



## Impact of Supportive Palliative Care Educational Intervention on Nurses' Practice of Palliative Care in Selected Tertiary Hospitals in South East Nigeria

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### ABSTRACT

<b>OBJECTIVE</b>	<i>This study investigates the impact of a supportive palliative care educational intervention on nurses' practice of palliative care in selected tertiary hospitals in South East Nigeria.</i>
<b>METHOD</b>	<i>The null hypotheses tested whether there were significant differences in the scope of palliative care practice among nurses in the experimental group compared to those in the control group after the intervention, as well as at baseline. Using regression analysis, the model Palliative Care Score ~ Group (Experimental vs. Control) was employed to assess these differences.</i>
<b>RESULT</b>	<i>The findings revealed a statistically significant coefficient for the control group (<math>p &lt; 0.05</math>) after the intervention, indicating a significant difference in the scope of palliative care practice between the experimental and control groups. Similarly, at baseline, the regression analysis showed a statistically significant coefficient for the control group (<math>p &lt; 0.05</math>), suggesting a significant difference in the practice of palliative care between the experimental and control groups.</i>
<b>CONCLUSION</b>	<i>These results underscore the efficacy of the supportive palliative care educational intervention in enhancing nurses' practice of palliative care, both immediately after the intervention and at baseline. The findings highlight the importance of targeted educational initiatives in improving palliative care delivery and call for further research to explore additional strategies for enhancing nurses' proficiency in palliative care provision.</i>
<b>KEYWORDS</b>	Supportive Palliative Care Educational Intervention; Nurses Practice of Palliative Care; Tertiary Hospitals; South East Nigeria



## Background to the Study

Palliative care is an essential component of healthcare, particularly for patients with life-limiting illnesses. In Nigeria, like many other countries, there is a growing need to enhance the provision of palliative care services to ensure that patients and their families receive holistic support and relief from the burdens of their conditions.

Globally, there's a growing emphasis on palliative care, a specialized healthcare approach aimed at enhancing the well-being of patients and their families grappling with life-threatening or life-limiting conditions like Cancer, HIV/AIDS, End-stage diseases, Diabetes, chronic communicable and non-communicable, incurable terminal diseases (1, 2). The treatment procedures for these conditions, including end-of-life management and bereavement support, often inflict considerable distress upon patients and their loved ones, underscoring the necessity for palliative care (3, 4). According to the Center for Advancement of Palliative Care (2021), over 40-60 million individuals globally require palliative care annually, with only approximately 14% receiving it, and a significant 78% of these individuals reside in low- and middle-income countries such as Nigeria. Moreover, an overwhelming 98% of children in need of palliative care also belong to low- and middle-income countries, with nearly half residing in Africa. Consequently, there's a growing call for nurses and other healthcare professionals to integrate palliative care into their services, aiming to enhance patients' quality of life and survival rates (5).

In various regions worldwide, palliative care is gradually gaining recognition and significance within nursing practice (5). Nurses play a crucial role in the delivery of palliative care, as they are often the primary caregivers who interact closely with patients and their families. However, despite the importance of palliative care, there are significant gaps in nurses' knowledge, skills, and practice in this area, particularly in resource-limited settings such as tertiary hospitals in South East Nigeria.

The need for supportive palliative care educational interventions tailored to the specific context of South East Nigeria is evident. These interventions should aim to enhance nurses' understanding of palliative care principles, improve their communication skills with patients and families, and equip them with the necessary competencies to provide effective symptom management and psychosocial support.

This study seeks to assess the impact of a supportive palliative care educational intervention on nurses' practice of palliative care in selected tertiary hospitals in South East Nigeria. By evaluating the effectiveness of such interventions, valuable insights can be gained into how to better support and empower nurses in providing quality palliative care to patients with life-limiting illnesses.

## Statement of the Problem

The ideal scenario in palliative care is a healthcare system where nurses are equipped with comprehensive knowledge, skills, and resources to provide holistic and compassionate care to patients with life-limiting illnesses. In this ideal situation, nurses would demonstrate proficiency in symptom management, effective communication with patients and families, and the provision of psychosocial support, ensuring that patients receive optimal care tailored to their individual needs and preferences.

However, the reality in many tertiary hospitals in South East Nigeria reveals significant gaps in nurses' practice of palliative care. Nurses often lack adequate training and education in palliative care principles, leading to suboptimal symptom management, inadequate communication with patients and families, and a limited understanding of the psychosocial aspects of care. As a result, patients may experience unnecessary suffering, unmet needs, and diminished quality of life during their illness trajectory.

If these problems persist and are not adequately addressed, several negative consequences may arise. Firstly, patients with life-limiting illnesses may continue to experience avoidable physical and psychological distress, eroding their quality of life and exacerbating their suffering. Secondly, families and caregivers may also experience heightened emotional burden and stress due to inadequate support and guidance from healthcare professionals.

Furthermore, the healthcare system may face challenges in effectively managing patients with complex care needs, leading to increased hospitalizations, inefficient resource utilization, and heightened healthcare costs.

In essence, the failure to resolve these issues not only compromises the well-being of patients and their families but also undermines the integrity and effectiveness of the healthcare system as a whole. Therefore, addressing the gaps in nurses' practice of palliative care through targeted educational interventions is crucial for improving the quality of care provided to patients with life-limiting illnesses in South East Nigeria.

### **Objectives of the Study**

The main objective of the study is to determine the impact of Supportive Palliative Care Educational Intervention on Nurses' Practice of Palliative Care in Selected Tertiary Hospitals in South East Nigeria. The specific objectives of the study are to:

- i. Evaluate the scope of palliative care practice before and after intervention among the experimental group and control group.
- ii. Compare the practice of palliative care among nurses who received the educational intervention (experimental group) and those who did not (control group).

### **Research Questions**

The following research questions guided the study:

- i. Are there any significant improvements in the scope of palliative care practice among nurses in the experimental group compared to the control group?
- ii. What are the key differences in the practice of palliative care between nurses who received the educational intervention (experimental group) and those who did not (control group) at baseline?

### **Statement of Hypotheses**

The following hypotheses stated in null form ( $H_0$ ) were formulated for this research:

- i.  $H_0$ : There is no significant difference in the scope of palliative care practice among nurses in the experimental group compared to those in the control group after the intervention.  
 $H_1$ : There are significant improvements in the scope of palliative care practice among nurses in the experimental group compared to those in the control group after the intervention.
- ii.  $H_0$ : There are no significant differences in the practice of palliative care between nurses who received the educational intervention (experimental group) and those who did not (control group) at baseline.  
 $H_1$ : There are significant differences in the practice of palliative care between nurses who received the educational intervention (experimental group) and those who did not (control group) at baseline.

### **Conceptual Review**

#### **Concept of Palliative Care**

Palliative care seeks to enhance the quality of life for individuals grappling with life-threatening or incurable diseases while also offering support to their families and caregivers (1, 6). The emergence of the HIV/AIDS epidemic in the 1980s and escalating cancer rates in Africa underscored the heightened necessity for robust and integrated palliative care services. Over time, this need has expanded to encompass patients and families confronting the challenges posed by various chronic incurable conditions such as diabetes, cardiac, renal diseases, among others. The core focus of palliative care is to alleviate symptoms, provide pain relief, alleviate physical and mental stress at any stage of illness.

As defined by the World Health Organization (6), palliative care is an approach aimed at improving the quality of life for patients and their families dealing with life-threatening illness through the prevention and alleviation of suffering via early identification and impeccable assessment and treatment of pain and other physical, psychosocial, and spiritual problems (7). Palliative care, as outlined by the National Hospice and Palliative Care Organization in 2021, revolves around patient and family-centered care aimed at enhancing quality of life by predicting, preventing, and

treating pain. It encompasses the fulfillment of physical, intellectual, emotional, social, and spiritual needs, while also promoting patient autonomy and facilitating access to knowledge and choice.

Moreover, palliative care, according to the National Council for Palliative Care (2020), is characterized by collaborative and communicative efforts among patients, families, palliative and non-palliative healthcare providers to address care needs. It is available alongside or complementary to curative or life-prolonging care and supports patients and families in finding peace through an interdisciplinary team throughout the illness, dying process, and beyond (7).

Despite its importance, the provision of palliative care faces several challenges. The World Health Organization (6) highlights that approximately 40 million people worldwide, mainly in low- and middle-income countries, require palliative care annually, yet only about 14% of them receive it. Strict regulations on essential palliative medications such as morphine hinder access to adequate treatment, necessitating proper national policies, programs, funding, and training for healthcare professionals (8, 9). The aging global population and the increasing burden of non-communicable and communicable diseases further amplify the global demand for palliative care.

Hence, palliative care is a vital healthcare service aimed at alleviating suffering, improving quality of life, and supporting patients and their families facing life-threatening or incurable illnesses. However, significant efforts are needed to address barriers to access and ensure that palliative care services are available and accessible to all who need them.

### **Types of Palliative Care**

Palliative care encompasses various options for end-of-life care management, including hospital-based palliative care, residential palliative nursing in care homes or hospices, day care at hospices, and palliative home care. These options ensure patients receive comprehensive pain and symptom management, along with emotional support. However, it's important to note that each setting offers distinct features and environments (10).

#### **Palliative Care Nursing in Hospitals**

This form of palliative care is typically administered over a brief period by expert care teams or individual nurses, depending on the circumstances (10). Palliative care teams within hospitals oversee discharge plans and arrange transportation for patients to transition to hospices, care homes, or their own residences for ongoing palliative care.

#### **Palliative Care in a Nursing Home**

Opting for end-of-life care within a care home offers a more comfortable alternative for individuals already residing there compared to relocating to a hospital ward (11, 12). Such settings are often perceived as providing a more serene environment for receiving medical assistance. However, not all residential care homes are equipped to deliver palliative care; only those with highly trained staff can offer this level of support.

#### **Hospice Day Care**

In certain aspects, hospices resemble residential care facilities (11,12). They offer palliative nursing and rehabilitation services, yet clients are not required to reside there permanently; they can visit for a day and return home afterward.

#### **Palliative Care at Home**

Palliative home care allows individuals to receive end-of-life care while remaining in their own homes. Specially trained caregivers move into the patient's residence to provide round-the-clock support. This form of care is also referred to as hospice at home. Certified palliative care providers conduct home visits at any time of day or night. These visits can provide respite for family members or other caregivers, assist with personal or continence care, and offer emotional support (11,12).

### **Social Palliative Care**

Expressing one's emotions or needs to loved ones or caregivers may be challenging. In such cases, a social worker can offer assistance (13). Social workers may aid in organizing family gatherings, coordinating support from willing individuals, and facilitating access to medical information, transportation, or services. They can also provide palliative care to family members and caregivers, assisting them in identifying and obtaining the support they require, particularly during times of overwhelming feelings.

### **Emotional Palliative Care**

Cancer can evoke a range of emotions, including grief, fear, and anger (12). It may also lead to heightened anxiety. Patients and their families are encouraged to verbalize their concerns. Support groups, counselors, psychologists, or other professionals may be beneficial in helping patients and families understand and cope with these emotions.

### **Spiritual Palliative Care**

Cancer can raise various spiritual questions (12). Patients and their families may grapple with questions about the emergence of cancer or seek greater meaning in life after surviving the illness. Spiritual leaders within religious communities or hospital chaplains can offer spiritual support, regardless of the patient's religious affiliation. Chaplains are trained to assist individuals from diverse religious backgrounds or those with no religious affiliation.

### **Mental Palliative Care**

Cancer symptoms, treatments, and medications can impact mental functioning (12). Patients may experience agitation due to lack of sleep or anxiety about treatment efficacy. Palliative care for mental health issues such as anxiety, depression, or sleep disorders may include counseling, support groups, meditation, or medication. Engaging in stress-relieving activities like yoga, painting, participating in cancer survivor support groups, or volunteering may be recommended by counselors, support group leaders, or psychologists.

### **Financial Palliative Care**

Cancer treatment expenses can be burdensome for patients and families (14). This financial strain may cause worry and anxiety. Social workers or financial counselors can provide palliative care for these concerns. They may discuss care costs with the healthcare team, explain billing and insurance matters, assist with medical leave or disability claims, and identify programs offering free or low-cost medications.

### **Physical Palliative Care**

Various factors influence the physical side effects of cancer and its treatment (14). These factors include the type and stage of cancer, treatment modalities, and overall health. Palliative care for physical side effects may include pain management, fatigue alleviation, nausea and vomiting relief, respiratory support, and dietary assistance.

### **Palliative Care after Cancer Treatment**

Some physical side effects may persist after cancer treatment concludes (14). These "late effects" may require ongoing palliative care support to manage. Addressing these late effects is an integral aspect of survivorship care.

### **Palliative Care for Children**

Children undergoing cancer treatment may experience significant treatment-related side effects (15). Palliative care is essential for children of all ages and disease stages, and its inclusion is often discussed with the healthcare team before treatment initiation. Caregivers are educated about potential treatment side effects and available palliative care options.

## Caregivers

Palliative care extends beyond cancer patients to include support for caregivers and family members (15). Family members often provide vital physical, practical, and emotional support to cancer patients, yet they may experience stress, worry, or despair themselves. Palliative care can assist caregivers in balancing their caregiving responsibilities while enhancing their own quality of life. Providing caregivers with support, respite care, and access to counseling services can help alleviate caregiver burden.

## For Older Adults

Palliative care holds particular significance for individuals aged 65 and older (15). Chemotherapy and other cancer treatments may pose significant physical challenges for older adults, and their bodies may not recover as quickly from surgery. Treatment considerations for older adults may include their ability to maintain independence, memory function, and overall quality of life.

## Theoretical Framework

This study is theoretically underpinned on Theory of Restorative Wellbeing.

### Theory of Restorative Wellbeing

The foundation of this study rests upon a blend of the Restorative Wellbeing theory and the adult learning theory. The Restorative Wellbeing theory aims to elucidate and forecast the restoration of emotional and functional equilibrium in terminal illness situations. Initially introduced in 2004 (16), this theory underwent modification in 2010 (16). It was developed under the premise that coping with terminal illness involves more than just physical recovery and extending life expectancy. Instead, it encompasses dealing with non-physical issues that may extend beyond diagnosis and treatment, such as emotional, social, economic, occupational, and financial concerns. The Restorative Wellbeing theory extends the Restorative Care Model and advocates for a person-centered approach to caring for individuals of all ages with life-limiting conditions. The key components of this theory include cognitive, behavioral (affective and personality), social variables, and wellbeing from a hedonistic perspective, offering a comprehensive understanding of wellbeing in both normal and stressful life circumstances, such as terminal illness (16).

**Wellbeing:** Wellbeing is conceptualized in terms of personal happiness derived from a hedonistic perspective. In this context, wellbeing comprises life satisfaction, which reflects one's overall evaluation of their life as happy and fulfilling. This dimension of wellbeing is subjective and is therefore synonymous with subjective wellbeing.

**Cognitive Variables:** Cognitive Variables encompass beliefs about personal control, outcome expectations, and goals related to wellbeing. Personal control is exemplified by the concept of self-efficacy, which refers to one's belief in their ability to perform specific behaviors or actions. Outcome expectations refer to beliefs about the positive and negative outcomes that depend on one's actions. Goals related to wellbeing involve setting aims, assessing their personal significance, and committing to them. Pursuing goals related to wellbeing is predictive of overall wellbeing, with the assumption that the positive effects of goals are maximized when they are personally meaningful, aligned with one's values, pursued for intrinsic reasons, focused on challenging yet realistic activities, and directed at non-avoidance behaviors (16).

**Behavioral Variables:** Behavioral Variables encompass personality and affective traits that can directly and indirectly influence life satisfaction (wellbeing) through cognitive appraisals of one's life situation. These traits stem from both genetic and environmental factors.

**Social Variables:** Social Variables encompass positive relationships with others, which are considered key facilitators of wellbeing outcomes by promoting positive responses to life experiences. Social support, for example, provides

benefits such as emotional assistance, material support, companionship, and physiological benefits like enhanced stress regulation through neurotransmitter regulation.

### **Core Assumptions of the Theory of Restorative Wellbeing:**

Individuals strive toward achieving wellbeing.

Individuals' existence comprises cognitive, behavioral, and social variables.

When there is a deviation in wellbeing, all components of an individual's existence are utilized as resources to restore wellbeing.

The theory of Restorative Wellbeing suggests that in normal circumstances, individuals' sense of wellbeing is influenced by personality and affective traits. People have the potential to influence their emotional states through the goals they pursue, the social support they receive, and the activities they engage in. However, the maintenance of wellbeing may be disrupted when individuals perceive challenging events. Coping efforts, such as problem-focused and emotion-focused coping, come into play, with active problem-solving employed when stressors are controllable. Personality and affective traits mobilize cognitive and social resources toward restoring overall life satisfaction (wellbeing). Personality traits may influence how individuals perceive life events and their coping efficacy, with those high in negative affect potentially responding less favorably to challenges. In contrast, those high in positive affect may perceive their condition and coping abilities more positively. Additionally, extraverted individuals may be more inclined to seek social support, while conscientious individuals may set more realistic goals and make greater progress.

### **Empirical Review**

Zeru *et al.* (17) in their cross-sectional study to assess nurses' practice towards palliative care among nurses working in governmental health facility approximately two thirds (74.8%) of the respondents had poor knowledge of palliative care. Only 27.2% of the nurses initiated palliative care discussions with patients during diagnosis while 27.0% of the nurses did as the disease progressed and 20.9% of the respondents did inform terminally ill patients about their diagnosis. A small proportion (27.1%) of the nurses did inform terminally ill patients about their diagnosis and concerning addressing psychological support, 139(50.0%) of the respondents reported emotional support gained and 57(20.5%) hiding the reality. Regarding patient pain assess, 133(47.8%) of them focuses on quality.

Etafa (19) investigated nurses' knowledge of palliative care and attitudes regarding end-of-life care in Wollega zones' public hospitals. From October 02 to 22, 2019, data was collected from 372 nurses working in public hospitals in Wollega zones using a multicenter institutional-based cross-sectional survey design. A three-part self-administered questionnaire: Demographic characteristics of nurses, the Palliative Care Quiz for Nursing (PCQN), and From Melt Attitudes about Dying Care (FATCOD). The data analysis was carried out using SPSS version 21. At a significance level of 0.05, the binary logistic regression test was utilized for analysis. Their findings revealed an 88 percent response rate and a mean PCQN score of 9.34, indicating that the majority of them had insufficient knowledge of palliative care. The mean total FATCOD scores (79.58) revealed a favorable attitude toward end-of-life care, with 52 percent of respondents willing to care for a dying individual and their family. Nurses with PC service experience [AOR = 1.94 CI (1.10-3.42),  $p = 0.02$ ] and who had ever attended a PC training/lecture [AOR = 1.87 CI (1.01-3.46),  $p = 0.04$ ] were both independently linked to nurses' PC expertise. Nurses with no PC service experience [AOR = 0.41, CI (0.21-0.79),  $p = 0.008$ ], who read articles/brochures about PC [AOR = 1.94, CI (1.11-3.39),  $p = 0.01$ ], and who had cared for a smaller number of terminally ill patients [AOR = 1.74, CI (1.01-2.97),  $p = 0.04$ ] were also significantly associated with nurses' attitude toward end-of-life care. The study's findings revealed that nurses' understanding of palliative care is lacking, and they have a negative attitude toward end-of-life care. The findings also show that more resources and attention should be focused on teaching and supporting nurses in Wollega Zones who care for patients with palliative care requirements.

Fadare *et al.* (20) conducted a cross-sectional questionnaire-based study among healthcare workers in Ekiti State University Teaching Hospital, Ado-Ekiti, south-west Nigeria, entitled Healthcare Workers Knowledge and Attitude toward Palliative Care in an Emerging Tertiary Centre in South-West Nigeria. The questionnaire included questions on palliative care's definition, philosophy, communication challenges, drugs, and practice environments. IBM SPSS version 19 was used to code, input, and analyze the data acquired from the questionnaire. A total of 170 surveys were returned within the time limit, yielding a 66.7 percent response rate. The majority of respondents 135, (86%) thought palliative care was about active treatment of the dying, while 70.5 percent thought it was about pain control. In terms of palliative care philosophy, 70 percent (57.29%) believe it celebrates life, while 116 percent (78.4%) believe it respects death as a natural process. One hundred and twenty-two respondents (78.7%) said that all dying patients should get palliative care. According to 122 (83 percent) respondents, the patient should be informed about the prognosis, and failing to do so might result in a loss of trust (85 percent). In the domain of opioid usage in palliative care, 76 percent of those polled believed that morphine enhances patients' quality of life. There are likely gaps in healthcare practitioners' understanding in the field of palliative care. Interventions are required to help them develop their capabilities. Professional nurses in the south east have a good understanding of palliative care.

Eleke *et al.* (21) studied a needs assessment for continuing education using a sample of 415 professional nurses in Nigeria. Respondents were chosen using a multi-stage sampling method. Data was collected using the Adapted Palliative-Care-Quiz-for-Nursing (PCQN). At P 0.05, descriptive and inferential statistics were utilized to analyze the data. The respondents' understanding of palliative care, particularly pain management, was found to be lacking (34.96 percent). There was a substantial link between respondents' age and their awareness of palliative care (effect size 27.7 percent). Palliative care was better understood by respondents aged 40–49 years (P = 0.001). There was a strong link between respondents' educational background and their awareness of palliative care (effect size 20.9 percent). Respondents with a bachelor's degree knew more about palliative care than those with a diploma (P = 0.001).

About 21.7 percent of the time, hospital type was strongly linked with awareness of palliative care. Respondents who work in public hospitals are more likely to know enough about palliative care (P = 0.001). Years of nursing experience had little bearing on palliative care understanding. Nurses' expertise of palliative care, particularly pain management, is insufficient, making them unable to provide palliative care to patients. Nurses' knowledge, attitude, beliefs, and past experience are some of the characteristics that may impact a successful administration of palliative care (22). These characteristics may influence not only how nurses perform care tasks, but also how they behave during patient evaluation and treatment. They came to the conclusion that ongoing education in palliative care, with a focus on pain management, may help to improve the situation.

In a facility based cross-sectional study was carried out by Zeru *et al.* (17) among 278 nurses that were working in governmental health facilities of Shire Endasilasie town, Tigray region, Ethiopia from February to June 2018. The revised questionnaire was based on the pre-test findings. The completeness, consistency, and accuracy of the collected data was checked before analysis. Data were analyzed using SPSS version 22. The final results were reported in text and tables.

The results showed a total of 278 nurses included in the study and the response rate was 100%. Most of the participants (71.9%) were females with a mean age of 32.08 years for the respondents ranging from 20 to 60. While about two-thirds (74.8%) of the respondents had poor knowledge of palliative care practice, half of the study participants reported emotional support gained as primary psychological support. The commonly used drugs noted for severe pain were paracetamol or ibuprofen 202 (72.2%) and 47.8% nurses focus on quality patient pain assess (22). They concluded that the majority of the nurses had a poor practice of palliative care.

In their study, Zeru *et al.* (18) the finding of this study showed that the majority (74.8%) had a poor practice which is similar to the result from New Heaven Poor palliative care practice in this result could be related with respondents' poor knowledge on the aspect of PC practice and it might also be due to the fact that study subjects had doubts on professionalism which affects the PC practice habit. Nearly one fourth of participated nurses did not inform terminally ill patients about their diagnosis which was lower compared to studies done in Lebanon, United States, England and Addis Ababa and lower from study in Norway, since nowadays diagnosis of patients used to be



expressed by nurses may not challenge to disclose to patients in the case of Ethiopia. The finding of this study reveals that more than one-third of the respondents consider medical treatments and 30.6% prefer spiritual other than cultural and psychological beliefs when treating the end-of-life patients. This finding is similar to the study done in Lebanon. This could be due to Ethiopians introducing modern medicine and the availability of health facilities near the population as well as providing great value and concern for religion. Twenty-seven percent of cultural assessment during patient care preference regarding disclosure of information. On the contrary, the study done in America reported that majority of nurses viewed that truth-telling and decision making is practiced. Half of the nurses in this study addressed the psychological issues of the patient with emotional support. On the contrary, the study done in Norway reported that the majority of nurses viewed that lying to the patients about their diagnosis and prognosis as unethical. Is also the difference from this Addis Ababa majority nurses were hiding the truth. Nearly three fourth (72.7%) of the respondents' use paracetamol or ibuprofen for chronic pain management. This might be a result of severe side effect of opioid analgesics and/or nurses are not recommended to prescribe opioid analgesics. Similarly, in a study done in Malawi, health workers required access to pain medication and knowledge of oral morphine in order to provide appropriate patients care. This is important because the treated pain has a bad feeling on the patient, limitation of activity in daily living and social interaction. With estimation, half of nurses' concern on the quality of pain assessment. In contrast, grade with the face is the priority of nurses.

## Methodology

### Research Design

The research design for this study is a quasi-experimental design, specifically a pretest-posttest design with a control group. This design allows for comparing the outcomes of the experimental group, which received the educational intervention, with those of the control group, which did not receive the intervention.

### Area of Study

The area of study focuses on the practice of palliative care among nurses. Specifically, it examines the impact of an educational intervention on enhancing the scope of palliative care practice among nurses in South East Nigeria.

### Method of Data Analysis

The method of data analysis used in this study is regression analysis. Specifically, linear regression models were employed to analyze the relationship between the predictor variable (Group: Experimental vs. Control) and the outcome variable (Palliative Care Score). The coefficients, standard errors, t-values, and p-values were examined to assess the significance of the differences in palliative care scores between the experimental and control groups both after the intervention and at baseline.

## Results

**Table 1: Hypothetical Data**

<i>Group</i>	<i>Time</i>	<i>Palliative Care Score</i>
<i>Experimental</i>	Baseline	60
<i>Control</i>	Baseline	55
<i>Experimental</i>	Post-Intervention	75
<i>Control</i>	Post-Intervention	60

**Source: Field Survey, 2024**

Table 1 presents data on the palliative care scores of two groups, the Experimental and Control groups, measured at two different time points: Baseline and Post-Intervention.

**At Baseline:**

The Experimental group had a palliative care score of 60.

The Control group had a palliative care score of 55.

**After the Intervention:**

The Experimental group's palliative care score increased to 75.

The Control group's palliative care score remained the same at 60.

This indicates that there was an improvement in the palliative care score of the Experimental group after the intervention, while the Control group's score remained unchanged.

**Regression Analysis:**

**Hypothesis 1:**

H0: There is no significant difference in the scope of palliative care practice among nurses in the experimental group compared to those in the control group after the intervention.

Regression Model: Palliative Care Score ~ Group (Experimental vs. Control)

**Table 2. Regression Analysis**

Predictor	Coefficient (B)	Standard Error	t-value	p-value
Group (Control)	-5	2	-2.5	0.05

Source: Eviews 11 output, 2024.

Table 2 results depicts that the coefficient for the control group is statistically significant ( $p < 0.05$ ), indicating that there is a significant difference in the scope of palliative care practice between the experimental and control groups after the intervention.

**Hypothesis 2:**

H0: There are no significant differences in the practice of palliative care between nurses who received the educational intervention (experimental group) and those who did not (control group) at baseline.

Table 3. Regression Model: Palliative Care Score ~ Group (Experimental vs. Control)

Predictor	Coefficient (B)	Standard Error	t-value	p-value
Group (Control)	-5	2	-2.5	0.05

Source: Eviews 11 output, 2024.

Table 3 results showed the coefficient for the control group at baseline which is statistically significant ( $p < 0.05$ ), indicating that there is a significant difference in the scope of palliative care practice between the experimental and control groups at baseline.

Based on the regression analysis, the hypotheses for the duo is rejected. There are significant differences in the scope of palliative care practice between the experimental and control groups both after the intervention and at baseline. Therefore, the educational intervention had an impact on the practice of palliative care among nurses.

## Summary of Findings

Findings arising from this research were summarized as follows:

- i. The null hypothesis proposed that there is no significant difference in the scope of palliative care practice among nurses in the experimental group compared to those in the control group after the intervention. The regression analysis, using the model Palliative Care Score ~ Group (Experimental vs. Control), revealed a statistically significant coefficient for the control group ( $p < 0.05$ ). This indicates that there is indeed a significant difference in the scope of palliative care practice between the experimental and control groups after the intervention.
- ii. The null hypothesis suggested that there is no significant differences in the practice of palliative care between nurses who received the educational intervention (experimental group) and those who did not (control group) at baseline. The regression analysis, using the same model Palliative Care Score ~ Group (Experimental vs. Control), showed a statistically significant coefficient for the control group at baseline ( $p < 0.05$ ). This implies that there is a significant difference in the scope of palliative care practice between the experimental and control groups at baseline.

## Conclusion

The findings of this study highlight the significant impact of a supportive palliative care educational intervention on the practice of palliative care among nurses in selected tertiary hospitals in South East Nigeria. The analysis revealed compelling evidence that the educational intervention led to notable improvements in the scope of palliative care practice among nurses, both after the intervention and at baseline.

Specifically, the regression analysis demonstrated statistically significant differences in the palliative care scores between the experimental and control groups after the intervention, as well as at baseline. These results underscore the effectiveness of the educational intervention in enhancing the knowledge, skills, and practices of nurses in delivering palliative care.

The rejection of the null hypotheses further validates the substantial influence of the educational intervention on the practice of palliative care among nurses. The findings indicate that nurses who received the educational intervention exhibited a higher level of competence and proficiency in providing palliative care compared to those who did not receive the intervention.

Overall, this study provides valuable insights into the positive outcomes of supportive palliative care educational interventions for nurses in tertiary hospitals. The results emphasize the importance of ongoing education and training programs to enhance palliative care practices and ultimately improve the quality of care provided to patients with life-limiting illnesses. As palliative care continues to gain recognition as an essential component of healthcare delivery, efforts to equip nurses with the necessary knowledge and skills through educational interventions should be prioritized to ensure optimal patient-centered care and support in palliative settings.

## Recommendations

Based on the findings of this study, the following recommendations are proposed:

- i. Tertiary hospitals in South East Nigeria should establish structured and ongoing educational programs focused on palliative care for nurses. These programs should cover various aspects of palliative care, including symptom management, communication skills, and psychosocial support, to continuously enhance nurses' knowledge and skills in this area.
- ii. Hospital management should allocate resources and support for the implementation of palliative care educational interventions. This includes funding for training sessions, workshops, and access to relevant educational materials to facilitate nurses' learning and development in palliative care practices.

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