

Sigma's 30th International Nursing Research Congress

Examining the Perceptions of Postoperative Vital Signs Practices

Helen S. Kane, MSN, MBA, RN, CCRN

Thomas Jefferson University Hospital Methodist Division, Philadelphia, PA, USA

Linda Wilson, PhD, RN, CPAN, CAPA, BC, CNE, CNEcl, CHSE-A, FASPAN, ANEF, FAAN

College of Nursing and Health Professions, Drexel University, Philadelphia, PA, USA

In Fall 2018, the nursing staff council at an urban magnet hospital began questioning why postoperative vital signs were done at the current frequency. An evidence-based practice project was started to investigate this topic. Staff nurses and Council members did a review of the literature with assistance from the Council's Co-Chair and CNS (Clinical Nurse Specialist). In a study by Stiver et al., (2017) they found that reduced overnight vital signs monitoring was linked to safety and patient's perception of sleep quality. In a study by Cardona-Morrell et al., (2016) the researchers found that the selection of "vital signs rely on nurses' clinical judgement or time availability rather than policy" (p. 9). In a study by Downey et al., (2018) the researchers found that "continuous vital signs monitoring outside the critical care area is feasible and may improve patient outcomes" (p. 19). In a study by Burchill et al., (2015) the researchers found that "tradition and ritual rather than research continue to drive postoperative vital sign assessment practices" (p. 249). Following the review of the current evidence in the literature, an anonymous electronic survey on vital signs perceptions was developed using survey monkey and sent to numerous medical surgical and telemetry units at this hospital and also to comparable units at another hospital in the system. The survey participants ranged in age from 20 to greater than 60. The survey participant's years of experience ranged from less than one year to greater than 35 years. The educational level of the survey participants ranged from diploma to masters degree. Results of the survey showed that the most common postoperative vital signs included temperature, pulse, blood pressure, respiratory rate and pulse oximeter reading. The most common frequency of postoperative vital signs was vital signs every 30 minutes times 2, followed by one hour times 2, and then every four hours. When asked about the top three assessments completed during vital signs assessment the survey participants identified the following as the top three: 1) level of consciousness; 2) respiratory assessment; and 3) surgical site evaluation. The survey also asked what patient factor would compel you to repeat the vital signs on your patient and the top three were as follows: 1) Change in mental status; 2) dyspnea; and 3) prior abnormal vital signs. The survey also asked what clinician factor would compel you to repeat the vital signs and the top three were as follows: 1) clinical judgement; 2) patient acuity; and 3) physician order. Finally as for perceptions on vital signs the majority of survey participants thought the following: 1) the vital sign routine is evidence-based; 2) frequency of vital signs should be individualized; 3) they feel overwhelmed trying to complete the different frequencies of vital signs; 4) postoperative vital signs are an accurate reflection of the patient's condition; and 5) repeating vital signs regularly is beneficial for the nurse and institution in case of a law suit. Future plans for the next project include collaboration with primary service surgeons to further investigate the variations of the "per unit protocol" order for vital signs frequency in the electronic physician orders among multiple hospital units.

Title:

Examining the Perceptions of Postoperative Vital Signs Practices

Keywords:

Vital signs, perceptions and postoperative

References:

Burchill, C., Anderson, B., and O'Connor, P. (2015). Exploration of Nurse Practices and Attitudes related to postoperative vital signs. *MedSurg Nursing*, 24(4), p.249-255.

Cardona-Morrell, M., Prgomet, M., Lake, R., Nicholson, M., Harrison, R., Long, J., Westbrook, J., Braithwaite, J., Hillman, K. (2015). Vital signs monitoring and nurse-patient interaction: A qualitative observational study of hospital practice. *International Journal of Nursing Studies*, 56, p. 9-16.

Downey, C. L., Chapman, S., Randell, R., Brown, J. M., Jayne, D. G. (2018). The impact of continuous versus intermittent vital signs monitoring in hospitals: A systematic review and narrative synthesis. *International Journal of Nursing Studies*, 84, p. 19-27.

Mok, W., Wang, W., Cooper, S., Ang, E. N. K., Liaw, S. Y. (2015). Attitudes towards vital signs monitoring in the detection of clinical deterioration: scale development and survey of ward nurses. *International Journal for Quality in Health Care*, 27(3), p. 207-213

Prgomet, M., Cardona-Morrell, M., Nicholson, M., Lake, R., Long, J., Westbrook, J., Braithwaite, J., Hillman, K.; (2016). Vital signs monitoring on general wards: Clinical staff perceptions of current practices and the planned introduction of continuous monitoring technology, *International Journal for Quality in Health Care*, 28(4), p. 515-521, <https://doi.org/10.1093/intqhc/mzw062>

Stiver, K., Sharma, N., Smith, L., Stephens, J. (2017). Quiet at Night: Reduced overnight vital sign monitoring linked to both safety and improvements in patients' perception of hospital sleep quality. *Patient Experience Journal*, 4(1), p. 90-96.

Abstract Summary:

The nursing staff council at an urban magnet hospital began questioning why postoperative vital signs were done at the current frequency. This session will present the evidence-based practice project that was completed to examine the frequency and perceptions of postoperative vital signs.

Content Outline:**Examining the Perceptions of Postoperative Vital Signs Practices**

I. Introduction

- A. Question on frequency of vital signs from staff unit council
- B. Discussion at unit based council meeting

II. Evidence-based project identified

- A. Review of the literature
- B. Anonymous survey on vital signs frequency and perceptions

III. Conclusion

- A. Varied practices of vital signs frequency
- B. Varied perceptions on the importance of vital signs frequency

IV. Plans for next project

First Secondary Presenting Author

Corresponding Secondary Presenting Author

Helen S. Kane, MSN, MBA, RN, CCRN
Thomas Jefferson University Hospital Methodist Division
Clinical Nurse Specialist
Philadelphia PA
USA

Author Summary: H. Lynn Kane is a Clinical Nurse Specialist at Thomas Jefferson University Hospital Methodist Division. Lynn has been a Certified Critical Care Nurse since 1979. Ms Kane has extensive critical care, trauma, perioperative, perianesthesia and administrative experience. Ms Kane is Past President of the South Eastern Pennsylvania Chapter of the American Association of Critical Care Nurses 1986-87. Ms Kane is the current President of the New Jersey Perianesthesia Nurses Association.

Second Primary Presenting Author

Primary Presenting Author

Linda Wilson, PhD, RN, CPAN, CAPA, BC, CNE, CNEcl, CHSE-A, FASPAN, ANEF, FAAN
Drexel University
College of Nursing and Health Professions
Assistant Dean for Special Projects, Simulation and CNE Accreditation & Clinical Professor
Philadelphia PA
USA

Author Summary: Dr Wilson is the Assistant Dean for Special Projects, Simulation and CNE Accreditation & Clinical Professor at Drexel University College of Nursing and Health Professions in Philadelphia. She is a dual Certified Nurse Educator and is dual Certified in Simulation and Perianesthesia nursing. Dr Wilson has extensive experience in simulation, debriefing, nursing education and nursing technology.