Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 9, 510-521

Effect Of Palliative Care Training Program On Perceived Self-Efficacy And Stress Of Nurses

[1] Samah Ramadan Elrefaey, [2] Fathyea Abdallah Shams Eldin, [3] Shimaa Gomah Yousef, [4] Shaimaa Mohamed Nageeb

[1] Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University, Egypt.
[2] Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University, Egypt.
[3] Assistant Professor of Medical-Surgical Nursing, Faculty of Nursing, Damanhour University, Egypt.
[4] Lecturer of Psychiatric Nursing and Mental Health, Faculty of Nursing, Zagazig University, Egypt.
Email: dr_shaimaa_2007@yahoo.com

Abstract

Background Nurses play a significant role in palliative care as the only 24-hour caregivers in the health care system.

Aim To study the impact of palliative care training programs on nurses' perceived self-efficacy and stress.

Design A quasi-experimental research design was used.

Methods The subjects enrolled in this research were 50 nurses working in the medical ward, surgical ward, and critical care units at Benha University Hospital.

Results

The findings revealed that the related mean total self-efficacy scores at pre-and post-intervention were 26.79±8.37 and 37.50±7.63, respectively, with a significantly large difference at p-value <0.01. In addition, at pre-intervention, less than half and more than one third of the studied nurses had poor and moderate knowledge, respectively, regarding palliative care. While at post-intervention, two thirds of them had good knowledge. Additionally, more than one third of the studied nurses had severe stress pre-intervention, while two fifths had normal stress levels post-intervention.

I INTRODUCTION

Palliative care is a multidisciplinary health team caregiving approach for adjusting the quality of life and providing specialized medical and nursing care for patients suffering from complex and serious illnesses. As per the World Health Organization, around 40 million individuals globally require palliative care each year. In addition, it is considered as a treatment, nursing care, and assistance for patients with a life-limiting illness **(Montgomery, Sawin et al., 2017, Albanesi, Piredda et al., 2021)**.

Palliative care nurses provide direct and indirect care for patients. In addition, nurses play multiple roles in health care, such as assessment of patients, management of pain, medication,

managing equipment, and providing personal care for patients (i.e., dressing and bathing) **(Neiman 2020)**. Nurses who work in long-term care facilities can provide superior palliative care and address the expanding requirements of ICU patients **(Barnett, Reed et al., 2021)**.

Nurses on every shift face and deal with patients who suffer from life-threatening diseases in all clinical areas. The increased need for palliative care has caused nurses to face high-stress levels (physically and psychologically), so a high knowledge and self-efficacy level is required to become competent in palliative care **(Kurnia, Trisyani et al., 2018, Rosa, Meghani et al., 2020)**.

Palliative care nurses are at high-stress risk at work, such as exposure to numerous deaths, and grieving families. Nurses' palliative care expertise, attitudes toward death and dying, and self-efficacy can all impact nursing care **(Gilissen, Pivodic et al., 2020, Dijxhoorn, Brom et al., 2021)**.

An individual's generalized self-efficacy is their assessment of their overall capacity to execute tasks. Across various work types, job performance and job-related attitudes are associated with generalized self-efficacy **(Cha, Lee et al., 2020)**. Self-efficacy for nurses refers to their confidence in providing nursing care (emotional or physical) to their ill patients **(Hebdon, Coombs et al., 2021)**.

Studies have shown that although palliative care in the later stages of life is what the patients and their families highly deserve, most nurses are not adequately prepared to provide this type of care, so its provision is becoming more difficult for the nurses. Much research has also been performed on the inadequacy of palliative care education in medical departments revealing that nurses are yet to be well versed in palliative care and thus need more appropriate training for this concept and specific care designing such caring programs for nurses involved in the matter is as their professional training as important to increase their knowledge, level of self-efficacy and decrease work stress where they are considered an important predictors of increasing palliative care quality **(Dehghani, Barkhordar et al., 2020).**

2 AIMS

This study aimed to examine the palliative care training programs' impact on perceived self-efficacy and stress of nurses through:

- Assessment of nurses' knowledge level perceived self-efficacy, and stress-related palliative care.
- Implementing palliative care training programs for studied nurses.
- Evaluate the effect of palliative care training programs on nurses' knowledge level, perceived self-efficacy, and stress.

3 BACKGROUND

The demand for palliative care is growing owing to an aging population and an increase in the number of people living in long-term care institutions and dying from long-term disorders or chronic diseases.

4 RESEARCH QUESTION

Research hypothesis:

H1- Palliative care training programs had a positive impact on nurses' knowledge

H2- Palliative care training programs had a positive impact on nurses' self-efficacy

H3- Palliative care training programs decrease nurses' stress levels

5 Methods

5.1 Research desig

The present study used a quasi-experimental research design.

5.2 Research Setting

The study was performed in the medical ward, surgical ward, and critical care units at Benha University hospital.

5.3 Subject

The study included 50 nurses working in previously mentioned settings which were selected under the following inclusion criteria: willingness to contribute to the study, at least one year of experience in palliative care. According to a 5% significance level and test power of 90%, and regarding the work carried out by Joy, 2015 with s = 6 and a significant difference of at least 4 points in the mean score of self-efficacy, there were 42 cases demonstrated to be needed. Therefore, by considering 20% loss, 50 nurses were validated.

$n= (z\alpha/2+z\beta)^2 2S^2 / (\mu 1-\mu 2)^2$

5.4 Data Collection:

Data were obtained through three tools:

First tool: A self-administered questionnaire translated to the Arabic language contains two parts:

Part I: Features of the studied nurses such as gender, age, marital status, qualifications, experience, position, the existence of a palliative care team, and affiliated ward.

Part II: Knowledge level: the researcher designed it after reviewing the related literature **(Chover-Sierra, Martínez-Sabater et al., 2017, Fadhil, Lyons et al., 2017)**. It is included ten closed-ended questions in MCQ form, such as the identification of palliative care, aim of palliative care, nurses' roles and ways of pain management …etc. Nurses' responses were scored as one point for a correct answer and zero for a wrong answer; Good knowledge if nurses score >75%, Average if the score is between 60 to 75%, and poor if the score <60%.

Second tool: Perceived Palliative Care Self-efficacy.

This scale was adapted from **(Phillips, Salamonson et al., 2011)**. The researchers have translated the scale into the Arabic language. The scale consists of 12 questions divided equally into two dimensions: psychosocial support domain – patients' questions about the dying process and explaining patient's wishes after death.... etc., and symptom management domain – reacting to patient reports of pain and reacting to and coping with terminal delirium…etc. A four-point Likert scale was used to develop this scale. The highest possible score is 48, and the lowest possible score is 12. Greater results indicate greater self-efficacy ("37–48"), moderate scores indicate moderate self-efficacy ("25–36"), and low scores indicate low self-efficacy ("12–24").

Third tool: Stress scale: this tool was adapted by **(Terakado and Watanabe 2012),** and the researchers have translated it into the Arabic language. It is included six factors, like stress from patients' and families' rejection of care, as well as stress from a lack of self-ability or a nursing team…etc. The responses scored on the Likert scale include: never, rarely, often, and always 1, 2, 3, 4, respectively. The greatest score is 24, and the lowest is 6. Higher scores were termed normal if the score is 6, mild if the score is between 7-12, moderate 13-18, severe 19-24.

5.6 Ethical considerations

All nurses were provided with information about the study and given the opportunity to ask questions/seek clarification prior to volunteering to participate in the study. Participants had the right to change their decision and end their participation at any

time. All data obtained were only used for this study, the information from participants was anonymous, and individual participant information was not identifiable.

5.7 Pilot Study

In order to test the applicability and clarity of the constructed and included tools, the pilot study was carried out on five nurses (10% of the studied nurses) at the settings mentioned previously. The pilot study also allowed for the assessment of the time taken to finalize the questionnaire by each subject.

5.8 Validity and Reliability

The content's validity was determined by experts in the critical department and psychiatric nursing. Their views concerning the layout, accuracy, consistency, format, and relevancy of the tools were brought forth. Cronbach's alpha was utilized to test the reliability of knowledge (alpha = .799), for self-efficacy scale (alpha = 0.856), and stress scale (alpha = .827).

5.9 Fieldwork

Based on the pre-assessment and aim of the study, the researchers divided the studied nurses into three groups, each group must attend five training sessions, and each training is about 30-40 minutes designed and implemented by the researchers. The researchers informed nurses about their group, and the time of session. The sessions were conducted in the hospital's conference room in coordination with the hospital's medical director and nurse manager. Session content and education program were based on the literature review from October 2020 to February 2021**(Centeno, Garralda et al., 2017, Rosa 2018, Lalloo, Osei-Twum et al., 2021)**.

In the first session, the researchers have clarified the aim, significance, and tools of the study. The topics included in this session included the meaning, principles, goals, supportive components, and ethical issues of palliative care, and spirituality in enhancing the quality of life.

The second session included main topics such as pain management, identifying the predisposing factors and signs of pain, physical assessment of pain, and organizing treatment methods.

In the third session, the researchers focused on the nurse's role in providing physical and emotional nursing care related to palliative care for serious and complex diseases.

In the fourth session, the researchers explained to nurses the communication skills and communication methods during palliative care, self-efficacy concept, and stress management.

In the last session, the researchers have summarized the training program, asked nurses for any questions, feedback, and open discussion. Then, they ask nurses to complete the posttest questionnaire, the same one used at pre-intervention. The researchers relied on multi-educational methods such as group discussion, brainstorming, and reflective thinking and different illustrative methods such as PowerPoint, photos, and videos.

5.10 Data Analysis

A personal computer (PC) was used in entering, coding, and revising the data obtained from the study sample. (SPSS) version 24 was used for computerized entry of data and statistical analysis. Descriptive statistical analysis in the shape of number/percentage and mean (S.D) was used to present data. A t-test was used to compare the means of the two groups.

6 RESULTS

Table (1) revealed that the mean age of studied nurses was 41.60±3.99 years and the mean of nursing experience was 14.8±2.78 years. Also, it revealed that 70% of the studied nurses were female, 78% were staff nurses, and 80% affiliated with the palliative care team. Related to qualification, 48% of the studied nurses had attended a technical health institute.

Table (1) Distribution of the studied nurses according to their characteristics (n=50).

Items	N	%
Age:		
25 – <35	12	24
35 - <45	18	36
45 - 55	20	40
Mean SD 41.60±3.99		
Gender:		
Male	15	30
Female	35	70
Position:		
Head nurse/manager	4	8
Senior nurse	7	14
Staff nurse	39	78
Affiliated ward:		
Medical	15	30
Surgical	17	34
Critical	18	36
Existence of palliative care team		
Yes	10	20
No	40	80
Qualification:		
Diplom	6	12
Technical health institute	24	48
Bachelor	15	30
Postgraduate	5	10
Experience year:		
1 - <10	13	26
10 - <20	25	50
20 – 30	12	24
Mean SD 14.8±2.78		

Figure (1) demonstrated that 48% and 34% of the studied nurses had poor and moderate knowledge, respectively, concerning palliative care at pre-intervention, while at post-intervention, 60% had good knowledge and 30% had average knowledge, with a significantly large difference at p-value <0.01.

Figure (1) Distribution of the studied nurses at pre and post-intervention according to total knowledge about palliative care (n=50).

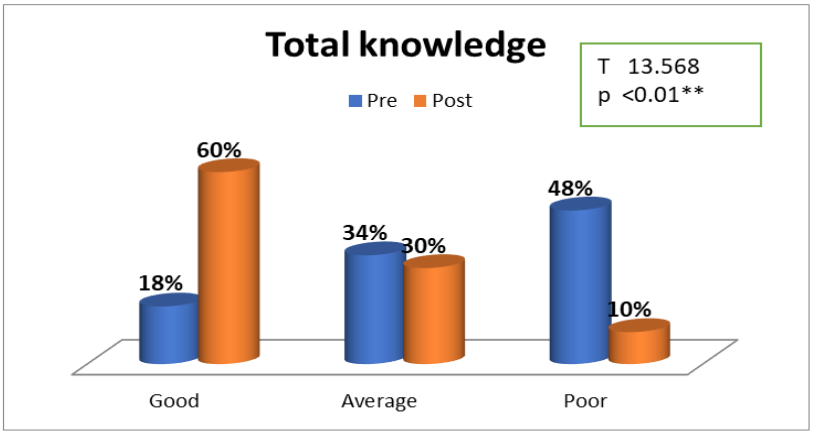


Table (2) detected that the mean score of the total psychosocial support domain at pre-intervention was 12.77±4.91. On the contrary, at post-intervention, the mean score was 18.14±6.11, with a significantly large difference at a p-value <0.01. In addition, the mean score of total symptom management at pre-intervention was 14.02±5.50, while at post-intervention, the mean score was 19.36±4.89, with a significantly large difference at p-value <0.01. The related mean total self-efficacy score at pre-intervention was 26.79±8.37, while at post-intervention was 37.50±7.63, with a significantly large difference at p-value <0.01.

Table (2) Compare the means of the studied nurses at pre-and post-intervention according to self-efficacy (n=50).

Items	Pre	Post	T-test	P-value
Total psychosocial support domain	12.77±4.91	18.14±6.11	11.634	<0.01**
Total symptom management	14.02±5.50	19.36±4.89	12.076	<0.01**
Total scale	26.79±8.37	37.50±7.63	16.057	<0.01**

Figure (2) verified that 52% and 32% of the studied nurses had low and moderate self-efficacy, respectively, at pre-intervention. At the same time, 48% had high self-efficacy, and 38% had a moderate level of self-efficacy at post-intervention, with a significantly large difference at a p-value < 0.01.

Figure (2) Distribution of the studied nurses at pre and post-intervention according to total self-efficacy (n=50).

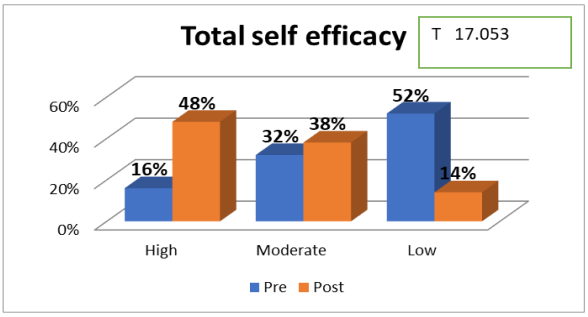


Table (3) showed that the related mean total stress score at pre-intervention was 18.1±4.79. In contrast, at post-intervention, it was 9.12±3.88, with a significantly large difference at p-value <0.01.

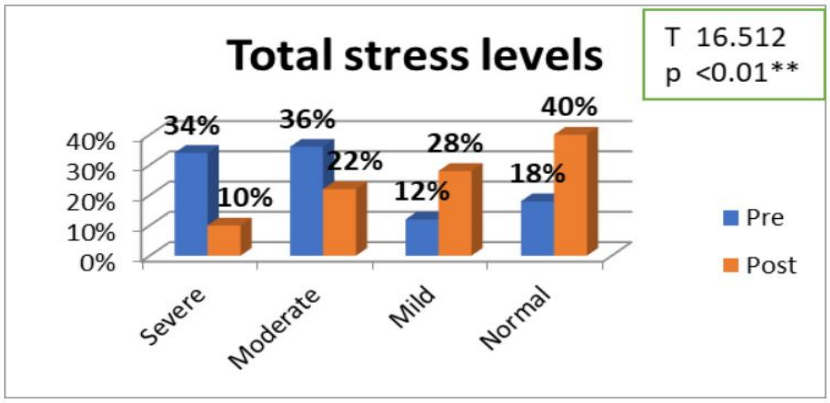
Table (3) Compare the means of the studied nurses at pre and post-intervention according to stress (n=50).

Items	Pre	Post	T-test	P-value
- stress is related to differences in how team members assume care.	2.88±0.81	1.76±0.54	4.561	<0.05*
- stress due to incapability to alleviate patients' and families' physical and emotional pain.	3.11±0.69	1.82±0.65	5.966	<0.05*
- stress is caused by patients' and families' refusal of care.	3.17±0.71	1.43±0.53	5.037	<0.05*
- stress due to lack of capacity of self or nursing team.	3.36±0.57	1.24±0.62	6.115	<0.01**
- Workplace stress due to inadequacy of nursing management systems.	2.97±0.43	1.48±0.59	4.936	<0.05*
- Stress due to encounters with the patient's life being endangered.	2.61±0.52	1.39±0.44	3.5625	<0.05*
Total scale	18.1±4.79	9.12±3.88	9.641	<0.01**

Figure (3) revealed that 34% and 36% of the studied nurses had severe and moderate stress, respectively at pre-intervention, while at post-intervention, 40% had normal stress and 28% had mild stress, with a

significantly large difference at p-value <0.01.

Figure (3) Distribution of the studied nurses at pre and post-intervention according to total stress levels (n=50)



7 DISCUSSION

The increasing necessity of palliative care in the intensive care unit is characterized by an increasing number of patients with critical and terminal conditions. Consequently, the use of PC for comprehensive treatment by nurses is required. Self-efficacy and stress are the major predictors that affect the application of palliative care in ICUs. As a result, nurses must have a high level of self-efficacy to deliver quality PC to patients and their families **(E El-Sayad and A Shaala 2021).** As a result, the purpose of this study was to investigate the impact of palliative care training on nurses' perceived self-efficacy and stress.

According to the features of nurses, the present study mentioned that the mean age of the studied nurses was 41.60±3.99 years, and the mean nursing experience was 14.8±2.78 years. In addition, it indicated that more than two-thirds of the studied nurses were females, and the majority of them affiliated with a palliative care team. About half of the studied nurses had attended a technical health institute related to qualification. These results are provided by the study conducted by **(Kurnia, Trisyani et al., 2018),** who noted that about three-quarters of studied nurses were females, and only one-third had a bachelor's in nursing.

Regarding palliative care knowledge, the present study demonstrated that less than half of the studied nurses and more than one-third had poor and moderate knowledge, respectively, concerning palliative care at pre-intervention. In contrast, more than half had good knowledge at post-intervention, and less than one-third had average knowledge, with a significantly large difference at p-value <0.01. These results can be explained using effective training programs and illustrative methods for more clarification. These results are consistent with the study

(Joy 2015), which showed that palliative care training positively affected nurses' knowledge regarding palliative care in intervention groups with a p-value <0.05. In addition, a cohort study by **(Malik and Chapman 2017)** reported a significant enhancement in knowledge after nurses attended the educational intervention about end-of-life care. Additionally, this study is under the study performed by **(Harden, Price et al. 2017)**, who found that educational programs positively impacted nurses' knowledge of palliative care for oncology patients.

The current study mentioned that palliative care training enhances nurses' self-efficacy, which is detected through increases in mean scores of total psychosocial support domain, total symptom management, and total self-efficacy at post-intervention, with a significantly large difference at p-value <0.01.

Also, it was demonstrated that more than half of the studied nurses and about one-third had low and moderate self-efficacy, respectively, at pre-intervention; while less than half had high self-efficacy and more than one-third had moderate level at post-intervention, with a significantly large difference at p-value <0.01. These results have attributed to the training program prepared by researchers, depending on the level of nurses' information before training, and using easy-to-understand terminologies. The findings of this study are supported by the findings of **(Dehghani, Barkhordari-Sharifabad et al. 2020)**, who found that palliative care education has the potential to raise nurses' perceived self-efficacy. In providing palliative care, all health care team members, such as nurses, play a significant role. In addition, the cohort study by **(Zhou, Li et al. 2021)** noticed that most of the studied nurses had low self-efficacy and needed training programs. Moreover, the study performed by **(Jang and Yeom 2018)** discovered that nurses with a high level of palliative care knowledge had a high level of self-efficacy and, as a result, performed better in HPC nursing.

According to the total stress score, the current study detected that the mean score at pre-intervention was 15.49±4.68, while at post-intervention, the mean score was 7.73±3.60, with a significantly large difference at p-value <0.01. Also, it was revealed that about one-third of the studied nurses had severe stress and more than one-third had moderate stress at pre-intervention. In contrast, at post-intervention, more than one-third had normal stress and more than one-quarter had mild stress, with a significantly large difference at p-value <0.01. These results may be due to allowing the nurses to ask about any unclear points and also participate with them in the discussion during the lecture and train researchers well on the prepared material. These results are supported by the study (Baqeas and Rayan 2018), who proved that palliative care nurses were shown to experience high work-related stress and support for palliative care training decreases nurses' stress levels. Also, the cohort study by **(Gómez-Urquiza, Albendín-García et al. 2020, Kim and Kim 2020)** stated that coping strategy training positively affected work stress among palliative care nurses.

8 Conclusion

To conclude, the present study reported that less than half of the studied nurses and more than one-third had poor and moderate knowledge, respectively, concerning palliative care at pre-intervention. In contrast, more than half had good knowledge at post-intervention, and less than one-third had average knowledge, with a significantly large difference at p-

value <0.01. The current results revealed that about one-third of studied nurses had severe stress, and more than one-third had moderate stress at pre-intervention. Moreover, at post-intervention, more than one-third had normal stress and more than one-quarter had mild stress, with a significantly large difference at p-value <0.01. Further, one-third of them had low and moderate self-efficacy at pre-intervention, while slightly less than half had high self-efficacy and more than one-third had moderate levels of self-efficacy at post-intervention, with a significantly large difference at p-value <0.01.

9 Recommendation

- Selecting a palliative care team based on competence and giving them intensive training courses to be ready to provide care to patients and support the rest of the nurses.
- Constant education for nurses about palliative care and coping with strategy-related stress.
- Continuous assessment of the ability of nurses to provide palliative care for patients.
- Providing psychological support for nurses who are providing palliative care.

Conflict of interest:

The authors declare that there is no conflict of interest.

Funding:

This research received no external funding.

References:

1. Albanesi, B., M. Piredda, A. Marchetti, C. Mastroianni, C. Magnani, M. Artico, D. D'Angelo, M. Lusignani, A. Ianni and M. G. De Marinis (2021). "Oncology and palliative care nurses' knowledge and attitudes toward artificial nutrition and hydration for patients at end of life in Italy: a cross-sectional survey." Cancer nursing **44**(2): E99-E107.
2. Baqeas, M. and A. Rayan (2018). "Improving psychological well-being and quality of life among palliative care nurses: literature review." Am J Nurs **6**(3): 82-86.
3. Barnett, M. D., C. M. Reed and C. M. Adams (2021). "Death Attitudes, Palliative Care Self-efficacy, and Attitudes Toward Care of the Dying Among Hospice Nurses." Journal of clinical psychology in medical settings **28**(2).
4. Centeno, C., E. Garralda, J. M. Carrasco, M. den Herder-van der Eerden, M. Aldridge, D. Stevenson, D. E. Meier and J. Hasselaar (2017). "The palliative care challenge: analysis of barriers and opportunities to integrate palliative care in Europe in the view of national associations." Journal of palliative medicine **20**(11): 1195-1204.
5. Cha, E., S. Lee and J. Lee (2020). "Health Personnel's Knowledge, Attitudes, and Self-Efficacy Related to Providing Palliative Care in Persons with Chronic Diseases." The Korean Journal of Hospice and Palliative Care **23**(4): 198-211.
6. Chover-Sierra, E., A. Martínez-Sabater and Y. R. Lapeña-Moñux (2017). "An instrument to measure nurses' knowledge in palliative care: Validation of the Spanish version of Palliative Care Quiz for Nurses." PloS one **12**(5): e0177000.
7. Dehghani, F., M. Barkhordari-Sharifabad, M. Sedaghati-Kasbakhi and H. Fallahzadeh (2020). "Effect of palliative care

training on perceived self-efficacy of the nurses." BMC palliative care **19**: 1-6.

8. Dijxhoorn, A.-F. Q., L. Brom, Y. M. van der Linden, C. Leget and N. J. Raijmakers (2021). "Prevalence of burnout in healthcare professionals providing palliative care and the effect of interventions to reduce symptoms: A systematic literature review." Palliative medicine **35**(1): 6-26.
9. E El-Sayad, H. and S. A Shaala (2021). "Palliative Care Education: Its Effect on Nurses' Competency during Care of Dying Patients." Egyptian Journal of Health Care **12**(2): 514-532.
10. Fadhil, I., G. Lyons and S. Payne (2017). "Barriers to, and opportunities for, palliative care development in the Eastern Mediterranean Region." The Lancet Oncology **18**(3): e176-e184.
11. Gilissen, J., L. Pivodic, A. Wendrich-van Dael, W. Cools, R. Vander Stichele, L. Van den Block, L. Deliens and C. Gastmans (2020). "Nurses' self-efficacy, rather than their knowledge, is associated with their engagement in advance care planning in nursing homes: A survey study." Palliative medicine **34**(7): 917-924.
12. Gómez-Urquiza, J. L., L. Albendín-García, A. Velando-Soriano, E. Ortega-Campos, L. Ramírez-Baena, M. J. Membrive-Jiménez and N. Suleiman-Martos (2020). "Burnout in Palliative Care Nurses, Prevalence and Risk Factors: A Systematic Review with Meta-Analysis." International Journal of Environmental Research and Public Health **17**(20): 7672.
13. Harden, K., D. Price, E. Duffy, L. Galunas and C. Rodgers (2017). "Palliative Care: Improving nursing knowledge, attitudes, and behaviors." Clinical journal of oncology nursing **21**(5).
14. Hebdon, M. C. T., L. A. Coombs, P. Reed, T. E. Crane and T. A. Badger (2021). "Self-efficacy in caregivers of adults diagnosed with cancer: An integrative review." European Journal of Oncology Nursing: 101933.
15. Jang, B.-J. and H.-A. Yeom (2018). "Hospice-palliative care nurses' knowledge of delirium, self-efficacy and nursing performance on delirium." The Korean Journal of Hospice and Palliative Care **21**(2): 65-74.
16. Joy, Y. L. (2015). "The influence of a palliative care education intervention in increasing knowledge and self-efficacy of nurses practicing in long-term care."
17. Kim, H. and K. Kim (2020). "Palliative cancer care stress and coping among clinical nurses who experience end-of-life care." Journal of Hospice & Palliative Nursing **22**(2): 115-122.
18. Kurnia, T. A., Y. Trisyani and A. Prawesti (2018). "Factors associated with nurses' self-efficacy in applying palliative care in intensive care unit." Jurnal Ners **13**(2): 219-226.
19. Lalloo, C., J.-A. Osei-Twum, A. Rapoport, C. Vadeboncoeur, K. Weingarten, S. Veldhuijzen van Zanten, K. Widger and J. Stinson (2021). "Pediatric Project ECHO®: A virtual community of practice to improve palliative care knowledge and self-efficacy among interprofessional health care providers." Journal of palliative medicine **24**(7): 1036-1044.

20. Malik, M. and W. Chapman (2017). "Education and training in end-of-life care for certified nursing assistants in long-term care." The Journal of Continuing Education in Nursing **48**(2): 81-85.
21. Montgomery, K. E., K. J. Sawin and V. Hendricks-Ferguson (2017). "Communication during palliative care and end of life: Perceptions of experienced pediatric oncology nurses." Cancer nursing **40**(2): E47-E57.
22. Neiman, T. (2020). "Acute care nurses' experiences of basic palliative care." Journal of Hospice & Palliative Nursing **22**(2): 101-107.
23. Phillips, J., Y. Salamonson and P. M. Davidson (2011). "An instrument to assess nurses' and care assistants' self-efficacy to provide a palliative approach to older people in residential aged care: A validation study." International Journal of Nursing Studies **48**(9): 1096-1100.
24. Rosa, W. E. (2018). "Integrating palliative care into global health initiatives: opportunities and challenges." Journal of Hospice & Palliative Nursing **20**(2): 195-200.
25. Rosa, W. E., S. H. Meghani, P. W. Stone and B. R. Ferrell (2020). "Opportunities for nursing science to advance patient care in the time of COVID-19: A palliative care perspective." Journal of Nursing Scholarship.
26. Terakado, A. and T. Watanabe (2012). "Creation of a questionnaire to measure stress among nurses engaged in palliative care on general wards." Supportive Care in Cancer **20**(10): 2537-2544.
27. Zhou, Y., Q. Li and W. Zhang (2021). "Undergraduate nursing students' knowledge, attitudes and self-efficacy regarding palliative care in China: A descriptive correlational study." Nursing Open **8**(1): 343-353.