# Can death be simulated? Teaching End-of-Life Care with Simulation in Nursing Education

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#### Summary

**Background:** In 2021, a significant proportion of adult deaths in Germany, comprising of 447,473 individuals, occurred within hospital settings, representing nearly half of the total deaths in the country, which numbered 1,023,687 (statistika 2021). Consequently, nurses play a pivotal role as primary caregivers for this patient group, necessitating comprehensive education to address their specific needs. Existing literature suggests that nursing students often lack the adequate preparation to provide care for this group, with factors such as insufficient theoretical knowledge and suboptimal mentoring during clinical placements (Bloomfield et al. 2015; Gillan et al. 2014; Leighton 2009, Leighton/Dubas 2009). The use of simulation has proven effective in bridging the theory-practice gap, particularly in the context of End-of-Life Care. The objective of this study was to assess nursing students' perceptions of the use of simulation in learning about End-of-Life Care (Gillan et al. 2014; Moreland et al. 2012).

**Methods:** Over a three-year period, three cohorts of third-year nursing students at Fulda University of Applied Sciences engaged in simulated experiences involving a dying patient and one or more family members. The authors created three different scenarios in which the students had to perform oral care, break bad news to family members and administer palliative pain medication. During the simulations, the family member(s) confronted the students with questions concerning spiritual care and improving the quality of life at this stage. This project utilized a qualitative design. After the simulation and debriefing sessions, semi-structured interviews and group discussion were conducted. After transcribing, the interviews were analyzed using open and axial coding, after the Glaser and Strauss approach to Grounded Theory.

**Results:** The process of theoretical coding yielded five results: Simulation revealed to be a good tool to learn about End-of-Life Care (1), simulation focused on communication (2), the importance of spiritual care (3), the aspect of realism (4) and a lack of theoretical knowledge (5).

**Conclusion:** Simulation-based learning seems to be a valuable tool in the teaching of End-of-Life-Care especially with a focus on communication.

Key words: End-of-Life Care, Simulation, palliative care, Nurse Education, EoL Care, High-Fidelity Simulation, Simulation-based learning, dying patient

# 1. Introduction

Death is an integral part of the human life cycle, and transforming a "bad death" into a "good death" is a fundamental component of palliative care, which holds great importance in the field of nursing. In palliative care, nurses play a crucial role in supporting patients and their families as part of an interdisciplinary team, with the aim of enhancing the quality of life across various dimensions psychological, physical, spiritual, and social as recognized by WHO (2020). This significance is further emphasized in today's society, by shifts in demographic structures.

In Germany, the population of individuals aged 85 and above is on the rise, paralleled by an increase in the number of people residing in nursing homes or staying in hospitals (Statistisches Bundesamt 2023a; Matzke et al. 2021). Astonishingly, the statistics from 2021 revealed that 447,473 of individuals died in hospitals (statistika 2021). As 20 % of the German population reside in nursing homes, a significant number of people pass away in nursing homes (Matzk et al. 2021). Consequently, a large number of individuals meet their end within the healthcare services. Unfortunately, only 30% of these individuals received specialized palliative care, as highlighted in the study conducted by Grote-Westrick and Volbracht in 2015. The factors contributing to this remarkably low percentage remain unclear, although studies from the Anglo-Saxon countries suggest that a substantial number of nursing students don't feel adequately prepared to care for patients in their final moments (Gillan et al. 2014: Corvetto/Teakman 2013; Leighton 2009).

For some students, the sense of unpreparedness stems from a lack of theoretical knowledge or clinical experiences, while for others, it's a mental unpreparedness rooted in fear and uncertainty regarding how to approach patients and provide support to their instances, families. In certain these

encounters can be so emotionally distressing that they lead to psychological challenges (Kardong-Edgren 2015). Consequently, it's necessary that every nursing school places a high priority on educating future nurses for this specialized and intricate responsibility.

One promising method to better equip students for the challenges of End-of-Life Care is through simulated experiences, which can provide students with a secure and controlled environment to gain exposure to these critical aspects. This approach offers a means to bolster the confidence and competence of future healthcare professionals, ensuring that they are better prepared to address the unique demands of end-of-life patient care (Gillan et al. 2014; Corvetto/Teakman, 2013; Leighton 2009).

#### 2. Theoretical background

Simulation has proven to be a vital tool to teach and learn the management of clinical situations – especially End- of Life Care- in nursing education (Moreland et al. 2012). Recently, educators have discussions regarding the application of simulation to teach End-of-Life Care, with several noteworthy articles highlighting both its advantages and potential challenges. A review of the literature underscores how simulation can enhance students' comprehension of palliative care situations and their interactions with patients and their families (Gillan et al. 2014).

Caring for dying patients and their family members is a critical skill. However, one issue lies in the inadequacy of clinical experiences. Some students report never encountering a dying patient during their clinical placements, while others, when faced with such situations, lack the opportunity to address the complexities effectively (Tamaki et al. 2019). Ineffectual mentorship and insufficient time to talk to colleagues are contributing factors. Notably, there is little of research on this subject in Germany, but it is highly likely that this issue is pertinent here as well. Uncertainties with communication practices is a recurrently cited concern. Numerous students express hesitation in their ability to effectively converse with patients and their family members, primarily due to a fear of inadvertently exacerbating the situation with ill-chosen words (Bloomfield et al. 2015).

Teaching End-of-Life Care often delves into psychological aspects, given the sensitivity of the subject matter. Death and dying are inherently delicate topics, and most students have encountered them in their personal or professional lives. This can evoke a wide range of emotional responses in students, from tears to even hysterical outbursts. Adequate preparedness is pivotal when dealing with students who may experience anxiety or emotional reactions during simulations (Kardong-Edgren 2015; Leighton 2009).

(2009) recommends that Leighton instructors contact the university's psychological services as a potential source of backup support when needed. She also suggests involving a mental health specialist in the simulation to address emotional reactions during debriefing sessions. Nevertheless, it remains challenging to predict students' responses, even for seasoned educators. Kardongen-Edgren (2015) has reported that End-of-Life Care simulations can elicit emotional reactions, especially if students have recently experienced traumatic encounters with death, whether in a clinical setting or through personal loss. Anxiety and emotional responses can be extreme factors that hinder the learning process, effectively blocking students and deterring them from engaging with End-of-Life Care education. A negative outcome of such experiences is the reluctance to return to the simulation laboratory following а distressing encounter (Corvetto/Teakman 2013).

Prior to engaging in simulation exercises, it is imperative to address safety aspects. Leighton (2009) categorizes death within a simulation into three distinct types: "expected," "unexpected," and as a "result of action or inaction." In cases of "expected" death, both students and educators are aware of the simulated patient's impending death, with clear objectives and no surprises for the students. In contrast, with "unexpected" death, educators know of the simulated patient's death, while students are kept in the dark. The third scenario involves death as a "result of action or inaction," where the simulated patient's outcome depends on the decisions made by the students during the simulation. In this context, death can be employed as a consequence if students fail to align with the stated objectives. From a psychological standpoint, the safest approach for simulating death in exercises designed to reduce anxiety and teach End-of-Life Care is the "expected death." This approach allows students to prepare for the simulation and, if needed, engage in discussions with the instructor beforehand to address any concerns (Corvetto/Teakman 2013).

Debriefing is a vital part of any simulation. It serves as a critical part for students to reflect upon their actions, critically think about the simulated experience and comprehend their mistakes (Fanning/Gaba 2007; Shinnick et al. 2011). Given the sensitive nature of End-of-Life Care as a topic, debriefing plays a central role. Not only does it afford students the opportunity to introspect and learn from their performance, but it also enables educators to detect and address any potential psychological concerns.

# 3. Developing and Executing the simulation

#### 3.1 Constructing the case study

The primary objective of this study was to introduce students to the concept of caring for terminally ill patients. Through simulation, the aim was to alleviate anxiety and offer a secure environment for students to practice and comprehend the fundamentals of End-of-Life Care. Following the simulation, the expectation was for students to gain a deeper understanding of specific clinical scenarios. Moreover, during the subsequent debriefing session, students should have the opportunity to express their emotions and seek clarifications.

To design this simulation, the authors utilized the INACSL Standards for Outcomes and Objectives which emphasizes the significance of well-defined learning objectives for each simulation (INACSL Standards Committee 2021a). The standards recommends that these learning outcomes should by categorized into psychomotor, affective, and cognitive domains, aligning with Bloom's revised taxonomy. Table 1 outlines the specific learning outcomes tailored for the End-of-Life Care simulation at the University of **Applied Sciences.** 

| Dimension | Objectives   |  |  |
|-----------|--|--|--|
| Cognitive | Students   |  |  |
|           | <ul> <li>can recognize the signs of imminent death (e.g. irregular breathing,<br/>changes in vital signs, unresponsiveness)</li> </ul> |  |  |
|           | understand palliative care as an integral part of End-of-Life Care   |  |  |
|           | <ul> <li>know specific communication practice to talk to patients and family<br/>members</li> </ul>                                    |  |  |
| Affective | Students   |  |  |
|           | <ul> <li>feel secure to communicate anxiety and self-consciousness about<br/>End-of-Life Care</li> </ul>                               |  |  |
|           | <ul> <li>communicate in an emphatic manner with patient and family<br/>member</li> </ul>   |  |  |
| Psycho-   | Students   |  |  |
| motoric   | <ul> <li>assess the patient using recognized assessment methods (e.g. Pain<br/>Scale)</li> </ul>                                       |  |  |
|           | <ul> <li>Perform nursing tasks (oral care, administration of medication, check<br/>vital signs)</li> </ul>                             |  |  |

Table 1 Learning Objectives based on Blooms' taxonomy (Own representation

The next step involves creating a suitable case study, avoiding overwhelming the students. To create a suitable case study, the authors aligned with the recommendations in the INACSL Standard of Best Practice Simulation Design (INACSL Standards Committee 2021b). In their initial approach, the authors opted to centre the case study on an elderly woman in the first year (Scenario One). This choice was deliberate, considering that heart-related illnesses rank as the leading cause of death in Germany, accounting for roughly one-third of all fatalities (Statistisches Bundesamt 2023b). Given that many students might have encountered similar situations during their clinical placements, the authors deliberately leaned toward a less emotionally charged scenario by featuring an older patient rather than a younger one.

After the first year, the authors expanded their repertoire by designing two additional scenarios to encompass a broader range of clinical contexts. Cancer, as frequently linked to End-of-Life Care in the literature, inspired the creation of one case study involving a cancer patient. Different forms of cancer contribute to roughly a quarter of all deaths in Germany (Statistisches Bundesamt 2023b). To introduce diversity in settings, Scenario 2 is set in the patient's home.

Additionally, another simulation was developed in the second year, focusing predominantly on family members. In this scenario, students do not directly engage with the patient but instead interact with family members grappling with the concept of "end-stage" care (Scenario Three). The patient in this scenario suffers from chronic obstructive lung disease (COPD). Notably, this scenario offers the advantage of requiring no patient simulator or clinical equipment, making it conducive for classroom-based simulations.

As previously mentioned, the safest approach to using simulation for teaching End-of-Life Care is through "expected death" (Leighton 2009). Consequently, students received the case study two weeks in advance of the simulation. They were informed that the simulation revolved around a terminally ill patient with a family member present, with a deliberate decision made not to depict the moment death of the patient during the simulation, but rather focussed on the End- of-Life Care.

#### 3.2 Setting the scene

The three scenarios were staged as follows:

- In Scenario One, the setting was a single patient room within a hospital. On the patient's bedside table. various personal items were arranged, including an old family photo and religious artefacts such as a Bible and crucifix. The patient is portrayed by a Human Patient Simulator (HFS), programmed with specific vital signs as outlined in Table 2, and only responded to strong stimuli with incomprehensible sounds. The family member (played by a SP) sits on a chair next to the bed.
- For Scenario Two, a home care situation was recreated. The HFS lies in a wooden home care bed situated in a simulated living room. The patient's husband sits in armchair beside them. an Medications and various medical equipment were scattered across a nearby table. The simulator was programmed to simulate heavy, painful breathing and vocalizations. The husband's role was performed by an SP.
- In the third simulation, no patient room setup was necessary since the patient did not make an appearance. Instead, a "conference" room adjacent to the nurse's station was arranged for communication with the family members. It featured a desk, several chairs, and floral arrangements. An essential element of this scenario was the patient's chart.

|                   | Case Overview   | Background/ Situation  | Task/Intervention   |
|-------------------|---|--|---|
| Scenario<br>One   | Patient Name: Maria<br>Neubauer<br>Age: 82<br>Family: widowed, one<br>daughter (45)<br>Medical diagnosis:<br>Congestive heart failure<br>with pulmonary edema<br>Religion: Roman-catholic | Mrs. Neubauer has been a<br>cardiac patient for many<br>years. Last week Mrs.<br>Neubauer decided to sign a<br>DNaR declaration. It is<br>Tuesday morning, Mrs.<br>Neubauer is not conscious;<br>her vital signs are weak (BP<br>85/50, HR 55, RR 7) and her<br>breathing irregular. | Intervention: Perform<br>oral care with 0,9%<br>saline solution and<br>complete a short<br>physical assessment  |
| Scenario<br>Two   | Patient Name: Irene<br>Keller<br>Age: 58<br>Family: husband, one son<br>Medical diagnosis: End-<br>stage small cell lung<br>cancer<br>Religion: Lutheran                                  | Mrs. Keller was diagnosed<br>with small cell lung<br>carcinoma 18 months ago.<br>After chemotherapy and<br>radiation failed, she was send<br>home. The palliative home<br>care visits her twice a week to<br>administer medication.  | Intervention:<br>Administer i.v. pain<br>medication (palliative<br>standard) and<br>complete a short<br>physical assessment   |
| Scenario<br>Three | Patient Name: Jeremy.<br>King<br>Age: 68<br>Family: widowed, two<br>daughters, one son<br>Medical diagnosis: COPD<br>(GOLD 4)<br>Religion: Roman- catholic                                | Mr. King signed a DNaR form<br>a few months ago together<br>with his youngest daughter.<br>He does not wish to be put on<br>a respirator again. He now<br>suffers from an acute<br>exacerbation of COPD due to<br>a lung infection.  | Intervention: Explain<br>the father's condition<br>(Breaking Bad News)<br>to the children.<br>Diffuse the situation<br>between siblings<br>concerning the DNaR<br>order |

Table 2 Scenarios (own representation)

#### 4. Methods

#### 4.1 Participants

Over the course of three years (2017-2020), a total of 24 students engaged in this simulation. All 24 participants were enrolled in the nursing program at the University of Applied Sciences in Fulda. The teaching team opted to exclusively involve third-year students in this simulation, given its complexity and the potential to overwhelm those with less experience, in line with the guidance provided by authors Corvetto and Teakman (2013), who recommend the participation of more matured students.

In the initial year, the participation interest was limited, with only four students initially confirming their involvement. Consequently, the teaching team extended the opportunity to second-year students, resulting in two additional students joining. In the first year, students exclusively experienced Scenario One. In the second year, the scope expanded to include two more scenarios, with a total of 12 students participating in the simulation. In the third and final year, six students took part. All third-year students possessing a background of approximately seven prior simulations and a minimum of 1200 hours of clinical experience.

Student participation in this simulation was voluntary, not graded, and not yet integrated into the standard study program. All students signed informed consent before the simulation.

#### 4.2 Data collection

Students received the case study one week prior to the simulation. On the day of the simulation, each student embarked on the simulated experience either individually or in pairs. Their role was that of a nursing student. Before the simulation, students underwent a pre-briefing session and received a handover from the teaching staff, utilizing the SBAR approach to ensure structured and focussed communication (Pilz et al. 2020). Each simulation spanned from 10 to 20 minutes.

Following the simulation, a debriefing session ensued, involving two instructors, the standardized patient (SP), and the students. This debriefing typically lasted around 30 minutes. Subsequently, one of the instructors conducted semi-structured interviews with each student, with each interview lasting approximately 15 to 20 minutes. In the second and third year, the teaching team opted to conduct a group interview with the students, which took approximately 1 to 1,5 hours. The teaching team thoughtfully developed the interview questions, experts in nursing education and research.

The interview and group discussion sessions commenced with an open-ended question, inviting students to describe their perceptions of the simulation. Subsequent questions delved into their experiences during clinical placements, the key aspects of their nursing interventions, and the emotions they encountered when confronted with End-of-Life Care.

#### 4.3 Data analysis

For data analysis, the "Grounded Theory" method, pioneered by Glaser and Strauss in 1967, was employed. The interviews and focus group sessions were transcribed and subsequently subjected to a thorough coding process. Additionally, the teaching team engaged in the practice of creating memos following each interview, as well as during the simulation development process. Throughout the coding phase, further memos were generated, drawing from the insights and reflections of the research team.

Employing the principles of grounded theory, the data underwent successive stages of coding. The first step was open coding. Open Coding is the systematic process of breaking down and analysing qualitative data line by line to identify and develop initial concepts and categories. It is the first step in the data analysis process and aims to discover and create a comprehensive understanding of the data. The next step was axial coding to connect categories and codes that were generated during open coding. It seeks to identify the core concepts, relationships, and patterns within the data. In axial coding, researchers examine how various categories are linked to each other and to a central phenomenon or core category (Corbin/ Strauss 2015). During this stage we developed the five categories: simulation as a tool to lean about EoLC, Communication, Spiritual Care, Realism and Theoretical Input.

#### 5. Results

Five different aspects reveled themselves to be relevant:

#### Simulation as a tool to learn about End-of-Life Care

Every student voiced their strong belief that a simulation based learning is a valuable

tool for learning about End-of-Life Care. One student further emphasized this sentiment by sharing, "*After I go through a simulated experience, I feel I already know what a real situation could look like*".

*"It is great that a simulation was now being offered, I immediately agreed to take part in it."* 

One students considers conducting a simulation on end-of-life care to be "a good idea" and adds that this can "reduce fears" Another students reports: "I was a bit nervous before, but now I feel really good". The students also highlighted the value of simulation-based learning in preparing them for their clinical placements and future roles in healthcare practice.

*"It already feels so much, like I am at the hospital"* 

"It is good to practice this on a dummy first"

Students also pointed out that the "*patient is not real so I can make mistakes and nothing happens*" Students also highlighted the importance of receiving feedback. "*The feedback is also good, it helps me to evaluate myself*".

#### Communication

Communication emerged as the central focus of the simulation. In all three simulations, every student emphasized that effective communication took precedence over the nursing interventions. One student even offered the perspective that "*nursing intervention played a secondary role*."

The students consistently expressed their enjoyment of engaging in conversations with the family member, highlighting the perceived authenticity and significance of these interactions. Moreover, they underscored the importance of maintaining communication with the patient, even when the patient was not conscious.

"While direct communication with the patient was not possible, it remained vital to keep her informed of every step of the care process." "Above all, the questions asked by the relative really made me think"

#### Spiritual care

The significance of spiritual care within the simulation was a notable aspect of our study. The instructors observed that while all students acknowledged the patient's religiosity and the importance of addressing their spiritual needs during the simulation, there were variations in their approaches.

*"I know how important spiritual care at the end of life is, especially here in catholic Fulda"* 

*"I think religion is very personal and intimate, I don't think I am in a place to intervene... I would rather call a pastor"* 

Personal knowledge and belief seemed to influence action or inaction during the simulation.

*"I don't have anything to do with religion, I am baptized but I unfortunately don't know anything about it"* 

"I don't believe, so I don't know what to do."

# Realism

#### "Simulation is just ... [shrugs] simulation"

The majority of students expressed their concern that the simulator did not convincingly replicate the appearance of an older, sick patient. They found the representation lacking in realism, which affected their engagement in the simulation.

#### "I can't take the doll seriously"

*"But it is still something different when you have a real human interaction partner in front of you"* 

Some students even experienced confusion during the scenario, as they couldn't discern whether the Human Patient Simulator (HFS) was supposed to be portraying a deceased patient. This uncertainty stemmed from the difficulty of accurately hearing the simulated breathing, further diminishing the perceived authenticity of the scenario.

#### Missing theoretical input

Every student highlighted a lack of theoretical instruction. Specifically, multiple students mentioned having vague recollections of classes related to End-of-Life Care, while others indicated that they had no memory of receiving any relevant lessons at all. Even among students who were in their second and third years, where an Endof-Life Care class was conducted one week prior to the simulation, they still reported little knowledge on the topic.

"It just doesn't get enough attention"

"It is actually very sad that so much about end-of-life care has not yet been addressed in the classroom"

*"I remember, we learned something about communication and spiritual care in the first semester? And about ethics too. But that was long ago and not enough."* 

#### 6. Discussion

All participants recognized communication as the primary focus of the simulation, aligning with the researcher's intentions and the available literature (Bloomfield et al. 2015). Consequently, family members received instructions to actively engage the students by asking them numerous auestions to facilitate and uphold communication. One of our research objectives was to observe how students would structure their communication in these scenarios. The findings align with existing research on End-of-Life Care (EolC) simulations and echo a recurring theme in related publications.

The concept of realism was a recurring topic in all interviews and groups discussion. Students expressed that they found the Human Patient Simulator (HFS) to be "unrealistic." In the first and second scenarios, the HFS wore an old-fashioned nightgown and a grey wig, but still had natural-looking skin and a youthful appearance. There was a discussion before the simulation about whether to use an HFS or a Standardized Patient (SP). Using a real older person could have made the simulation look more authentic, especially with the use of special effects makeup to a dving patient appearance. create However, several reasons led to the decision not to use an SP. One primary concern was that it would be unusual for students to interact with a stranger portraying a dying person, as they were more accustomed to having classmates, lecturers, or student tutors play the role of patients in most simulations. Additionally, it might be challenging for the SP to convincingly portray a dying person, depending on their acting training.

These were the most compelling arguments against using an SP. There were other considerations, such as the difficulty of simulating irregular breathing by a healthy person and the availability of actors or actresses willing to portray patients, particularly for sensitive topics. Enhancing the HFS's realism could potentially be achieved through different lighting, but there were positive aspects related to realism. Students found the family member role to be very realistic. Some students shared their personal experiences, with one noting that the family member was a Some "pleasant" portrayal. students mentioned encountering challenging behaviour when dealing with grieving family members during their clinical placements. The individuals portraying family members were instructed to be sad but reasonable, to avoid overwhelming the students. It could be interesting to incorporate a more emotional response from the family member to make communication more challenging.

In the third scenario, there was no patient involved, which surprised the students as they had not experienced a simulation without a patient before. Another important aspect during the simulation was spiritual care, and there was a significant variation in what students considered appropriate. Some students have seem to а more nuanced understanding of spiritual care, while others might have approached it from a more general perspective. A few students expressed the belief that faith is a personal matter, and it should not be the nurse's responsibility to become involved in a patient's spiritual concerns. However, others were convinced that it is indeed a nurse's duty to address these specific needs. Notably, for students who had prior clinical experience in hospice care showed a heightened awareness of the patient's spiritual needs. It raises questions about the extent to which students are prepared to engage in spiritually sensitive discussions with patients, as well as the extent of their training in this particular aspect of care. However, the simulation experience might make students more conscious of spiritual needs when they are part of a simulated scenario.

Interestingly, psychological issues did not seem to arise during the simulation or the debriefing session and no student appeared to be distressed by the simulation or the subsequent discussions. In fact, students willingly shared deeply personal stories debriefing during the about their experiences with loss and death during their clinical placements. Some students also discussed their own experiences in private situations with family members and friends. It is worth noting that it was assumed that students who were genuinely onlv interested in the simulation and not significantly affected by the topic chose to participate. Participation was voluntary, and one participant, during an informal conversation after the official interview, mentioned that she was aware of two students who decided not to attend the simulation due to the sensitivity of the subject. Additionally, multiple students reported feeling nervous before the

simulation, but they clarified during the debriefing that their nervousness was not greater than in previous simulations and was unrelated to the topic.

Another crucial factor revolved around theoretical instruction. It was surprising that the students mentioned they had not received much theoretical input on End-of-Life Care. In the first year of simulations, some students recalled receiving only brief information about palliative care, while others couldn't recall any relevant training at all. In the second and third year of establishing this simulation, the instructors developed a dedicated End-of-Life Care class for students one week in advance. This class was offered to all students as part of the module, yet the students found it inadequate. Furthermore, multiple students pointed out that they had never encountered a dying patient during their clinical experiences. Given that these students were nearing the end of their nursing program, this lack of exposure was surprising. This was also discussed in the literature by Tamaki et al. (2019). It could be advantageous establish to more standardized End-of-Life Care classes within the nursing curriculum in Germany.

# 7. Conclusion

In this small study, simulation has emerged as a highly effective method for teaching about End-of-Life Care to nursing students. However, there are aspects to consider. Perhaps the most important is the establishment of psychological safety, an important prerequisite to any successful simulation experience, necessitating comprehensive pre-discussions to alleviate potential emotional distress. Equally integral is the provision of comprehensive theoretical foundations before students engage in the simulation, ensuring they are optimally equipped to navigate complex End-of-Life Care scenarios.

Simulation serves as a potent tool for cultivating students' sensitivity to the

spiritual needs of patients and emphasizing the role it plays in nursing education. By focusing on effective communication, simulation exercises create a beneficial environment for students to develop the essential skill sets required in End-of-Life Care.

In summary, this study highlights that using simulation is effective for teaching students about End-of-Life Care. However, it also emphasizes the importance of conducting more research and thoroughly exploring the field of nursing education. The limited availability of scholarly literature, particularly in Germany, emphasizes the need for a better understanding of what students think and experience when it comes to End-of-Life Care education.

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