**Post-Surgical Chemotherapeutics’ Experiences of Patients with Cancer in the Lens of Student Nurses**

**Abstract**

Cancer patients undergoing post-surgical chemotherapy face profound physical, emotional, and psychological challenges. This qualitative study explores these experiences through the lens of student nurses who provided direct care during their clinical rotations. Using an exploratory descriptive design and Braun and Clarke’s thematic analysis framework, data were gathered from semi-structured interviews and reflective journals of 19 undergraduate nursing students. Three major themes emerged: Witnessing Vulnerability and Resilience, Emotional Labor and Professional Identity Formation, and Communication as a Tool for Compassionate Care. Student nurses observed patients navigating cycles of strength and suffering, demonstrating emotional fortitude amid severe side effects. These encounters elicited strong emotional responses from the students, which played a pivotal role in shaping their empathy, clinical judgment, and emerging professional identity. The study highlights the dual impact of clinical exposure, providing students with real-world insight into patient-centered oncology care while also emphasizing the need for emotional support and reflective learning in nursing education. Findings suggest that nursing programs should incorporate structured reflection, communication training, and emotional resilience-building to better prepare students for the demands of oncology care. Moreover, mentorship from experienced clinicians can bridge the gap between theory and practice, enhancing the students’ confidence and compassion. This research underscores the transformative potential of clinical learning and its implications for improving both patient care outcomes and the quality of nursing education. By understanding cancer care through the eyes of student nurses, the study contributes to a more holistic and human-centered approach in preparing future nurses for complex healthcare environments.

**Keywords:** Oncologic nursing, student nurses, Chemotherapy, surgical nursing, qualitative inquiry

**Introduction and Background of the Study**

Cancer remains one of the leading causes of morbidity and mortality worldwide. According to the World Health Organization (2022), cancer is responsible for approximately 10 million deaths annually, making it a critical global health concern (Bray et al., 2022). Treatments such as surgery and chemotherapy play a significant role in prolonging life and improving outcomes, yet they often come with a heavy emotional, physical, and psychological burden. For many patients, chemotherapy following surgery represents one of the most challenging periods in their cancer journey due to the compounded stress of recovery and treatment side effects (American Cancer Society, 2023 as cited by Pulumati et al., 2023). While numerous studies have documented the clinical outcomes of cancer therapy, fewer have examined the subjective experiences of patients from the perspective of those who provide daily care—such as student nurses.

Student nurses play a pivotal role in direct patient care during their clinical placements. Their frequent bedside presence allows them to develop close, compassionate relationships with patients, making them uniquely positioned to observe and understand patients’ post-surgical chemotherapy experiences (Benner, 1984). Unlike experienced nurses who may adopt more clinical detachment, student nurses often exhibit heightened emotional engagement and curiosity, making their observations rich sources of qualitative insight. Their experiences are not only educational but can also inform more empathetic care practices within the broader health care team.

The transition from surgery to chemotherapy is a critical time for patients. It is a phase marked by physical vulnerability, emotional distress, and existential questioning (Tu et al., 2022). Patients may struggle with pain, fatigue, fear of recurrence, and disruptions in body image and lifestyle. These complex experiences are often underreported or unexpressed, yet student nurses, due to their constant interaction and attentive care, may be the first to notice subtle shifts in mood, coping strategies, and interpersonal communication (Bergerot et al., 2024). This highlights the value of documenting and analyzing their perceptions.

Understanding patient experiences from the lens of student nurses adds a valuable layer to the existing literature on cancer care. Their reflections can help humanize patient narratives and identify unmet needs in emotional and psychosocial support. Furthermore, they offer insights into how novice practitioners begin to develop clinical judgment, empathy, and professional identity through direct encounters with suffering and resilience (Azarabadi et al., 2024). In this way, their experiences become a two-way mirror, illuminating both the realities of cancer care and the formative process of nursing education.

This dual perspective also provides opportunities to improve educational strategies. By analyzing the challenges student nurses face while caring for post-surgical chemotherapy patients, nursing programs can tailor curricula that foster emotional preparedness, critical thinking, and ethical sensitivity. These improvements can translate into more confident, compassionate professionals who are better equipped to address the multifaceted needs of oncology patients (Longhini et al., 2024).

Therefore, this study aims to explore the experiences of cancer patients undergoing post-surgical chemotherapy through the narratives and reflections of student nurses. It seeks to capture how these students perceive patient struggles, adaptation, and recovery, while also understanding their own growth in clinical competence and empathy. Through this lens, the research aspires to contribute to both improved patient-centered care and enhanced nursing education.

**Research Objectives**

The primary objective of this study is to explore and understand the lived experiences of cancer patients undergoing post-surgical chemotherapy from the perspective of student nurses. Specifically, the study aims to (1) identify the physical, emotional, and psychosocial challenges observed by student nurses during patient care; (2) examine how student nurses interpret and respond to these patient experiences within the context of their clinical learning; and (3) analyze how such encounters influence the development of empathy, clinical competence, and professional identity among nursing students. Through these objectives, the study seeks to contribute to the enhancement of both patient-centered oncology care and nursing education practices.

**Methodology**

This study employed an exploratory descriptive inquiry design to gain in-depth insights into the experiences of cancer patients undergoing post-surgical chemotherapy as perceived by student nurses. This qualitative approach is appropriate for examining complex, subjective human experiences and is particularly suited for areas with limited existing research (Sibeoni et al., 2020). Data were collected through semi-structured interviews and reflective journals from student nurses during their clinical rotations in oncology settings. Thematic analysis was used to identify patterns and meanings within the data, allowing for a rich description of both patient experiences and student nurse perspectives (Chichua et al., 2025). This method facilitated the exploration of real-life contexts while capturing the emotional and clinical nuances observed by the participants.

The population for this study consisted of undergraduate student nurses who were currently enrolled in a Bachelor of Science in Nursing (BSN) program and had completed or were actively engaged in clinical placements in oncology units where they cared for patients undergoing post-surgical chemotherapy. These students were selected because of their direct, hands-on experience with cancer patients during a critical phase of treatment, making them well-positioned to provide valuable insights into patient care and personal learning.

A purposive sampling technique was employed to identify participants who met specific inclusion criteria: (1) active enrollment in a BSN program, (2) completion of at least one clinical rotation in an oncology setting, and (3) willingness to share reflective narratives or participate in interviews. This sampling approach ensured that participants had relevant and recent exposure to the research topic. The sample size was determined based on the principle of data saturation, with approximately 19 student nurses participating, or until no new themes emerged from the data. This method allowed for a focused, in-depth exploration of the student nurses' perspectives while maintaining the richness and credibility of qualitative research.

Data collection for this study involved two primary qualitative methods: semi-structured interviews and reflective journals. Semi-structured interviews were conducted either face-to-face or via secure video conferencing platforms, allowing participants to share their experiences in a conversational yet guided manner (Archibald et al., 2019). An interview guide was used to ensure consistency while also allowing flexibility for participants to elaborate on meaningful experiences. In addition to interviews, participants were asked to submit reflective journals they had written during or after their clinical rotations in oncology units. These journals provided rich, narrative insights into their thoughts, emotions, and observations while caring for post-surgical chemotherapy patients.

To ensure the ethical integrity of the study, ethical clearance was obtained from the institution’s research ethics committee prior to data collection. Participants were provided with an informed consent form that clearly explained the purpose of the study, their rights as participants, the voluntary nature of their involvement, and assurances of confidentiality and anonymity. Pseudonyms were used in all transcripts and reports to protect participant identities. Participants were also informed of their right to withdraw from the study at any point without any academic or personal consequences. Data were securely stored in password-protected digital files and were accessible only to the research team. These ethical undertakings ensured that the study upheld the principles of respect, beneficence, and justice as outlined in ethical research guidelines such as those provided by the American Nurses Association (ANA) in 2015 (Barrow et al., 2022).

Table 1. Participants’ Profile

|  |  |  |  |
| --- | --- | --- | --- |
| **Profile Variable** | **Category/Description** | **Frequency (n)** | **Percentage (%)** |
| **Total Participants** |  | 19 | 100% |
| **Age Range** | 20–21 years | 7 | 36.8% |
|  | 22–23 years | 9 | 47.4% |
|  | 24 years | 3 | 15.8% |
| **Gender** | Female | 15 | 78.9% |
|  | Male | 4 | 21.1% |
| **Year Level** | 3rd Year | 11 | 57.9% |
|  | 4th Year | 8 | 42.1% |
| **Clinical Rotation in Oncology** | Completed | 19 | 100% |
| **Experience with Cancer Patients** | Direct caregiving during post-surgical chemotherapy | 19 | 100% |
| **Prior Exposure to Cancer (e.g., family, volunteer work)** | Yes | 6 | 31.6% |
|  | No | 13 | 68.4% |

 **Data Analysis**

In the first phase of Braun and Clarke’s thematic analysis, **familiarization with the data**, the researchers immersed themselves in the interview transcripts and reflective journals of the 19 student nurses. Through repeated readings, initial observations began to surface, particularly revolving around emotional reactions to patient suffering, the physical toll of chemotherapy, and the transformative impact of clinical exposure. Students expressed empathy, shock, and admiration as they recalled the resilience of their patients. These early impressions laid the groundwork for a deeper thematic understanding of their experiences in oncology care.

The second phase, **generating initial codes**, involved systematically identifying and organizing significant features of the data. Key codes included "emotional connection with patients," "uncertainty in care tasks," "observation of chemotherapy effects," "coping strategies," and "developing empathy." These codes revealed not only the challenges patients faced, such as hair loss, nausea, and emotional instability, but also the internal struggles and growth the student nurses experienced. Many students emphasized their desire to comfort patients despite feeling inadequately prepared, underscoring their emerging professional identity and emotional sensitivity.

During the third phase, **searching for themes,** the research team grouped related codes into broader, overarching themes that represented core patterns in the dataset. Three prominent themes emerged: Witnessing Vulnerability and Resilience, Emotional Labor and Professional Identity Formation, and Communication as a Tool for Compassionate Care. These themes reflected both the patient experience through the lens of student nurses and the personal and professional development students underwent during their oncology rotation.

In the fourth phase, **reviewing themes**, each proposed theme was revisited and evaluated against the dataset to ensure coherence and consistency. The theme Witnessing Vulnerability and Resilience captured students' accounts of patients who alternated between physical suffering and emotional strength. Students described observing patients bravely facing chemotherapy side effects, such as fatigue and hair loss, while also displaying moments of vulnerability through tears or expressions of fear. These dual observations allowed students to reflect on the complexity of human strength and the deeply personal nature of cancer treatment.

The fifth phase, **defining and naming themes**, involved refining the meaning of each theme and articulating what each represented. The theme Emotional Labor and Professional Identity Formation highlighted the internal journey of student nurses as they managed their emotions while learning to support others. Many shared stories of emotional exhaustion, but also noted how these experiences made them feel more committed to the nursing profession. They began to see themselves not just as learners but as caregivers, developing confidence and a deeper understanding of compassionate practice.

The third theme, Communication as a Tool for Compassionate Care, was also defined in this phase. Student nurses emphasized how communication, both verbal and non-verbal, played a crucial role in building trust and easing patient anxiety. Simple acts like listening attentively, offering a reassuring touch, or sitting beside a patient in silence were seen as powerful tools. Students noted that effective communication not only improved patient morale but also made them feel more capable and connected as future nurses.

Across all themes, the students’ reflections illustrated how their experiences in caring for post-surgical chemotherapy patients became formative moments in their nursing education. These encounters allowed them to see beyond the clinical procedures and into the emotional world of their patients, enriching their understanding of holistic care. Many students expressed a newfound respect for cancer patients and a deeper commitment to patient-centered nursing practice.

Thus, applying Braun and Clarke’s thematic analysis (Nabirye et al., 2025) revealed that student nurses, through their close and often intense interactions with cancer patients, developed critical emotional, communicative, and professional skills. Their narratives highlighted how witnessing human vulnerability and strength in clinical settings contributed to their growth, not only as healthcare providers but as empathetic individuals. These insights have important implications for both nursing education and oncology care, suggesting the value of structured reflection and emotional support in shaping competent, compassionate nurses.

**Results and Discussion**

This section presents an in-depth analysis of the experiences of student nurses caring for cancer patients undergoing post-surgical chemotherapy. Using Braun and Clarke’s (2006) thematic analysis framework, the qualitative data collected from interviews and reflective journals were systematically examined to uncover key themes reflecting both patient experiences and student nurses’ personal and professional growth. The findings highlight the complexities of patient vulnerability, the emotional challenges faced by student nurses, and the critical role of communication in delivering compassionate care. These themes provide valuable insights into the intersection of oncology nursing practice and nursing education.

TABLE 2. The themes developed from the interviews

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Theme** | **Sub-Theme** | **Meaning Unit** | **Translated Statement (English)** | **Translated Statement (Tagalog)** |
| Witnessing Vulnerability and Resilience | Physical and Emotional Challenges | Patients suffer physically but remain emotionally strong | “Patients endure severe fatigue and nausea, yet still find strength to smile.” | “Sakit na pagkapagod at pagsusuka ang nararanasan ng mga pasyente, pero nakakahanap pa rin sila ng lakas para ngumiti.” |
|  | Emotional Fluctuations | Patients show moments of hope and despair | “I saw patients cry one moment, then gather courage the next.” | “Nakita ko ang mga pasyente na umiiyak sa isang sandali, tapos nagpapakatatag sa susunod.” |
| Emotional Labor and Professional Identity Formation | Emotional Impact on Students | Students feel both overwhelmed and motivated | “Caring for them made me feel emotionally exhausted but more determined to be a nurse.” | “Ang pag-aalaga sa kanila ay nakakapagod sa emosyon pero lalo akong na-inspire maging nurse.” |
|  | Growth in Empathy | Developing deeper understanding through patient stories | “Hearing their stories helped me understand their pain beyond the physical.” | “Ang pakikinig sa kanilang kwento ay tumulong sa akin na maintindihan ang kanilang sakit higit sa pisikal.” |
| Communication as a Tool for Compassionate Care | Verbal and Non-Verbal Communication | Small gestures build trust and comfort | “A simple touch or listening quietly made a big difference for patients.” | “Ang simpleng haplos o tahimik na pakikinig ay malaking bagay sa mga pasyente.” |
|  | Building Therapeutic Relationships | Effective communication improves patient morale | “When I took time to talk with patients, they seemed less anxious.” | “Kapag naglaan ako ng oras para makipag-usap sa mga pasyente, parang nabawasan ang kanilang pagkabalisa.” |

The table highlights three overarching themes that emerged from the analysis of student nurses’ narratives about caring for cancer patients undergoing post-surgical chemotherapy: *Witnessing Vulnerability and Resilience*, *Emotional Labor and Professional Identity Formation*, and *Communication as a Tool for Compassionate Care*. Each theme is supported by sub-themes and meaning units that shed light on the complex experiences of both patients and student nurses, emphasizing the dual focus on patient suffering and nursing education.

The first theme, *Witnessing Vulnerability and Resilience*, underscores how student nurses observed the physical and emotional challenges faced by patients during chemotherapy. Patients endure severe symptoms such as fatigue and nausea, yet many maintain a courageous and hopeful attitude. This aligns with findings from Lyu et al. (2024), who reported that cancer patients often exhibit remarkable resilience despite intense treatment-related suffering. Recognizing this vulnerability alongside resilience helps student nurses develop a holistic understanding of patient experiences beyond clinical symptoms.

The sub-theme of emotional fluctuations further reveals the dynamic emotional landscape patients navigate. Student nurses recounted moments where patients expressed despair through tears but quickly regained composure and hope. Such oscillations are consistent with Flaubert et al., (2021) description of cancer as a journey marked by uncertainty and emotional variability. These observations highlight the importance of emotional support as a continuous and adaptable aspect of nursing care during chemotherapy.

Moving to the second theme, *Emotional Labor and Professional Identity Formation*, the data reflect the significant emotional impact that caring for oncology patients has on student nurses. Many students felt overwhelmed yet motivated, illustrating the emotional labor inherent in nursing (Salehi et al., 2025). This labor involves managing one’s own feelings while supporting the patient, a complex skill that develops through clinical exposure. The dual feelings of exhaustion and inspiration underscore the transformative nature of such experiences on students’ personal and professional growth.

The sub-theme of growth in empathy illustrates how direct patient interactions deepen students’ understanding of suffering beyond physical symptoms. Through hearing patients’ stories, students gained insights into the psychosocial dimensions of cancer care, a finding supported by Pohontsch et al., (2024), who emphasize the role of narrative and reflection in cultivating empathy among nursing students. This empathic development is critical for fostering compassionate, patient-centered care.

The third theme, *Communication as a Tool for Compassionate Care*, highlights the pivotal role communication plays in oncology nursing. Both verbal and non-verbal communication techniques, such as attentive listening and gentle touch, were identified as powerful means of building trust and providing comfort. This echoes findings by Crivelli et al., (2024) who stress that effective communication enhances patient satisfaction and emotional well-being during cancer treatment.

Within this theme, the sub-theme of building therapeutic relationships further emphasizes that investing time in patient conversations reduces anxiety and fosters a supportive environment. The therapeutic relationship is a cornerstone of nursing care, particularly in oncology where patients often face fear and uncertainty (Opland & Torrico, 2024). Student nurses’ awareness of this dynamic reveals their growing professional competence and sensitivity to patient needs.

Overall, the themes reflect a comprehensive view of the student nurses’ clinical experiences, balancing the emotional demands of caring for vulnerable patients with the educational opportunities to build resilience and empathy. These findings support the argument by Benner (1984) that experiential learning in clinical settings is essential for developing nursing expertise and emotional intelligence (Aryuwat et al., 2024).

The data also suggest that nursing education programs should intentionally incorporate structured reflection and emotional support to help students process the intense experiences encountered in oncology care (Kerr et al., 2022). Providing these resources may reduce emotional exhaustion and foster sustained compassion, ultimately benefiting both student well-being and patient care quality.

Thus, the thematic analysis of student nurses’ reflections offers valuable insights into the interplay between patient vulnerability, emotional labor, and communication in post-surgical chemotherapy care. These findings reinforce the importance of holistic, patient-centered approaches in nursing education and practice, highlighting the need to support student nurses emotionally and professionally as they develop into competent, compassionate healthcare providers.

The findings of this study hold significant implications for **nursing education**, particularly in the design and delivery of clinical training programs. Student nurses' reflections revealed that exposure to post-surgical chemotherapy care provided more than just technical learning—it fostered empathy, emotional resilience, and professional identity development. Therefore, nursing curricula should integrate **reflective learning strategies** such as journaling, debriefing sessions, and guided discussions to help students process their emotional experiences. These activities can enhance critical thinking and deepen understanding of the human aspects of care, which are often underemphasized in traditional clinical evaluations (Negm et al., 2022).

Moreover, the study underscores the need to include structured lessons on **emotional labor and coping mechanisms** in nursing education. The emotional intensity of oncology care can be overwhelming for students, particularly those encountering severe patient suffering for the first time. Incorporating modules on mental health, self-care, and stress management within nursing programs can equip students with the tools to manage their emotions and prevent burnout. According to Alodhialah et al., (2024), recognizing emotional labor as a legitimate and essential part of nursing practice is key to sustaining compassionate care over time.

From a **clinical practice** standpoint, the findings emphasize the value of **mentorship and support systems**in oncology settings. Preceptors and clinical instructors should be trained to recognize the emotional needs of students and provide appropriate guidance during challenging care experiences. Supportive supervision can help students feel more confident in their abilities while also promoting patient safety and ethical practice. Mikkonen et al., (2024) argues that mentorship is vital in bridging the gap between theoretical knowledge and experiential learning, especially during emotionally charged encounters like those in cancer care.

In addition, the importance of **effective communication** as observed by student nurses points to a broader implication for both education and practice: the need to formally teach and model therapeutic communication skills. While communication is often discussed in theory, students benefit greatly from seeing these skills applied in real-life clinical settings. Simulation-based training, role-playing, and observation of seasoned nurses engaging with patients can reinforce how communication fosters trust, alleviates anxiety, and contributes to holistic care (Madayag et al., 2024).

On the other hand, the findings support the integration of **patient-centered care models** in both academic and clinical settings. By recognizing patients as individuals with emotional, physical, and psychosocial needs, as observed by the students, nursing education can better prepare future nurses to approach care holistically. Embedding principles of Jean Watson’s Theory of Human Caring or other holistic frameworks into the curriculum can align educational goals with practice realities, ensuring that students graduate not only as skilled clinicians but also as compassionate caregivers (Seniwati, et al., 2023).

**Conclusions**

This study explored the experiences of cancer patients undergoing post-surgical chemotherapy through the lens of student nurses. The findings revealed that student nurses are in a unique position to observe the multifaceted nature of patient care, including the physical, emotional, and psychological struggles patients endure. Themes such as vulnerability and resilience, emotional labor, and the role of communication emerged as central to their narratives. These experiences not only deepened the student nurses’ understanding of holistic care but also contributed significantly to their development of empathy, professional identity, and clinical confidence. Overall, the study highlights the profound impact that real-life clinical exposure in oncology settings can have on the personal and professional growth of student nurses.

 **Recommendations**

Based on the findings, several recommendations are proposed for nursing education and clinical practice. First, nursing schools should integrate structured reflective activities, such as journaling and debriefing, to help students process their emotional experiences and develop critical self-awareness. Second, curricula should include focused content on emotional resilience and self-care strategies to prepare students for the demands of emotionally intensive clinical environments. Third, clinical preceptors and educators should provide supportive supervision and mentorship, especially during complex or emotionally challenging patient care situations. Fourth, communication skills training should be enhanced through simulations and real-life case discussions to emphasize the importance of therapeutic interactions. Lastly, both academic and clinical institutions should foster a culture that values emotional intelligence and holistic, patient-centered care as essential components of professional nursing practice.

**COMPETING INTERESTS DISCLAIMER:**

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

**References**

Alodhialah AM, Almutairi AA, Almutairi M. Exploring Nurses' Emotional Resilience and Coping Strategies in Palliative and End-of-Life Care Settings in Saudi Arabia: *A Qualitative Study. Healthcare (Basel).* 2024 Aug 19;12(16):1647. doi: 10.3390/healthcare12161647. PMID: 39201205; PMCID: PMC11353972.

Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants. *International Journal of Qualitative Methods*, *18*. <https://doi.org/10.1177/1609406919874596> (Original work published 2019)

Aryuwat P, Holmgren J, Asp M, Radabutr M, Lövenmark A. Experiences of Nursing Students Regarding Challenges and Support for Resilience during Clinical Education: *A Qualitative Study. Nurs Rep*. 2024 Jun 28;14(3):1604-1620. doi: 10.3390/nursrep14030120. PMID: 39051356; PMCID: PMC11270303.

Azarabadi A, Bagheriyeh F, Moradi Y, Orujlu S. Nurse-patient communication experiences from the perspective of Iranian cancer patients in an outpatient oncology clinic: a qualitative study. *BMC Nurs*. 2024 Sep 27;23(1):682. doi: 10.1186/s12912-024-02339-4. PMID: 39334158; PMCID: PMC11438122.

Barrow JM, Brannan GD, Khandhar PB. Research Ethics. [Updated 2022 Sep 18]. In*: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing*; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK459281/>

Bergerot, C., Bergerot, P. G., Maués, J., Segarra-Vazquez, B., Mano, M. S., & Tarantino, P. (2024). Is cancer back?—Psychological issues faced by survivors of breast cancer. *Annals of Palliative Medicine, 13*(5), 1229–1234. <https://doi.org/10.21037/apm-24-54>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, Jemal A. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024 May-Jun;74(3):229-263. doi: 10.3322/caac.21834. Epub 2024 Apr 4. PMID: 38572751.

Chichua, M., Mazzoni, D., Marzorati, C., & Pravettoni, G. (2025). The journey of patients in cancer clinical trials: A qualitative meta-synthesis on experiences and perspectives. Patient Education and Counseling, 130, 108469. <https://doi.org/10.1016/j.pec.2024.108469>

Crivelli AF, Barello S, Acampora M, Bonetti L. Uncovering Nursing Communication Strategies and Relational Styles to Foster Patient Engagement in Oncology: A Scoping Review. *Healthcare (Basel*). 2024 Jun 25;12(13):1261. doi: 10.3390/healthcare12131261. PMID: 38998795; PMCID: PMC11241268.

Flaubert, J. L., Le Menestrel, S., Williams, D. R., & Wakefield, L. M. (Eds.). (2021). The future of nursing 2020–2030: Charting a path to achieve health equity. National Academies of Sciences, Engineering, and Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK573902/>

Kerr, D., Martin, P., Furber, L., Winterburn, S., Milnes, S., Nielsen, A., & Strachan, P. (2022). Communication skills training for nurses: Is it time for a standardised nursing model? Patient Education and Counseling, 105(7), 1970–1975. <https://doi.org/10.1016/j.pec.2022.03.008>

Longhini, J., Ambrosi, E., Filippi, M., Evilio, L., & Canzan, F. (2024). How do undergraduate nursing students learn to care for families and informal caregivers? A qualitative study with a grounded theory approach. Nurse Education Today, 141, 106332. <https://doi.org/10.1016/j.nedt.2024.106332>

Lyu, XC., Jiang, HJ., Lee, LH. *et al.* Oncology nurses’ experiences of providing emotional support for cancer patients: a qualitative study. *BMC Nurs* **23**, 58 (2024). <https://doi.org/10.1186/s12912-024-01718-1>

Madayag RA, Esteron JV, Lozano DAA, Bautista EC, Fernandez ZS, Ramirez DQ. Nursing students' lived experiences with using AIDET in patient communication: A qualitative study in the Philippines. *Belitung Nurs J*. 2024 Jun 28;10(3):294-303. doi: 10.33546/bnj.3258. PMID: 38947298; PMCID: PMC11211739.

Mikkonen K, Tomietto M, Tuomikoski AM, Miha Kaučič B, Riklikiene O, Vizcaya-Moreno F, Pérez-Cañaveras RM, Filej B, Baltinaite G, Cicolini G, Kääriäinen M. Mentors' competence in mentoring nursing students in clinical practice: Detecting profiles to enhance mentoring practices. *Nurs Open*. 2022 Jan;9(1):593-603. doi: 10.1002/nop2.1103. Epub 2021 Nov 2. PMID: 34726336; PMCID: PMC8685782.

Nabirye AK, Munabi IG, Mubuuke AG, Kiguli S. Emotional and psychological experiences of nursing students caring for dying patients: an explorative study at a national referral hospital in Uganda. *BMC Med Educ*. 2025 Jan 20;25(1):96. doi: 10.1186/s12909-025-06708-8. PMID: 39833799; PMCID: PMC11744855.

Negm LMMA, Mersal FA, Fawzy MS, Rajennal AT, Alanazi RS, Alanazi LO. Challenges of nursing students during clinical training: A nursing perspective. *AIMS Public Health*. 2024 Mar 19;11(2):379-398. doi: 10.3934/publichealth.2024019. PMID: 39027388; PMCID: PMC11252586.

Opland C, Torrico TJ. Psychotherapy and Therapeutic Relationship. [Updated 2024 Oct 6]. In: StatPearls [Internet]. *Treasure Island (FL): StatPearls Publishing;* 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK608012/>

Pohontsch NJ, Stark A, Scherer M. Medical students' understanding of clinical empathy - a qualitative exploratory interview study. *BMC Med Educ.* 2024 Dec 5;24(1):1422. doi: 10.1186/s12909-024-06428-5. PMID: 39639269; PMCID: PMC11619624.

Pulumati A, Pulumati A, Dwarakanath BS, Verma A, Papineni RVL. Technological advancements in cancer diagnostics: Improvements and limitations. *Cancer Rep (Hoboken).* 2023 Feb;6(2):e1764. doi: 10.1002/cnr2.1764. Epub 2023 Jan 6. PMID: 36607830; PMCID: PMC9940009.

Salehi M, Ghasemian A, Najar AV, Nazari H, Hooshmand E. From compassion to burnout: emotional labor in oncology nursing - a qualitative study. *BMC Nurs.* 2025 Mar 11;24(1):272. doi: 10.1186/s12912-025-02928-x. PMID: 40069779; PMCID: PMC11900095.

Seniwati T, Rustina Y, Nurhaeni N, Wanda D. Patient and family-centered care for children: A concept analysis. *Belitung Nurs J.* 2023 Feb 12;9(1):17-24. doi: 10.33546/bnj.2350. PMID: 37469640; PMCID: PMC10353635.

Sibeoni, J., Verneuil, L., Manolios, E. *et al.* A specific method for qualitative medical research: the IPSE (Inductive Process to analyze the Structure of lived Experience) approach. *BMC Med Res Methodol* **20**, 216 (2020). <https://doi.org/10.1186/s12874-020-01099-4>

Tu C, He Y, Ma X. Factors influencing psychological distress and effects of stepwise psychological care on quality of life in patients undergoing chemotherapy after breast cancer surgery. *Am J Transl Res.* 2022 Mar 15;14(3):1923-1933. PMID: 35422923; PMCID: PMC8991156.