

Effectiveness of End-of-Life Training Program for Nurses in a Long-Term Palliative Care Setting: A Pilot Study

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ABSTRACT

Introduction: Palliative training programs, such as the End-of-Life Nursing Education Consortium (ELNEC) curriculum, can equip nurses with the necessary skills and knowledge to cope with patients during end-of-life (EOL) situations. Still, limited studies were conducted in Asia to evaluate its impact on nurses' death anxiety and attitudes in Asia. **Methods:** This pilot study utilized a quantitative single-group pre-and post-test design and was conducted at a community hospital in Singapore between January 2018 and June 2019. Eight-two nurses participated in ELNEC program, where a questionnaire was administered before and one month following the two-day workshops. **Results:** The ELNEC program improved death anxiety (FATCOD) scores from 117.98 to 129.09 ($t = -11.38, p < 0.01$), which indicated a more positive attitude and reduced anxiety towards death encounters. Participants' communication apprehension, using the CA-Dying scores, decreased from a pre-intervention mean of 92.96 to a post-intervention mean of 76.70 ($t = 18.25, p < 0.01$). **Implication:** Faculty can utilize ELNEC resource to improve nurses' knowledge and attitudes towards end-of-life situations in a long-term palliative care setting. **Conclusion:** This study supports the effectiveness of the ELNEC curriculum in equipping nurses with the necessary skills and knowledge to cope with patients during end-of-life (EOL) situations.

Keywords: ELNEC; End-of-Life; Palliative; Death Anxiety; Long-term Care

INTRODUCTION

Death is an inevitable phenomenon that creates distress and apprehension for many healthcare professionals (Nia *et al.*, 2016). Nursing, being a helping profession, is at the forefront of caring for patients and encountering death is part of nursing work and seems inescapable. Caring for a dying patient can be a worrisome experience that can induce anxiety and communication apprehension among nurses. End-of-life (EOL) is an essential factor in advanced practice registered nursing (APRN) education. Most of the nurses recognized the relevance of the ELNEC content to their APRN practice, regardless of their area of clinical specialty (Kelley & Mazanec, 2013).

It is pertinent for nurses to increase their awareness and understanding of the method of care for terminally ill patients. Palliative training programs, such as the End-of-Life Nursing Education Consortium (ELNEC) curriculum, can equip nurses with the necessary skills and knowledge to cope with patients during end-of-life (EOL) situations and conduct a range of palliative education activities (Tang *et al.*, 2021).

The ELNEC program was developed by nationally recognized palliative care experts in the United States and covers core topics such as pain and symptom management, ethical, cultural and communication issues in palliative care (Davis *et al.*, 2021). However, despite its purported aims to contextualized the

program to suit local cultural needs, limited studies have been conducted on the effectiveness of the ELNEC program on nursing practice. Significantly there is positive correlations between communication apprehension about death and fear of death as well as communication apprehension about death and general communication apprehension (Carmack & DeGroot, 2016).

Several studies which evaluated the ELNEC on nurses and their practice were retrieved. Most of these studies were conducted on nursing students in the Western countries (Bassah *et al.*, 2014; Li *et al.*, 2021). Only five were conducted in Asia – Japan, South Korea, Taiwan, China and Singapore (Cheong *et al.*, 2019; Kim *et al.*, 2011; Lin *et al.*, 2018; Peng *et al.*, 2017 Mallo *et al.*, 2018). Collectively, these studies have shown that ELNEC decreased nurses' or nursing students' death anxiety and addressed their concerns about death and dying. Other than improving their knowledge about end-of-life care and death attitudes, the ELNEC also equipped them with the technical expertise in managing pain and distressing symptoms and effective communication skills to deal with death and dying. Despite promising results from these ten studies, effectiveness for nurses were not confirmed regarding dealing with death and dying on a more frequent basis due to the limited studies within Asia, which might present sociocultural differences towards death communication. Furthermore, not all studies focused on examining its impact on nurses' death anxiety and communication apprehension within a community hospital setting. Hence, this study aimed to evaluate the effectiveness of the ELNEC on the death anxiety and attitudes of nurses working in palliative care at a community hospital in Singapore.

METHODOLOGY

This pilot study utilized a quantitative single-group pre-and post-test design to evaluate the effect of the ELNEC program on palliative nurses' death attitudes and anxiety in Singapore. The study was conducted at a community hospital in Singapore between January 2018 and June 2019. Convenience sampling was utilized to recruit nurses working at the hospital's two palliative wards with a total population of 90 nurses of different job grades.

Both existing and new nurses were invited to attend a two-day ELNEC workshop, which comprised eight modules based on the ELNEC international core curriculum and was facilitated by the first author. The ELNEC workshops were conducted for different batches of nurses for administrative reasons between 2018 and 2019. At the start of the workshop, participants were asked to complete a questionnaire which comprised of a demographics questionnaire, the 30-item Frommelt Attitude Toward Care of the Dying (FATCOD) scale and the 30-item Communication Apprehension Dying Scale (CA-Dying Scale). The two scales were found to demonstrated good validity and reliability (Frey *et al.*, 2013). One month following the ELNEC training, the same participants were asked to complete the same questionnaire. The adapted questionnaire was reviewed by a palliative consultant, two nursing professors, and nine nurses for face validity before implementation.

Participants were informed that participation was voluntary and their confidentiality and anonymity would be maintained at all times. They were also given information about the study and that they could withdraw from the study at any time without any penalty. Implied consent was assumed based on questionnaire completion.

Data was stored electronically in a secure manner prescribed by university guidelines and analyzed using IBM SPSS Version 24. Descriptive statistics was used to perform univariate analysis and report the nurses' sociodemographic characteristics, while inferential statistics were conducted to compare pre-and post-intervention death anxiety and attitudes scores. The significance level was set at 0.05.

RESULTS

Eighty-two nurses participated in the study. Their demographic characteristics are presented in Table 1. When analyzing the effects of participants' demographics on pre-intervention FATCOD and CA-Dying scores, only years of experience was found to have a significant effect on FATCOD ($r=0.588$, $p<0.01$). The other sociodemographic profile did not have any significant effect on both pre-intervention and post-intervention scores.

Table 1: Demographic Characteristics of Participants (N = 82)

Sociodemographic Profile	Frequency (%)	Mean (SD; Range)
Designation		
Staff Nurse	33 (40.2)	
Enrolled Nurse	17 (20.7)	
Nursing Aide	32 (39.0)	
Age		
23-27	12 (14.6)	
28-35	38 (46.3)	
36-45	29 (35.4)	
56-65	3 (3.7)	
Religion		
Buddhist	7 (8.5)	
Catholic	20 (24.4)	
Christian	36 (43.9)	
Hinduism	9 (11.0)	
Islam	2 (2.4)	
Free Thinker	6 (7.3)	
Others	2 (2.4)	
Religious Beliefs Influence on Attitude toward Death and Dying		
Strong Influence	59 (72.0)	
Minor Influence	15 (18.3)	
No Influence	8 (9.8)	
Previous Education on Death and Dying		
Yes	16 (19.5)	11.67 (5.90; 3 -30)
No	66 (80.5)	
Years of Nursing Experience		

SD: Standard Deviation

In Table 2, paired *t*-test was conducted to compare the FATCOD and CA-Dying scores pre and post-intervention, and we found that the ELNEC program increased the death anxiety (FATCOD) scores from 117.98 to 129.09 ($t = -11.38, p < 0.01$), with a higher score indicating a more positive attitude and reduced anxiety towards death encounters. Finally, we observed a reduction in communication apprehension, with the CA-Dying scores decreasing from a pre-intervention mean of 92.96 to a post-intervention mean of 76.70 ($t = 18.25, p < 0.01$).

Table 2: Comparison of Nurses' Death Attitudes and Communication Apprehension Scores Before and After ELNEC (N=82)

	Pre-test	Post-test	<i>t</i>
FATCOD	117.98 (8.43)	129.09 (7.38)	- 11.38 *
CA-Dying	92.96 (15.81)	76.70 (14.60)	18.25 *

* $P < 0.01$; *T* – Paired *T*-Test; ELNEC – End-Of-Life Nursing Education Consortium

DISCUSSION

This study contributed to the limited evidence on the effectiveness of the ELNEC program in improving nurses' competency in palliative care. Among the demographic characteristics, this study found that nurses' clinical experience and encounter with death had an influence on their death attitudes and anxiety. The result concurred with other studies (Chua *et al.*, 2021; Li *et al.*, 2021), suggesting that greater exposure to death encounters could affect nurses' death attitudes and anxiety. However, greater exposure might not translate into better nursing competence in end-of-life care. In this study, many nurses did not have prior education in palliative training, which could impede their confidence and capability to care for the death and dying.

The study had demonstrated the effectiveness of a short ELNEC program in improving palliative nurses' death attitudes and reduce their anxiety and communication apprehension. Communication and caring at the end of life can be very stressful. Nurses working in the palliative care setting need to build their competence and confidence in engaging palliative patients meaningfully. Our findings were consistent with previous ELNEC studies (Robinson & Fitzgerald, 2012, Chua *et al.*, 2021; Li *et al.*, 2021).

Three limitations were identified from this study. First, the study was conducted at a single site, which limited its generalizability to nurses working in other care settings. Second, the lack of a control group limited us from attributing the study effect to the intervention solely. Finally, the use of convenience sampling might create a potential respondent bias due to participants' acquiescence (Polit & Beck, 2020).

Implications for Practice

Many nurses lacked formal EOL training during their pre-registration nursing training (Tang *et al.*, 2021). A short palliative training workshop, such as the ELNEC, can potentially improve nurses' knowledge and attitudes towards end-of-life situations in a long-term palliative care setting (Li *et al.*, 2021). The ELNEC curriculum can provide a useful resource for nurse educators and faculty to enhance existing nursing capabilities in delivering quality EOL experiences for patients and family members in different care settings. It also provides the platform for new and existing nurses to explore their death attitudes and confront potential anxieties associated with death encounters.

CONCLUSION

Nurses working in a palliative long-term care setting faces death and dying situations on a more frequent basis than their counterparts. The prolonged exposure can cause death anxiety, care fatigue and burnout among new and existing nurses. This study supports the effectiveness of the ELNEC curriculum in equipping nurses with the necessary skills and knowledge to cope with patients during end-of-life (EOL) situations.

Ethical Approval

This study has been approved by the Open University of Malaysia ethics committee (OUM/2.7/400/ 2017(01) on 4th April 2017.

Conflict of Interest

No conflict of interest has been declared by the authors.

ACKNOWLEDGEMENT

The authors would like to thank the hospital management for their permission to conduct the research. They will like to acknowledge Assoc. Prof. Dr Aini Ahmad from Open University Malaysia/KPJ University College, Malaysia for her review of the statistics. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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