



# A randomized controlled trial of an educational intervention on Hellenic nursing staff's knowledge and attitudes on cancer pain management

Elisabeth I. Patiraki<sup>a,\*</sup>, Elizabeth D.E. Papathanassoglou<sup>a</sup>, Cheryl Tafas<sup>b</sup>, Vasiliki Akarepi<sup>c</sup>, Stelios G. Katsaragakis<sup>a</sup>, Anjuleta Kampitsi<sup>c</sup>, Chrysoula Lemonidou<sup>a</sup>

<sup>a</sup>University of Athens School of Nursing, Athens, Hellas, Greece

<sup>b</sup>University of Connecticut Health Center, John Dempsey Hospital

<sup>c</sup>Nursing Education Department, St. Savas Cancer Hospital, Athens, Hellas, Greece

## KEYWORDS

Cancer pain;  
Randomized  
controlled trial;  
Knowledge;  
Attitudes;  
Education

**Summary** The purpose of this randomized controlled study was to explore the effectiveness of an educational intervention on nurses' attitudes and knowledge regarding pain management and to explore associations with nurses' characteristics.

A four Solomon group experimental design was employed to assess the effect of the intervention and potential effects of pre-intervention testing. One hundred and twelve nurses were randomized to two intervention and two control groups. The intervention was based on viewing a series of educational videotapes and case scenarios. The Validated Hellenic version of the Nurses Knowledge and Attitudes Survey Regarding Pain (GV-NKASRP) was used.

Pre-intervention scores revealed various limitations in regard to pain assessment and management. At the pre-test, the average number of correct answers was  $17.58 \pm 7.58$  ( $45.1\% \pm 19.3\%$  of total questions). Pre-intervention scores differed significantly among participants with different educational backgrounds ( $P < 0.0001$ ). A significant effect of pain education on total knowledge scores as well as regarding specific questions was detected. Intervention group participants provided  $6.11 \pm 5.55$  additional correct answers ( $15.66\% \pm 14.23\%$  improvement,  $P < 0.0001$ ), and they exhibited significantly improved post-test scores compared to controls ( $26.49 \pm 5.24$  vs.  $18.75 \pm 4.48$ ;  $P < 0.0001$ ). A potential negative effect of pre-test on knowledge gain for specific items and for total scores was detected. These findings suggest low pre-test knowledge scores among Hellenic oncology nurses and a significant effect of the intervention.

© 2005 Elsevier Ltd. All rights reserved.

\*Corresponding author. 123 Papadiamantopoulou Street, Athens 11523, Hellas, Greece. Tel.: +30 210 7461464; fax: +30 210 7461476.  
E-mail address: [epatiraki@nurs.uoa.gr](mailto:epatiraki@nurs.uoa.gr) (E.I. Patiraki).

**Zusammenfassung** Das Ziel dieser randomisierten kontrollierten Studie bestand darin, die Wirksamkeit einer Schulungsmaßnahme auf die Arbeitsauffassungen und die schmerzmedizinischen Fachkenntnisse von Krankenpflegekräften zu ermitteln und mögliche Assoziationen mit den Eigenschaften der Pflegekräfte zu untersuchen.

Mit einem Solomon-4-Gruppen-Design wurden die Wirkung der Schulungsmaßnahme (Intervention) sowie mögliche Effekte von präinterventionellen Tests untersucht. Insgesamt 112 Pflegekräfte wurden durch Randomisierung auf zwei Interventions- und zwei Kontrollgruppen verteilt. Die Intervention bestand darin, dass sich die Probanden eine Reihe von Schulungs-Videofilmen und Fallszenarien ansahen. Für die Untersuchung wurde die validierte griechische Version des *Nurses Knowledge and Attitudes Survey Regarding Pain* (GV-NKASRP) verwendet. Die präinterventionellen Scores zeigten diverse Mängel im Hinblick auf die Einschätzung und das Management von Schmerzen. Im Vortest betrug die durchschnittliche Zahl korrekter Antworten  $17,58 \pm 7,58$  ( $45,1\% \pm 19,3$  aller Fragen). Bei Teilnehmern mit unterschiedlichem Ausbildungsniveau fielen auch die präinterventionellen Scores unterschiedlich aus ( $p < 0,0001$ ). Schmerzschulungen hatten einen signifikanten Effekt auf die Gesamt-Kenntnis-Scores und im Hinblick auf spezifische Fragen. Bei den Probanden der Interventionsgruppen wurden  $6,11 \pm 5,55$  zusätzliche korrekte Antworten ( $15,66\% \pm 14,23\%$  Besserung,  $p < 0,001$ ) sowie signifikant bessere Nachtest-Scores im Vergleich zu Kontrollprobanden registriert ( $26,49 \pm 5,24$  versus  $18,75 \pm 4,48$ ;  $p < 0,0001$ ). Ein möglicher negativer Effekt von Vortests auf den Wissenszuwachs im Hinblick auf bestimmte Items und auf die Gesamt-Scores wurde nachgewiesen. Diese Ergebnisse sprechen dafür, dass griechische onkologische Pflegekräfte niedrige Vortest-Kenntnis-Scores aufweisen und dass die Intervention eine signifikante Wirkung hat.

© 2005 Elsevier Ltd. All rights reserved.

## Introduction

Despite the severity and prevalence of cancer pain and its often debilitating consequences with various physiological and psychological correlates (Kuuppelomaki and Lauri, 1998; Miaskowski and Lee, 1999), pain remains poorly assessed and treated (de Wit et al., 1999; Lynn et al., 1997; Wells, 2000; Zhukovsky et al., 1995). A paucity of nursing knowledge regarding management of pain in oncology and other patient populations has been documented (McCaffery and Ferrell, 1992, 1995, 1997; Patiraki-Kourbani and Lemonidou, 2002; Romyn, 1992; Warden et al., 1998), presumably owing to deficits in nursing education, and barriers sustained by cultural attitudes, misconceptions about pain and limitations in nurse-patient interactions (Redmond, 1998). Additionally, even post-registration educational interventions appear to have limited effects in bringing about changes in the knowledge gained and caring behaviors (Francke et al., 1996; Twycross, 2002). Results of education studies are not clear-cut nor can they support, in some instances, that they improve nurses' knowledge and attitudes. Problematic methodologies with lack of control groups, randomization, and pre- and post-measurements may in part account for this confusion.

Research evidence indicates that cancer pain among oncology patients in Hellas may remain significantly under-treated (Patiraki-Kourbani et al., 1998). Nonetheless, no specifically targeted continuing education efforts for Hellenic nurses have been implemented so far. The current study employs a randomized controlled design to explore the effectiveness of an educational intervention on nurses' attitudes and knowledge regarding pain management, and to report baseline and immediate post-intervention findings, as well as to explore associations with nurses' characteristics.

## Review of the literature

Research results on the improvement of cancer pain management are challenging to compare and derive an approach from because of; diverse educational interventions, participants, study instruments, and measurement intervals. Some outcomes have focused on knowledge and attitudes (Ferrell et al., 1993; Hauck, 1986; Myers, 1985; Stratton, 1999) while others have demonstrated practice changes such as the administration of analgesics (de Rond et al., 2000a), documentation of pain behaviors (Howell et al., 2000), or patient

Download English Version:

<https://daneshyari.com/en/article/2649212>

Download Persian Version:

<https://daneshyari.com/article/2649212>

[Daneshyari.com](https://daneshyari.com)