi Arabia. Journal of Nursing Scholarship, 50(4), 422-431. doi: 10.1111/jnu.12394
- Alshammari, M., Duff, J., & Guilhermino, M. (2019). Barriers to nurse-patient communication in Saudi Arabia: an integrative review. BMC Nursing, 18, 16. doi: 10.1186/12912-019-0385-4
- Alswat, K., Abdalla, R.A.M., Titi, M.A., Bakash, M., Mehmood, F., Zubairi, B., Jamal, D., & El-Jardali, F. (2017). Improving patient safety culture in Saudi Arabia (2012-2015): trending, improvement and benchmarking. BMC Health Services Research, 17, 516. doi: 10.1186/s12913-017-2461-3
- Lake, E. T. (2002). Development of the Practice Environment Scale of the Nursing Work Index. Research in Nursing & Health, 25(3), 176-188. doi:10.1002/nur.10032

- Lee, S. E., Scott, L. D., Dahinten, V. S., Vincent, C., Lopez, K. D., & Park, C. G. (2019). Safety culture, patient safety, and quality of care outcomes: A literature review. Western Journal of Nursing Research, 41(2), 279-304.
- Saquib, N., Zaghloul, M.S., Saquib, J., Alhomaidan, H.T., Al-Mohaimeed, A., & Al-Mazrou, A. (2019). Association of cumulative job dissatisfaction with depression, anxiety and stress among expatriate nurses in Saudi Arabia. Journal of Nursing Management, 27, 740-748. doi: 10.1111/jonm.12762
- Zangaro, G. A., & Jones, K. (2019). Practice environment scale of the nursing work index: A reliability generalization meta-analysis. Western Journal of Nursing Research, 41(11), 1658-1684. doi:10.1177/0193945918823779

First Primary Presenting Author

Primary Presenting Author
Amal A. Alharbi, RN, MSN
University of British Columbia
School of Nursing
PhD Student
Vancouver, British Columbia
Canada

Author Summary: Amal Alharbi is currently a PhD student at the University of British Columbia, School of Nursing, Canada, who is also a Lecturer at the University of Tabuk, Department of Nursing, Saudi Arabia. She is keenly interested in advancing nursing profession in Saudi Arabia, with a focus on healthcare services and policy research. Her program of research focuses on health systems and improving the quality and safety of patient care delivery.

Second Author

V. Susan Dahinten, PhD, RN University of British Columbia School of Nursing Associate Professor Vancouver, British Columbia Canada

Author Summary: Dr. Dahinten is an Associate Professor at the University of British Columbia in Vancouver, Canada. The recent focus of her research has been the influence of nurse work environments on patient safety and nurse outcomes.