

# Lebanese Nurses' Knowledge Regarding Pain Management

Maya Abdul Rahman | Huda Abu-Saad Huijer | Samar Nouredine

**Maya Abdul Rahman, RN, MSN**

American University of Beirut

**Huda Abu-Saad Huijer, RN, PhD, FEANS, FAAN**

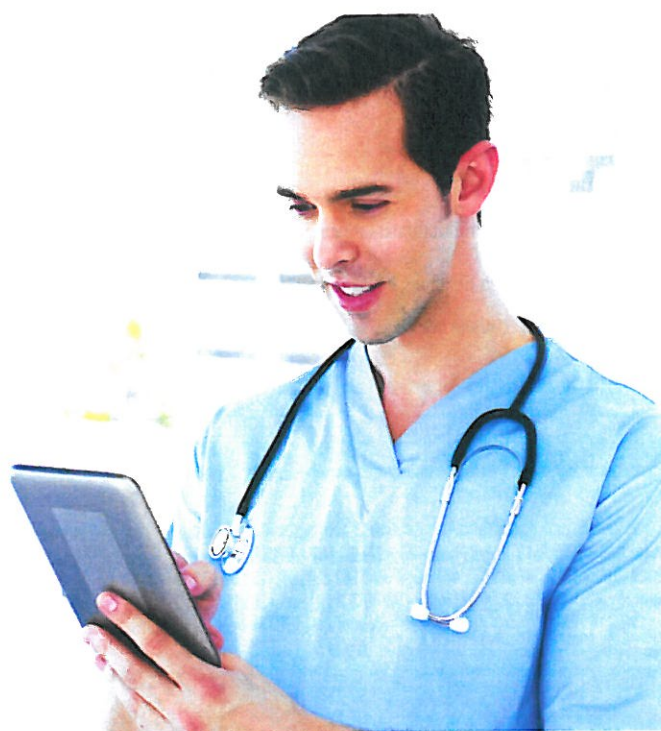
Professor and Director, Hariri School of Nursing, American University of Beirut

**Samar Nouredine, PhD, RN, FAHA**

Associate professor, Hariri School of Nursing, American University of Beirut

## Abstract

The aim of this study was to assess nurses' knowledge and attitudes regarding pain management at a tertiary medical center in Beirut using a descriptive cross sectional design. A questionnaire via the internet was sent to all registered nurses working full time with 88 respondents. The results indicate that the nurse knowledge related to pain and pain management was 56.15%. Only 3.4% of the nurses received a score equal to or greater than 80% which is the required score for effective management. Based on these results education of nurses is required.



## Background

Pain is one of the undesirable feelings any person would experience. Most people fear this feeling and try to avoid it. Pain management is one of the fundamental human rights and the Joint commission on Accreditation of Healthcare Organizations has recently considered pain as the fifth vital sign. Despite this fact, pain management remains suboptimal in clinical areas (Polomano, Dunwoody, Krenzischek, & Rathmell, 2008; Richards & Hubbert, 2007; Tanabe & Buschmann, 2000; Watt-Watson, Stevens, Garfinkel, Streiner, & Gallop, 2001; Whelan, Jin, & Meltzer, 2004). Many studies which have assessed nurse's knowledge and attitudes about pain find that nurses lack the knowledge and necessary to provide proper pain management (Manworren, 2000; Matthews & Malcolm, 2007; Naser, Sinwan, & Bee, 2005; Wang & Tsai, 2010; Wilson, 2007). For example, McCaffery and Robinson (2002) examined the knowledge and attitudes of 3282 nurses in the USA about pain. The results reflected suboptimal knowledge in pain management. Questions related to pharmacology and addiction,

were mostly answered incorrectly. Similar findings were obtained by Watt-Watson et al. (2001) who reported significant knowledge deficit and misbeliefs about pain management among cardiac nurses. A cross-sectional study using the Nurses' Knowledge and Attitudes Survey - Taiwanese version was conducted in Taiwan on intensive care unit nurses about pain management. Poor knowledge of pain management was also found (Wang & Tsai, 2010).

Nurses play an integral role in assessing pain and implementing pain management modalities (Musclow, Sawhney, & Watt-Watson, 2002). Thus, the need to assess nurses' knowledge and attitudes regarding pain is essential so gaps are identified, in order to ultimately ensure optimal patient pain management and better patient outcomes.

In Lebanon no published study has assessed the knowledge of nurses regarding pain management. Therefore, the aim of this study was to assess nurses' knowledge and attitudes regarding pain management at a tertiary medical center in Beirut and to use the results as a baseline for future interventions.

## Methodology

A descriptive cross sectional study design using survey methodology was adopted to investigate pain management knowledge and attitudes of nurses. A questionnaire via the internet was sent to all registered nurses working full time at the tertiary care hospital through the nursing office.

The Nurses' Knowledge and Attitudes Survey Regarding Pain instrument developed by Ferrell and McCaffery (1987, 2002) was used for this study. This is a valid and reliable tool based on standards of pain management like the American Pain Society, the World Health Organization, and the Agency for Health Care Policy and Research. It assesses different types of pain knowledge (acute and chronic) and a score of 80% is considered passing. The questionnaire comprises 22 true or false questions, 14 multiple-choice questions, and two vignettes on pharmacological and non-pharmacological interventions and attitudes on pain management. The study has been approved by the Institutional Review Board (IRB) of the University.

## Results

The response rate was rather low (20%) with responses complete on 88 out of 460 nurses. The majority of the nurses were females (71.3%), between twenty and thirty years of age (63.6%) and with Bachelor of Science in Nursing (58%). Almost one third of the respondents (34.1%) were from critical care areas. The overall mean score of nurses in this study related to knowledge was 56.15%. Only 3.4% of the nurses received a score equal to or greater than 80% and the rest of them received grades less than 70%. Incorrect answers were evident in areas related to equianalgesic dosing, opioid ceiling, uses of different pain medication, respiratory depression with the use of opioids, management of cancer pain as well as physical dependence. Moreover, lack of proper skills to assess pain assessment was evident in the responses.

Although gender and years of experience were not related to knowledge and attitudes about pain, age and level of education were significantly correlated ( $F = 3.46$ ,  $p = 0.036$  and  $t = -2.04$ ,  $p = 0.045$ , respectively). Nurses aged 31-40 years had the highest knowledge and attitude scores, and those younger than 31 had the lowest scores.

## Discussion

Proper knowledge about pain assessment and management are the basis of effective pain interventions. The overall mean score of nurses in this study related to knowledge was 56.15%, which is considered suboptimal similar to findings in other studies' mean scores like Wang & Tsai (2010) and Manworren (2000) who found mean scores of 53.4% and 60%, respectively. The optimal finding according to McCaffery and Ferrell (2002) is attaining a score of 80%. They speculate that a score less than 80% may compromise the nurse's ability to care for a patient with pain and a score of 70% or more indicates an adequate level of knowledge and application. In this study, 96.6% of the nurses scored below 80 and 88% of them scored below 70 signifying suboptimal knowledge and attitudes of our nurses regarding pain. This knowledge deficit suggests again inadequate knowledge related to pain. Similar to findings in other studies (Al-Shaer, Hill, & Anderson,

2011; Nasr et al., 2005; Wilson, 2007), this study showed no significant difference by gender and years of experience with respect to knowledge and attitudes pain score. However, there was significant difference by age and level of education in the knowledge and attitudes scores as compared to similar findings in other studies (Manworren, 2000; Naser et al., 2005).

## Recommendations

Based on these findings the following is recommended:

- Incorporate pain knowledge in undergraduate and graduate level nursing curricula.
- Initiate ongoing mandatory continuing education courses on pain management to nurses working in clinical settings.
- Establish pain competencies and maintain a yearly follow up on them.
- Conduct an evaluation study on nurses' knowledge and attitudes about pain after the completion of a mandatory continuing education course at the institution level.

## REFERENCES

- Al-Shaer, D., Hill, P., D., & Anderson, M., Ann. (2011). Nurses' knowledge and attitudes regarding pain assessment and intervention. *MEDSURG Nursing*, 20(1), 7-11.
- Ferrell, B., & McCaffery, M. (2008). Knowledge and Attitudes Survey Regarding Pain. Retrieved from <http://prc.coh.org>.
- Manworren, R. (2000). Pediatric nurses' knowledge and attitudes survey regarding pain. *Pediatric Nursing*, 26(6), 610.
- Matthews, E., & Malcolm, C. (2007). Pain management. nurses' knowledge and attitudes in pain management practice. *British Journal of Nursing (BJN)*, 16(3), 174-179.
- McCaffery, M., Ferrell, B. R., & Pasero, C. (2000). Nurses' personal opinions about patients' pain and their effect on recorded assessments and titration of opioid doses. *Pain Management Nursing*, 1(3), 79-87.
- McCaffery, M., & Robinson, E. S. (2002). Your patient is in pain: Here's how you respond. *Nursing*, 32(10), 36-47.
- Musclow, S. L., Sawhney, M., & Watt-Watson, J. (2002). The emerging role of advanced nursing practice in acute pain management throughout Canada. *Clinical Nurse Specialist*, 16(2), 63.
- Naser, E., Sinwan, S., & Bee, W. H. (2005). Nurses' knowledge on pain management. *Singapore Nursing Journal*, 32(2), 29-36.
- Polomano, R. C., Dunwoody, C. J., Krenzischek, D. A., & Rathmell, J. P. (2008). Perspective on pain management in the 21st century. *Pain Management Nursing*, 9(1), S3-10.
- Richards, J., & Hubbert, A. O. (2007). Experiences of expert nurses in caring for patients with postoperative pain. *Pain Management Nursing*, 8(1), 17-24.
- Tanabe, P., & Buschmann, M. (2000). Emergency nurses' knowledge of pain management principles. *JEN: Journal of Emergency Nursing*, 26(4), 299.
- Wang, H., & Tsai, Y. (2010). Nurses' knowledge and barriers regarding pain management in intensive care units. *Journal of Clinical Nursing*, 19(21), 3188-3196. doi:10.1111/j.1365-2702.2010.03226.x
- Watt-Watson, J., Stevens, B., Garfinkel, P., Streiner, D., & Gallop, R. (2001). Relationship between nurses' pain knowledge and pain management outcomes for their postoperative cardiac patients. *Journal of Advanced Nursing*, 36(4), 535-545.
- Whelan, C. T., Jin, L., & Meltzer, D. (2004). Pain and satisfaction with pain control in hospitalized medical patients: No such thing as low risk. *Archives of Internal Medicine*, 164(2), 175.
- Wilson, B. (2007). Nurses' knowledge of pain. *Journal of Clinical Nursing*, 16(6), 1012-1020.