



---

## **KNOWLEDGE, ATTITUDES AND CHALLENGES FACED BY NURSES DELIVERING PALLIATIVE CARE SERVICES IN THE BUEA REGIONAL HOSPITAL**

---

**DR BINWI FLORENCE (PhD)**

Department of Nursing, Faculty of Health Sciences, University of Buea, Cameroon

**ENOETIE RALIZA EFOSI OTANGMAYOR**

Department of Nursing, Faculty of Health Sciences, University of Buea, Cameroon

---

### **Abstract**

**Background:** Palliative Care (PC) is an essential component of comprehensive healthcare that seeks to improve the quality of life of patients with life-threatening illnesses and their families. Nurses play a central role in the delivery of palliative care because of their continuous involvement in symptom management, psychological support, patient advocacy and end-of-life care. Despite the growing recognition of palliative care worldwide, its implementation remains limited in low and middle-income countries including Cameroon. Evidence regarding nurses preparedness to provide palliative care in Cameroon remains scarce, particularly at the Buea Regional Hospital (BRH).

**Aim:** To assess the knowledge, attitudes and challenges faced by nurses delivering palliative care services at the Buea Regional Hospital.

**Methods:** A hospital-based cross-sectional design was conducted among 104 registered nurses working in the medical, surgical, ICU, oncology, private and VIP units at the Buea Regional Hospital. Participants were selected using convenience sampling. Data were collected using a structured questionnaire assessing the socio-demographic characteristics, knowledge of palliative care, attitudes towards palliative care, and perceived challenges affecting service delivery. Descriptive statistics summarized participants characteristics and study variables, while Chi-square tests assessed associations between selected socio-demographic variables and knowledge and attitude levels. Statistical significance was considered at  $p < 0.05$ .

**Results:** Among the 104 nurses who participated, majority were female (88.5%), aged between 26-30 years (41.3%), and held Bachelor's degrees (59.6%). Overall, 68.3% demonstrated good knowledge of palliative care with a mean score of 8.02/10.

Positive attitudes towards palliative care were observed in 89.4% of respondents with a mean score of 33.46/45. However, important knowledge gaps remained regarding the appropriate timing of palliative care initiation and its primary goals. Frequently reported barriers included; inadequate training (55.8%), emotional stress and burnout (55.8%) and cultural or religious barriers (51.0%). Notably, 82.7% of nurses reported that challenges had prevented them from delivering quality PC. The most recommended improvement was more training for nurses (87.5%).

**Conclusion:** Although nurses at the Buea Regional Hospital demonstrated good knowledge and positive attitudes towards palliative care, significant challenges particularly inadequate

training and emotional stress, hinder effective delivery. Targeted training programs, institutional support, and clear palliative care protocols are urgently needed to improve palliative care quality at Buea Regional Hospital.

### **Keywords:**

*Palliative care, knowledge, attitudes, challenges, nurses, Buea Regional Hospital, Cameroon.*

## **1.0 INTRODUCTION**

Palliative care (PC) is an interdisciplinary, holistic approach aimed at improving the quality of life for patients with life-threatening illnesses and their families by. It focuses on the prevention and relief of suffering through early identification, assessment and management of pain and other distressing physical, psychosocial, and spiritual problems [1]. Rather than focusing solely on end-of-life care or hospice, palliative care is intergrated throughout the progression of the disease. [2] Globally, there is an increase in the demand for Palliative Care and it is driven by demographic shifts and the increasing prevalence of non-communicable diseases such as cancer, cardiovascular, and respiratory conditions [5].

Nurses play a central role in the successful delivery of Palliative Care as they spend the most time with patients and their families. Their responsibilities go beyond assessment and pain management but also include; primary communicators between patients, families, and the clinical team, patient advocacy, psychosocial support, and assistance with complex end-of-life decision making [3]. Consequently, nurses knowledge and attitudes towards Palliative Care, and the challenges they face in service delivery are critical determinants of quality of care.

Inadequate knowledge among nurses may contribute to misconceptions regarding pain management, opioid use and the goals of palliative care, while negative attitudes may reduce nurses willingness and confidence to provide comprehensive care to patients, it has been consistently identified as a major barrier to effective service delivery [3]. Challenges include the lack of institutional protocols, insufficient multidisciplinary support, and high workloads. This interconnected relationship—where knowledge influences attitudes, and both are constrained or enabled by systemic challenges—forms the core conceptual framework for this study [4].

In spite of the growing recognition of Palliative Care, its services remains inadequate in many low- and middle-income countries. Within Sub-Saharan Africa, Palliative Care implementation continues to be constrained by shortages of trained personnel, inadequate educational opportunities, limited availability of essential medications and the absence of robust national policies. Cameroon faces similar challenges, with, Palliative Care services remaining underdeveloped, despite increasing number of of patients requiring supportive care and management [5,6]. While initiatives like a recent quasi-experimental training program for nurses in palliative and psychosocial oncology aimed at improving Palliative Care training demonstrate increasing recognition of these deficits; however, evidence suggests that training and educational interventions alone are insufficient without supportive multidisciplinary structures and institutional commitment [5,7].

The Buea Regional Hospital (BRH) serves as one of the major referral hospitals in the South West Region of Cameroon and provides care for patients with life-limiting conditions. Nurses routinely encounter patients requiring Palliative Care, however little empirical data exists on

the current level of knowledge, prevailing attitudes, and the specific challenges they face during routine clinical practice. This lack of localized evidence creates a barrier to designing effective, context-appropriate interventions. [5,7].

Understanding nurses competence to deliver Palliative Care is essential for reinforcing nursing education and improving patient outcomes. Moreover, identifying the specific challenges experienced by nurses can guide the development of interventions that promote patient centered care, improve workforce capacity and symptom management [3,8]. Therefore, the aim of this study is to assess the knowledge, attitudes and challenges faced by nurses delivering Palliative Care services at the Buea Regional Hospital.

## **Problem Statement**

Despite the increasing global recognition of Palliative Care as an essential component of healthcare, it's implementation in many developing countries including Cameroon remains limited. Nurses play a critical role in delivering Palliative Care as they are involved in pain management, symptom control and providing psychosocial support to patients. However many nurses face barriers such as inadequate training, limited institutional support and heavy workloads which may affect the quality of care provided.

At the Buea Regional Hospital, in the South West Region, nurses frequently care for patients with chronic and life-threatening conditions. However the level of nurses knowledge of Palliative Care, their attitudes towards providing Palliative Care and the specific challenges they encounter delivering these services are poorly documented. This lack of evidence limits the ability of healthcare administrators, educators and policy makers to design effective interventions and training programs aimed at strengthening PC services.

Therefore, assessing the knowledge, attitudes and challenges faced by nurses delivering palliative care at Buea Regional Hospital is necessary to identify gaps and improve the quality of care for patients with life-limiting illnesses.

## **Research Objectives**

### **General Objective**

To assess the knowledge, attitudes and challenges faced by nurses delivering palliative care services at Buea Regional Hospital.

### **Specific Objectives**

1. To assess the level of knowledge nurses have about palliative care
2. To explore the attitudes of nurses towards palliative care
3. To identify challenges faced by nurses in delivering palliative care

### **Research Questions**

1. What is the level of knowledge nurses have about palliative care in Buea Regional Hospital?
2. What are the attitudes of nurses toward palliative care delivery in Buea Regional Hospital?

3. What are the challenges nurses face when delivering palliative care in Buea Regional Hospital?

## 2.0 MATERIALS AND METHODS

This study was conducted using a cross-sectional hospital-based design. This study was conducted at the Buea Regional Hospital (BRH), located in the Buea Health District, Fako Division in the South West Region of Cameroon. BRH was chosen because it serves as an important referral center for Buea and neighboring communities and provided a wide range of specialized healthcare services.

The study population included all registered nurses providing direct patient care in the selected clinical units; surgical, medical, ICU, oncology, private and VIP units. Nurses who were unavailable during data collection or declined to provide informed consent were excluded. A total of 104 registered nurses participated in the study. Participants were recruited using a convenience sampling technique based on their availability and willingness to participate during the data collection period.

Data were collected using a well-structured questionnaire with closed ended multiple choice questions comprising of 4 sections: Socio-demographic characteristics of participants, Knowledge of Palliative Care, Attitudes towards Palliative Care and Challenges faced in Palliative Care delivery. Knowledge was assessed using ten questions, with correct answers scored as 1 and incorrect answers scored as 0. Attitudes was measured using a 5-point Likert scale, with scores ranging from strongly disagree (1) to strongly agree (5). Participants were also asked to identify barriers affecting the delivery of palliative care within their clinical practice. Reliability was ensured by pre-testing the questionnaire with nurses at the Limbe Regional Hospital to assess clarity, relevance and validity. Based on feedback obtained, corrections and modifications were made to the questionnaire to improve the overall quality.

Data were entered into Microsoft Excel and analyzed using the Statistical Package for Social Sciences (SPSS) version 28.0 for windows. Data collected were entered into and analyzed using statistical software. Descriptive statistics such as frequencies, percentages, tables and charts were used to summarize the data. Chi-square tests were performed to determine associations between socio-demographic characteristics and levels of knowledge and attitudes towards palliative care. Statistical significance was set at  $p < 0.05$ . Ethical clearance was obtained from the Faculty of Health Sciences, Department of nursing. Administrative authorization was sought from the Regional Delegation of Public Health and the Buea Regional Hospital administration. Participation was voluntary and written informed consent was obtained from every participant. Confidentiality and anonymity were maintained throughout the study by avoiding collection of personal identifiers.

## 3.0 FINDINGS

A total of 104 registered nurses participated in this study, with a majority being female (88.5%). Most participants were aged 26-30 years (41.3%) and held a Bachelor's degree in Nursing (59.6%). Nearly half of the participants had between one and five years of professional experience (Table 1).

**Table 1: Socio-Demographic and Professional Characteristics of Participants**

| Variable                                    | Category     | Frequency (n) | Percentage (%) |
|---------------------------------------------|--------------|---------------|----------------|
| Age Group (Years)                           | 20–25        | 29            | 27.9           |
|                                             | 26–30        | 43            | 41.3           |
|                                             | 31–35        | 12            | 11.5           |
|                                             | >35          | 20            | 19.2           |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Gender                                      | Female       | 92            | 88.5           |
|                                             | Male         | 12            | 11.5           |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Marital Status                              | Single       | 71            | 68.3           |
|                                             | Married      | 33            | 31.7           |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Highest Nursing Qualification               | Diploma      | 23            | 22.1           |
|                                             | Bachelor's   | 62            | 59.6           |
|                                             | Master's     | 14            | 13.5           |
|                                             | Other        | 5             | 4.8            |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Years of Nursing Experience                 | <2 years     | 31            | 29.8           |
|                                             | 2–5 years    | 46            | 44.2           |
|                                             | 6–10 years   | 17            | 16.3           |
|                                             | >10 years    | 10            | 9.6            |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Current Ward/Unit                           | Medical      | 30            | 28.8           |
|                                             | Surgical     | 25            | 24             |
|                                             | Private      | 16            | 15.4           |
|                                             | VIP          | 13            | 12.5           |
|                                             | ICU          | 12            | 11.5           |
|                                             | Oncology     | 8             | 7.7            |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Received Formal Training in Palliative care | Yes          | 79            | 76             |
|                                             | No           | 25            | 24             |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |
| Cared for a Terminally ill patient          | Yes          | 101           | 97.1           |
|                                             | No           | 3             | 2.9            |
|                                             | <b>Total</b> | <b>104</b>    | <b>100</b>     |

### 3.1 Knowledge of Palliative Care

Nurses demonstrated a generally high level of knowledge regarding palliative care. The mean knowledge score was 8.02 (SD = 1.42). 68.3% of nurses demonstrated good knowledge while 31.7% demonstrated poor knowledge. All participants correctly identified that effective communication is important in palliative care and most participants correctly identified palliative care as a holistic approach aimed to improve quality of life. However, gaps were identified in knowledge of the primary focus of palliative care and the appropriate stage of illness for initiation (64.4% correct), suggesting specific areas requiring targeted educational reinforcement (Table 2).

**Table 2: Knowledge of Palliative Care Among Nurses**

| Variable                                                       | Category                                   | Frequency<br>(n) | Percentage<br>(%) |
|----------------------------------------------------------------|--------------------------------------------|------------------|-------------------|
| Primary focus of Palliative care                               | Cure of disease                            | 5                | 4.8               |
|                                                                | Relief of pain and suffering               | 68               | 65.4              |
|                                                                | Life-prolonging treatment only             | 29               | 27.9              |
|                                                                | Emergency care                             | 2                | 1.9               |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Appropriate stage of illness for Palliative care initiation    | Only at the end of life                    | 17               | 16.3              |
|                                                                | Only after curative treatment fails        | 17               | 16.3              |
|                                                                | At any stage of a life-threatening illness | 67               | 64.4              |
|                                                                | Only in hospices                           | 3                | 2.9               |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Core components of Palliative care                             | Pain management                            | 19               | 18.3              |
|                                                                | Psychological support                      | 7                | 6.7               |
|                                                                | Spiritual care                             | 0                | 0                 |
|                                                                | All of the above                           | 78               | 75                |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Target group of Palliative care                                | Patients only                              | 19               | 18.3              |
|                                                                | Families only                              | 0                | 0                 |
|                                                                | Both patients and families                 | 85               | 81.7              |
|                                                                | Healthcare workers                         | 0                | 0                 |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Communication is important in Palliative care                  | True                                       | 104              | 100               |
|                                                                | False                                      | 0                | 0                 |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Use of Morphine for pain control in Palliative care            | True                                       | 81               | 77.9              |
|                                                                | False                                      | 23               | 22.1              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| The goal of Palliative care includes improving quality of life | True                                       | 91               | 87.5              |
|                                                                | False                                      | 13               | 12.5              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Professional team members involved in palliative care          | Nurses                                     | 17               | 16.3              |
|                                                                | Doctors                                    | 0                | 0                 |
|                                                                | Social workers                             | 2                | 1.9               |
|                                                                | All of the above                           | 85               | 81.7              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Palliative care can be provided alongside curative treatment   | True                                       | 76               | 73.1              |
|                                                                | False                                      | 28               | 26.9              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>100</b>        |
| Palliative care is only for cancer patients.                   | True                                       | 5                | 4.8               |
|                                                                | False                                      | 99               | 95.2              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>10</b>         |
| Overall knowledge level                                        | Good                                       | 71               |                   |
|                                                                | Poor                                       | 33               | 68.3              |
|                                                                | <b>Total</b>                               | <b>104</b>       | <b>31.7</b>       |

### 3.2 Attitudes Toward Palliative Care

The results reveal a predominantly positive attitude toward palliative care among nurses at BRH. Overall, 93 nurses (89.4%) demonstrated positive attitudes, while only 11 nurses (10.6%)

held negative attitudes. The mean total attitude score was 33.46 (SD = 6.12), indicating that, on average, respondents held above-neutral positive attitudes toward palliative care (Table 3). No socio-demographic factor was significantly associated with the overall attitude.

**Table 3: Attitudes Toward Palliative Care Among Nurses**

| Variable                                                                | Strongly Disagree n (%) | Disagree n (%) | Neutral n (%) | Agree n (%) | Strongly Agree n (%) | Mean ± SD   |
|-------------------------------------------------------------------------|-------------------------|----------------|---------------|-------------|----------------------|-------------|
| Palliative care is an essential part of nursing practice                | 8 (7.7)                 | 0 (0)          | 3 (2.9)       | 43 (41.3)   | 50 (48.1)            | 4.22 ± 1.08 |
| Caring for terminally ill patients is emotionally rewarding             | 6 (5.8)                 | 13 (12.5)      | 27 (26.0)     | 44 (42.3)   | 14 (13.5)            | 3.45 ± 1.06 |
| Nurses should be actively involved in palliative care decision-making   | 4 (3.8)                 | 6 (5.8)        | 12 (11.5)     | 39 (37.5)   | 43 (41.3)            | 4.07 ± 1.05 |
| Palliative care improves patients' dignity at the end of life           | 7 (6.7)                 | 6 (5.8)        | 19 (18.3)     | 38 (36.5)   | 34 (32.7)            | 3.83 ± 1.15 |
| I feel comfortable discussing end-of-life issues with patients/families | 8 (7.7)                 | 23 (22.1)      | 37 (35.6)     | 28 (26.9)   | 8 (7.7)              | 3.05 ± 1.06 |
| Palliative care should be integrated into routine hospital services     | 5 (4.8)                 | 8 (7.7)        | 22 (21.2)     | 47 (45.2)   | 22 (21.2)            | 3.70 ± 1.04 |
| I feel adequately prepared to provide palliative care to patients       | 7 (6.7)                 | 5 (4.8)        | 36 (34.6)     | 43 (41.3)   | 13 (12.5)            | 3.48 ± 1.00 |
| I think nurses need more training before providing palliative care      | 5 (4.8)                 | 6 (5.8)        | 8 (7.7)       | 49 (47.1)   | 36 (34.6)            | 4.01 ± 1.05 |
| Providing palliative care increases my professional satisfaction        | 7 (6.7)                 | 6 (5.8)        |               |             |                      |             |

### 3.3 Challenges Faced in Delivering Palliative Care

The most frequently reported challenges were inadequate training (55.8%) and emotional stress and burnout (55.8%), followed by cultural or religious barriers (51.0%). Poor communication with family members (36.5%) and shortage of staff (34.6%) were also commonly cited. Critically, 82.7% of nurses reported that challenges had at some point prevented them from delivering quality palliative care. While 68.3% felt adequately supported by hospital management, 46.2% rated institutional support as only moderately impactful on care delivery (Table 4).

**Table 4: Challenges Faced by Nurses in Palliative Care Delivery**

| Challenge                                     | Frequency (n) | Percentage (%) |
|-----------------------------------------------|---------------|----------------|
| Inadequate training                           | 58            | 55.8           |
| Emotional stress and burnout                  | 58            | 55.8           |
| Cultural or religious barriers                | 53            | 51.0           |
| Poor communication with family members        | 38            | 36.5           |
| Shortage of staff                             | 36            | 34.6           |
| Lack of guidelines or protocols               | 35            | 33.7           |
| Lack of essential medications (e.g., opioids) | 31            | 29.8           |
| Heavy workload                                | 31            | 29.8           |

## Discussion

This study aimed to assess the knowledge, attitudes and challenges faced by nurses delivering palliative care services at the Buea Regional Hospital. Majority of the participants were female (88.5%), and were within the age group of 26-30 years (41.3%) and had between 2-5 years of working experience (44.2%).

The present study found that majority of the participants demonstrated good knowledge of palliative care (68.3%). This finding suggests that many nurses possess basic understanding of the principles of palliative care, the nurses' clinical exposure to critically ill patients and may also be influenced by previous professional training and educational background. However, important gaps remained such as the knowledge of the primary focus of palliative care and the timing of palliative care initiation and its application beyond end-of-life care. These findings are consistent with studies carried out in several African countries where nurses demonstrated moderate knowledge of palliative care alongside positive professional perceptions toward end-of-life care and emphasized the importance of structured palliative care training programs in improving nurses' competence [9, 7].

Most participants expressed positive attitudes toward providing palliative care (89.4%). Most nurses acknowledged that palliative care is an essential component of nursing practice and recognized the importance of maintaining patient dignity, relieving suffering, supporting families and providing compassionate care. The generally positive attitudes observed in this study may be due to nurses' frequent exposure to critically ill patients and continuous interaction with patients requiring supportive care may have also increased nurses' appreciation of the importance of comfort, dignity and holistic care. However, the discomfort expressed by some nurses when discussing death and end-of-life issues may be related to emotional burden, cultural beliefs surrounding death and dying and inadequate communication training in palliative care. The findings align with previous research showing that nurses demonstrate positive attitudes toward palliative care and also further identified factors such as female gender and clinical exposure as contributors to positive attitudes [9,10,11].

Despite adequate knowledge and positive attitudes, participants identified several challenges affecting palliative care delivery. Inadequate training and emotional stress were the most frequently cited barriers, followed by cultural and religious beliefs, shortages of resources, limited institutional support and heavy workloads. These findings illustrate that knowledge alone is insufficient to ensure effective palliative care delivery. Similar barriers have been documented across sub-Saharan Africa where shortage of trained personnel, lack of essential medications, inadequate institutional policies continue to hinder palliative care implementation [12,13,14].

The fact that 82.7% of nurses reported that these challenges had prevented them from delivering quality palliative care demonstrates the significant impact of these barriers on patient care outcomes, and emphasizes the importance of educational interventions and institutional policies.

## 4.0 CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study revealed that nurses at Buea Regional Hospital demonstrated generally good knowledge of Palliative Care, although some gaps still existed in specialized areas such as the primary focus.

Most nurses demonstrated positive attitudes toward palliative care and recognized its importance in improving patient comfort, dignity and quality of life. However, some nurses still experienced discomfort when discussing end-of-life issues with patients and families.

The study identified several challenges hindering the effective delivery of Palliative Care, including inadequate training, emotional stress, cultural barriers, shortage of staff, lack of medications and limited institutional support, which negatively affected the quality of Palliative care delivery.

### Recommendations

To the nurses; actively participate in continuous professional education and training programs on Palliative Care to improve their knowledge and practical skills. To also improve communication with patients and family members and to encourage teamwork and collaboration among healthcare professionals involved in Palliative Care.

To the Buea Regional Hospital; The Hospital management should organize regular workshops and seminars on Palliative Care for nurses, also clear guidelines and protocols for Palliative Care services should be developed and implemented.

### Acknowledgements

The authors thank all the nurses who took part in this study.

### Limitations of the study

This study was conducted in only one health facility in the Fako division of South West Region.

### Conflict of interest

The authors declare they have no conflict of interest.

### References

- World Health Organization. Palliative care [Internet]. Geneva: World Health Organization; 2020 [cited 2025 Dec 14]. Available from: <https://www.who.int/news-room/fact-sheets/detail/palliative-care>
- Wantonoro W, Suryaningsih EK, Anita DC, Nguyen TV. Palliative care: a concept analysis review. *SAGE Open Nursing*. 2022 Aug;8:23779608221117379.
- Rafiee S, Azizi-Fini I, Banihashemi ZS, Yadollahi S. Knowledge and attitude towards palliative care and associated factors among nurse: a cross-sectional descriptive study. *BMC nursing*. 2024 Dec 23;23(1):947.

- Connor SR, Gwyther E. The worldwide hospice palliative care alliance. *Journal of pain and symptom management*. 2018 Feb 1;55(2):S112-6.
- Ooms GI, van Oirschot J, de Kant D, van den Ham HA, Mantel-Teeuwisse AK, Reed T. Barriers to accessing internationally controlled essential medicines in sub-saharan Africa: A scoping review. *International Journal of Drug Policy*. 2023 Aug 1;118:104078.
- Chance EA, Théophile P, Loe LR. A qualitative study of differences in palliative care in hospitals and traditional home-based care in Cameroon. *BMC Palliative Care*. 2025 Oct 6;24(1):242.
- Bassah N, Tendongfor N, Ebob-Anyia BA, Eta VA, Esembeson M, Ngah NE, Abdul-Rahim SA. Impact of Psychosocial and Palliative Care Training on Nurses' Competences and Care of Patients With Cancer in Cameroon: Protocol for Quasi-Experimental Study. *JMIR Research Protocols*. 2025 Jan 3;14(1):e64871.
- Bastos F, Garralda E, Montero A, Rhee JY, Arias-Casais N, Luyirika E, Namisango E, Pereira J, Centeno C, Tripodoro VA. Comprehensive scoping review of palliative care development in Africa: recent advances and persistent gaps. *Frontiers in Health Services*. 2024 Dec 9;4:1425353.
- Mengual TE, Chover-Sierra E, Ballestar-Tarín ML, Saus-Ortega C, Gea-Caballero V, Colomer-Pérez N, Martínez-Sabater A. Knowledge about palliative care and attitudes toward care of the dying among primary care nurses in Spain. *Healthcare (Basel)*. 2023;11(7):1018.
- Agyei KG, Yahaya AR, Ansong CA, Sarfo J, Oteng B, Boahe G, Norton SA. Knowledge and attitudes of undergraduate nursing students towards palliative care. *International Journal of Palliative Nursing*. 2025 Oct 2;31(10):473-82.
- Getie A, Wondmienenh A, Mengesha A, Fitwi A, Gedefaw G, Demis A. Assessment of knowledge and attitude towards palliative care and associated factors among nurses working in North Wollo hospitals. *Ethiop J Health Sci*. 2021;31(2).
- Amroudi MS, Raeissi P, Hashemi SM, Reisi N, Ahmadi SA. Investigating the challenges and barriers of palliative care delivery in Iran and the World: A systematic review study. *J Educ Health Promot*. 2021;10:246.
- Negasa EH, Human SP, Roro AG. Challenges in palliative care provision in Ethiopia: an exploratory qualitative study. *J Pain Res*. 2023;16:3405-3415.
- Agom DA, Onyeka TC, Iheanacho PN, Ominyi J. Barriers to the provision and utilization of palliative care in Africa: a rapid scoping review. *Indian J Palliat Care*. 2021;27(1):3-17. doi:10.4103/IJPC.IJPC\_355\_20.