

Promoting Effective Pain Assessment

Dorothie Durosier Mertilus, DNP, AGNP-C, AOCNP, BMTCN



Purpose

The purpose of this quality improvement project was to improve pain assessment on the Surgical Oncology unit at Florida Hospital Tampa (FHT).

Background

- More than 76.5 million American adults have problems with persistent pain
- Pain affects more people in America than diabetes, heart disease, and cancer combined
- Evidence suggests that pain in surgical oncology patients is poorly managed

Methods

A quality improvement project was implemented over the span of 3 months on a Surgical Oncology unit. 49 nurses participated. A pre-test/post-test design evaluated nurses' knowledge of pain assessment before and after educational interventions. Nurses who passed (N = 8) the pre-test were interviewed about barriers to pain assessment. 50 oncology patients' charts were reviewed at baseline and 14 oncology patients' charts were reviewed after 3 months to see if the nurses adhered to national standards for pain management.

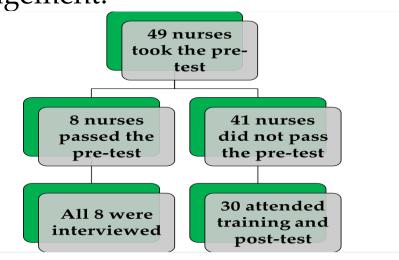


Figure 1. Project Process for Nurse Participants

Results

- Pre-test scores ranged from 42.9% to 92.9% (M = 65.5%, SD = 11.8)
- Post-test scores ranged from 57.2% to 100% (M = 85%, SD = 11.5)
- A paired t-test revealed a statistically significant improvement (22.9%, 95% CI [16.8%, 28.9%], *p* = 0.000) in the nurses' knowledge after attending training

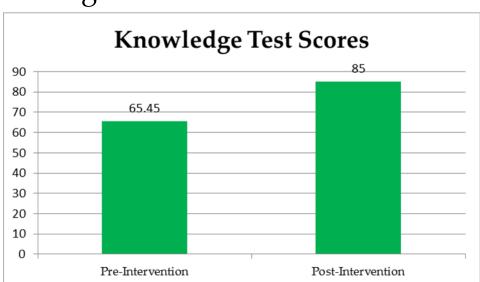


Figure 2. Average Pre-Test and Post-Test Scores of Nurse Participants

	Mean Difference	Std. Deviation	t	p
Post/Pre- Test Score	22.85200	16.18019	7.736	0.000

Table 1. Sample Paired T-test

Content Analysis of Interview Responses

- Of the 8 knowledgeable nurses, 87.5% (n = 7) reported barriers preventing them from assessing patients' pain compared with only 12.5% (n = 1) reporting no barriers
- Barriers were classified into 4 categories: time limitations, nurse-to-patient ratio, patient communication issues, and scheduling conflicts

Results

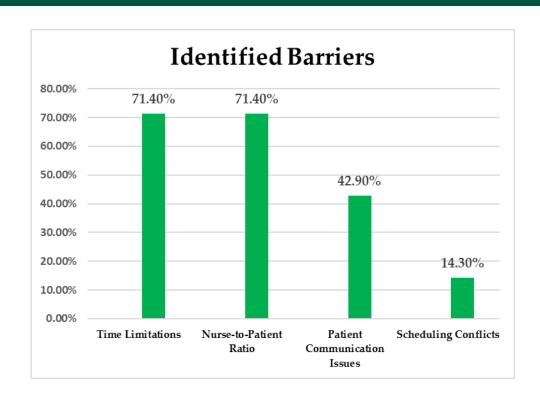


Figure 3. Identified Barriers by Knowledgeable Nurses

Chart Audit Results

Chart audit from baseline to follow-up showed improvements:

- Documentation of functional goal at least once a shift increased from 48% to 85.7%
- Pain assessment every four hours from 18% to 28.6%
- Reassessment after administration of PRN pain medications from 32% to 71.4%
- The documentation of pain level prior to medication administration remained 100%

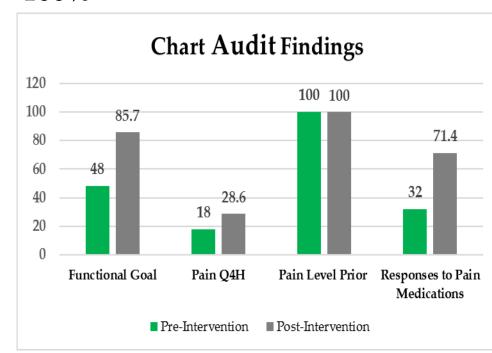


Figure 4. Results of Chart Audits

Discussion

- This project improved pain assessment and documentation on the Surgical Oncology unit at FHT
- The educational training session was associated with a 22.9% increase in nurses' knowledge of pain assessment
- A significant improvement was noted over 3 months in documentation of pain assessment
- Further investigation is needed to explore the efficacy of these interventions in promoting pain assessment and effective pain management

Implications for Practice

- Incorporate an educational training session about pain assessment in the curriculum of the newly hired nurses
- Conduct random chart audits to ensure that nurses adhere to the national standards for pain management

References

Innis, J., Bikaunieks, N., Petryshen, P., Zellermeyer, V., & Ciccarelli, L. (2004). Patient satisfaction and pain management: An educational approach. *Journal of Nursing Care Quality*, 19(4), 322-327.

Institute of Medicine. (2011). *Relieving pain in America: A blueprint for transforming prevention, care, education, and research.* Washington, DC: The National Academies Press.

The American Academy of Pain Medicine. (n.d.). AAPM facts and figures on pain. Retrieved from http://www.painmed.org

The Joint Commission. (2016). Pain management. Retrieved

Acknowledgements

from http://www.jointcommission.org

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