

Terminal Lucidity in Critical Patients: Ethical Implications for Nursing Personnel and End-of-Life Care

Jannette Melendez Flores RN, MSN, DNSs

School of Nursing, Universidad Ana G. Méndez

San Juan, Puerto Rico

JMF8201@gmail.com

Abstract:

Terminal lucidity is a poorly understood yet frequently observed clinical phenomenon in patients with terminal illnesses or advanced cognitive deterioration. It is characterized by an unexpected and temporary recovery of consciousness, communication, and mental clarity in the hours or days preceding death. This study aims to explore how this phenomenon is experienced, documented, and interpreted by nursing personnel in intensive care units (ICUs), as well as to identify its clinical, ethical, and human implications in end-of-life care. Through a review of recent scientific literature and the analysis of qualitative and quantitative research, common patterns were identified in how nursing professionals perceive and address these episodes. The findings reveal that although the phenomenon lacks a fully explained physiological basis, its recognition allows nursing teams to adapt palliative care, facilitate emotional closure, and provide compassionate support to both patients and their families. However, limitations in clinical documentation and the absence of institutional protocols for its management were also identified.

Available evidence suggests that terminal lucidity, far from being anecdotal, holds profound clinical and human value. Therefore, strategies are proposed to strengthen nursing education, develop best-practice guidelines, promote applied research, and integrate this phenomenon into humanized care models. Recognizing and appropriately responding to terminal lucidity reinforces the role of nursing as both a scientific and humanistic discipline, contributing to more ethical, dignified, and person-centered care during the final stage of life.

Keywords—*Terminal lucidity, Paradoxical lucidity, End-of-life consciousness, Critical care nursing, Ethical implications, Person-centered care*

I. INTRODUCTION

Terminal lucidity is a phenomenon described in patients with advanced chronic illnesses, neurological deterioration, or in the final stage of life, characterized by an unexpected and generally brief recovery of consciousness, communication, and mental clarity shortly before death. During these episodes, the patient may recognize family members, express wishes, or say goodbye, which contrasts significantly with their prior cognitive decline. Although its pathophysiological mechanism is not fully understood, terminal lucidity has been documented in various clinical contexts and represents a challenge for nursing personnel regarding its recognition, management, and the support provided to both the patient and their family.

In intensive care units (ICUs), nursing personnel play a fundamental role in identifying and documenting these episodes, as they maintain continuous observation of the patient's neurological and communicative status. Documentation of terminal lucidity is typically recorded in the clinical chart, objectively and chronologically noting changes in consciousness level, verbal or gestural communication, messages expressed by the patient, family reactions, and modifications to the care plan. This process is essential to ensure continuity of care, facilitate communication with the multidisciplinary team, and support clinical and ethical decision-making at the end of life. In this sense, one of the objectives of this study is to analyze how nursing personnel recognize and document terminal lucidity in the ICU context.

From a nursing perspective, terminal lucidity is interpreted not only as a clinical event but also as an opportunity to dignify the dying process, fostering emotional closure between the patient, the family, and the healthcare team. This phenomenon invites reflection on the importance of compassionate accompaniment, therapeutic communication, and respect for patient autonomy and wishes. Therefore, another objective of this research is to explore how nursing personnel interpret and experience terminal lucidity, as well as the human, ethical, and emotional implications it entails in end-of-life care.

Various authors have described terminal lucidity—also referred to as paradoxical lucidity—as the unexpected and transient return of cognitive functions such as speech, memory, or awareness of the environment in patients with advanced dementia or neurodegenerative diseases. Campos (2023) notes that the sudden illusion and optimism observed in some patients do not stem from unfounded hope, but from direct observation of the transition from agony to surprising improvement. Likewise, research conducted by Alexander Batthyány shows that these episodes often occur one or several days before death and, in most cases, are brief. Despite these findings, knowledge gaps persist regarding its systematic approach in clinical practice.

In this context, the present study aims to analyze terminal lucidity from the perspective of nursing personnel in intensive care units, considering its recognition, documentation, and interpretation. Specifically, it seeks to identify current documentation practices, examine the clinical, ethical, and human implications of the phenomenon, and explore the need for training strategies and best-practice guidelines that support humanized and ethical end-of-life care. Integrating terminal lucidity into care models strengthens the role of nursing as a scientific and humanistic discipline, contributing to dignified, person-centered care that is sensitive to the needs of patients and their families during the final stage of life.

II. METHODOLOGY

An integrative literature review was conducted to analyze the available scientific evidence on the phenomenon of terminal lucidity in critical

patients, as well as its clinical, ethical, and humanistic implications within nursing care. This type of review allowed the integration of studies with different methodological designs, including qualitative and quantitative research, observational studies, narrative reviews, and relevant clinical reports.

The information search was carried out systematically, organized, and comprehensively. A preliminary exploration of the topic was first conducted to delimit the research problem and understand the current state of knowledge. Subsequently, a formal search of scientific articles was performed in the following electronic databases: PubMed, Scopus, ScienceDirect, EBSCOhost, Google Scholar, and Elsevier.

Keywords and descriptors in Spanish and English were used: terminal lucidity, paradoxical lucidity, end-of-life cognition, critical patients, palliative care, nursing, end-of-life consciousness, and neurocognitive phenomena. These terms were combined using Boolean operators AND and OR to broaden and refine the results.

Inclusion criteria were:

- Articles published between 2020 and 2025
- Studies available in Spanish or English
- Research involving adult patients in critical, palliative, or terminal conditions
- Publications addressing terminal lucidity from clinical, neurological, ethical, or nursing perspectives

Excluded were duplicate articles, restricted-access studies, research not directly related to terminal lucidity, and publications lacking academic or methodological rigor.

Approximately 50 publications were initially identified. After applying inclusion and exclusion criteria and conducting a critical reading of titles, abstracts, and full texts, 15 scientific articles were selected for final analysis.

Data analysis was conducted through critical and comparative reading, identifying common patterns, conceptual differences, relevant clinical findings, and gaps in the literature. Results were organized into thematic categories related to: characteristics of the phenomenon, possible neurobiological explanations, ethical implications, and the role of nursing professionals in recognizing, documenting, and supporting patients and families.

This methodology enabled a comprehensive understanding of terminal lucidity, contributing to evidence-based recommendations for nursing practice in critical and end-of-life settings.

III. LITERATURE REVIEW

Terminal lucidity is a clinical phenomenon reported in various care settings, although its conceptualization and terminology vary according to cultural and professional contexts. It has often been described through metaphors such as “rally before death,” “the last awakening,” or “the final ray of light,” which attempt to capture the surprising and impactful nature of this transient state of consciousness observed in individuals with terminal illnesses or severe cognitive impairment. In scientific literature, the U.S. National Institute on Aging introduced the term paradoxical lucidity in 2018 to describe episodes of significant cognitive recovery in patients with neurodegenerative disorders, particularly those not in the immediate terminal stage. This distinction seeks to clarify terminology according to clinical context and disease progression. Despite limited formal documentation, terminal lucidity is widely recognized in clinical practice, especially in ICUs, palliative care services, and nursing homes. Its presence raises important questions not only in neuroscience but also in the ethics of care, end-of-life accompaniment, and the need for truly person-centered care.

The rigorous scientific study of terminal lucidity presents significant challenges, particularly due to ethical considerations in end-of-life contexts and the limited consent obtained from families or legal representatives during such sensitive moments. This has considerably restricted the generation of robust empirical evidence. Nonetheless, some studies have begun proposing preliminary physiological hypotheses to explain the possible mechanisms underlying the phenomenon.

One of the most discussed theories is reactive neuromodulation, which suggests that certain brain circuits—particularly in the prefrontal cortex and hippocampus—may be transiently activated due to the release of neurotransmitters and peptides associated with the hypothalamic–pituitary–adrenal axis. This response, similar to the fight-or-flight mechanism, has been interpreted as a

survival strategy. Saval (2022) mentions that Fernández proposes that this physiological activation occurs as a surge of stress hormones that briefly enhances perfusion and organ function, including the brain. This fleeting improvement in cognitive function may give rise to moments of conscious lucidity before final multiorgan failure. Parallel research led by Jimo Borjigin suggests that in states of terminal hypoxia and hypoglycemia, the brain may experience a form of compensatory hyperactivation. According to this hypothesis, when oxygen and glucose levels drop drastically, a sudden increase in neurotransmitters may occur, triggering synchronous activation of cortical regions that enables a brief restoration of consciousness, language, and social interaction (Malcom, 2023).

Despite these proposals, scientific literature still lacks clear terminological and conceptual consensus regarding terminal lucidity. This creates difficulties in systematizing clinical cases and comparing studies. Additionally, as noted by Naanous Rayek (Sumedico Vida Sana, 2022), ethical challenges in researching dying patients, combined with the scarcity of normative and methodological frameworks, continue to limit the advancement of rigorous clinical studies (Saval, 2022).

Peterson et al. (2022) reference the work of Nahm, who has explored the distinction between two related but distinct clinical phenomena: terminal lucidity and paradoxical lucidity. According to his definitions, terminal lucidity refers to an unusual and transient increase in mental clarity occurring in the final stages of life, regardless of the patient’s prior condition. Paradoxical lucidity, on the other hand, manifests specifically in individuals with advanced neurodegenerative diseases, such as Alzheimer’s disease, and consists of an unexpected and brief recovery of previously impaired cognitive functions.

Nahm proposes that the term *terminal* refers exclusively to the timing of the phenomenon—occurring near death—without reference to the type of neurological condition. In contrast, the term *paradoxical* implies a particular quality of the event, as it occurs in the context of progressive and physiologically limiting brain pathology, challenging conventional clinical expectations. For the author, both phenomena are unexpected from a

biomedical perspective and share the characteristic of raising questions about the relationship between brain deterioration and the expression of consciousness at the end of life.

However, Panmand et al. (2025) note that episodes of terminal lucidity can vary considerably in duration, ranging from a few minutes to several hours or even days. Their recent research identified that more than 90% of patients with advanced dementia who experienced this phenomenon died within the first week after the episode; of these, 41% died within 24 to 48 hours, and 15% within two hours. Although these data suggest a close proximity between lucidity and death, further research is needed to fully understand the clinical and physiological significance of this event. From the perspective of caregivers and family members, terminal lucidity represents an emotionally ambivalent experience. The unexpected return of consciousness and communicative ability may be interpreted as a sign of improvement, when in many cases it anticipates the final outcome. This paradox can provoke both relief and confusion, making greater understanding and dissemination of the phenomenon essential to provide emotional support and prepare loved ones compassionately for the imminent loss.

Silva et al. (2025) conducted a systematic analysis of 20 studies derived from 1,391 records, mostly from the United States (52%) and primarily descriptive in nature. The review focused on phenomena reported by terminal patients with preserved cognitive function, specifically end-of-life visions and dreams. These events, recalled with remarkable clarity, often involve encounters with deceased individuals and are emotionally meaningful, providing comfort, existential insight, and progressive acceptance of death. Such manifestations suggest that despite physical decline, significant psychological and spiritual activity persists. In contrast, terminal lucidity appears as a less common but clinically relevant phenomenon. It is characterized by the unexpected reappearance of cognitive abilities such as memory, orientation, and communication in patients with advanced neurological deterioration or severe terminal illness. This phenomenon raises fundamental questions about the relationship between consciousness and brain integrity, challenging the traditional notion that

consciousness is solely the product of intact neurological function. These experiences—both end-of-life visions and terminal lucidity—have opened a field of debate regarding the possible separation between mental processes and brain structure in the final stage of life.

Similarly, Regalado et al. (2025) justify the phenomenon through the physiology of the premortem well-being syndrome with several facts and hypotheses: delirium or acute confusional syndrome, where the clinical characteristics of delirium are decisive, as one of its main features is alternating periods of orientation with periods of drowsiness and disconnection from the external environment—something very close to what is recognized as terminal lucidity. Any cause leading patients into a delirious state is potentially a cause that could explain terminal lucidity. Another possible cause is hyponatremia, a relatively common disorder in patients with terminal illnesses such as pneumonia, liver failure, and sequelae of traumatic brain injury. Hyponatremia is a potentially reversible clinical condition, so patients with altered mental status who receive treatment for hyponatremia may show a striking neurological recovery, even if they die shortly afterward due to a concomitant illness. Additionally, patients with electroencephalographic changes have been identified, where brain activity decreases before death and, as an automatic response, a transient elevation in brain activity occurs, approaching that of alert patients, in response to cerebral hypoxia.

Muelles et al. (2025) conducted a systematic review analyzing 5,780 publications evaluated by two independent reviewers. After applying inclusion criteria up to May 2023, ten relevant studies were selected and integrated using a narrative approach. The review included quantitative, qualitative, and mixed-methods research, all focused on episodes of lucidity observed at the end of life, particularly in patients with advanced cognitive deterioration. The study highlights that exploring the neurobiological and behavioral aspects of these episodes may offer new opportunities to improve care quality for older adults, especially those living with neurodegenerative diseases. In this context, communication is emphasized as a key component for identifying terminal lucidity, positioning

speech and language professionals as relevant actors in evaluating and addressing this phenomenon, as well as in ensuring continuity of palliative care. From a cognitive standpoint, it is observed that during episodes of terminal lucidity, some patients experience a notable improvement in their state of consciousness. This may manifest as a sudden ability to orient themselves in time and space, engage in coherent conversations, recall significant memories, make conscious decisions, and respond clearly to environmental stimuli. These moments contrast sharply with previous states of confusion, aphasia, or cognitive disconnection, enabling meaningful interaction with their surroundings and loved ones. Although brief, this phase of lucidity represents a valuable opportunity for emotional closure, personal decision-making, and the expression of unresolved wishes.

Mutis and Evrard (2025) studied the reactions of healthcare personnel to the experience of terminal lucidity, which is often perceived as a puzzling and difficult-to-interpret phenomenon within the traditional clinical framework. For many professionals, this event represents a rupture with prevailing biomedical paradigms, generating a form of cognitive dissonance. This tension may provoke feelings of helplessness or insecurity, especially when personnel do not feel prepared to accompany the patient and family during these final moments. In response to this uncertainty, several professionals have begun developing informal strategies and practical knowledge, often acquired through direct experience or collaboration with colleagues. Some recognize that certain episodes of sudden improvement, far from indicating recovery, may anticipate imminent death, allowing them to prepare emotionally and clinically to provide more compassionate and personalized support. In this context, nursing personnel have shown a greater willingness to be actively present during the final stage, responding to the patient's expressed wishes or ensuring companionship at the moment of death. This conscious presence not only improves care quality but also provides meaning to professional practice, allowing caregivers to experience a sense of fulfillment by offering truly holistic care. Nursing professionals highlight the value of recognizing these moments of lucidity, noting that such

awareness enables them to be available to prevent patients from dying alone—a significant concern. For this reason, Mutis & Evrard (2025) emphasize the importance of developing sensitivity and competencies to integrate terminal lucidity as part of end-of-life care, even when its nature remains largely enigmatic or difficult to explain from a purely clinical perspective.

The approach to terminal lucidity in ICU patients reveals the complexity and depth of nursing care at the end of life. The experience, documentation, and interpretation of this phenomenon by nursing personnel demonstrate care centered on dignity, respect, and compassionate accompaniment. Documenting with objectivity and sensitivity, as well as interpreting from an ethical and human perspective, allows nursing to provide essential support during the most critical moments of the life process, contributing to a meaningful closure experience for patients and families. Recognizing and understanding terminal lucidity strengthens the role of nursing as a humanistic and scientific discipline within the hospital setting.

IV. DISCUSSION

Data extraction was conducted in a structured manner from the selected articles, gathering relevant information such as: author, year of publication, study type, population, clinical context, main findings, and contributions related to terminal lucidity. This information facilitated organization and comparison of results, enabling the identification of patterns, similarities, and differences among the analyzed studies.

The approach to terminal lucidity in intensive care units (ICUs) from the perspective of nursing personnel reveals a deeply complex phenomenon, laden with clinical, emotional, ethical, and human dimensions. Based on the extracted data, patterns were identified in how nursing professionals experience and understand these episodes, recognizing terminal lucidity as a significant event occurring in the final stages of life that requires specialized and sensitive attention.

First, the experience of these episodes by nursing personnel is characterized by surprise, uncertainty, and a profound emotional burden. Terminal lucidity—understood as an unexpected recovery of

consciousness in patients with severe cognitive deterioration or terminal illness—is often interpreted as a moment of connection between the patient and their loved ones. However, it may also provoke confusion or cognitive dissonance among caregivers, as it challenges conventional biomedical models, as noted by Mutis and Evrard (2025). This internal conflict may lead to feelings of helplessness or fear of not responding appropriately to a phenomenon that is neither clearly defined nor standardized in clinical practice.

Regarding clinical documentation, data show that nursing personnel tend to record these episodes informally or incompletely. This is partly due to the lack of clear clinical guidelines and the ephemeral and subjective nature of the phenomenon. Nonetheless, some professionals have begun developing shared experiential knowledge through teamwork and accumulated observation, forming a type of “tacit knowledge” that guides their actions in these cases (Mutis & Evrard, 2025). However, the formal systematization of this knowledge remains incipient.

In terms of interpretation, different perspectives emerge. For many professionals, terminal lucidity represents a unique opportunity to provide human-centered care. These episodes allow patients to express themselves, say goodbye, make final decisions, or reconcile with their environment—highly valued aspects of care. Literature indicates that this transient cognitive recovery may facilitate emotional closure for both patients and families, contributing to a healthier grieving process (Panmand et al., 2025; Silva et al., 2025).

From a neurophysiological standpoint, although no definitive consensus exists, various theories—such as reactive neuromodulation, terminal hypoxia, or hyponatremia—have been proposed to explain this temporary recovery of lucidity (Saval, 2022;

IV. RECOMMENDATIONS

The findings of this review support several recommendations to strengthen the clinical, ethical, and human approach to terminal lucidity in critical care settings. It is essential for healthcare institutions to develop clear protocols that guide the identification, documentation, and communication of these episodes, integrating them

into existing palliative and end-of-life care frameworks. Nursing education should incorporate formal training on terminal lucidity, emphasizing therapeutic communication, emotional support, and ethical decision-making during the final stage of life. Systematic and objective documentation must be encouraged, using standardized formats that capture changes in consciousness, verbal expressions, family interactions, and clinical decisions. Interdisciplinary spaces for reflection—such as case discussions or debriefings—should be promoted to help professionals process the emotional and ethical challenges associated with these events. Further applied research is needed to deepen understanding of the neurobiological mechanisms, frequency, and meaning of terminal lucidity, including the perspectives of families and its impact on the grieving process. Finally, care models should integrate a humanistic approach that recognizes terminal lucidity as an opportunity for emotional closure, respect for patient autonomy, and dignified accompaniment, ensuring that healthcare personnel are sensitized to the ethical implications and prepared to respond with compassion and presence.

VI. CONCLUSION

Terminal lucidity, although not yet fully understood from a physiological perspective, emerges as a clinical and human phenomenon of great value within intensive care units. The analysis conducted shows that this manifestation is experienced by nursing personnel as a meaningful event, capable of generating complex emotional responses and challenging the boundaries of the traditional biomedical model. Beyond being an anecdotal occurrence, terminal lucidity represents a clinical opportunity for emotional closure, the dignification of the dying process, and the strengthening of bonds between the patient, their family, and the healthcare team.

From a clinical practice standpoint, its recognition allows for a more compassionate adaptation of palliative care, facilitating the expression of wishes, farewells, and active presence during the final moments of life. However, its management continues to face significant challenges, such as the lack of standardization in clinical documentation, the scarcity of institutional guidelines, and limited

formal training on the topic. Despite these limitations, nursing personnel have developed practical knowledge based on clinical observation, shared experience, and ethical sensitivity.

In this sense, integrating terminal lucidity into end-of-life care models requires a holistic approach that connects scientific knowledge with the humanistic dimension of caregiving. The systematization of this knowledge, continuous training, and the creation of interdisciplinary spaces for reflection are essential strategies to strengthen the quality of care during the terminal stage.

In conclusion, terminal lucidity should be recognized not only as a valid clinical manifestation but also as a profound dimension of care that reaffirms the role of nursing as both a scientific discipline and a humanitarian vocation. Strengthening professional competencies related to this phenomenon will support progress toward a more ethical, conscious, and dignity-centered practice for patients at the end of life.

VII. ACKNOWLEDGMENT

The author conducted this review independently, without external mentorship or institutional support. No human participants or animals were involved. The author declared no conflict of interest and received no external funding.

VIII. REFERENCES

1. Campos, A. (2023). *La extrema lucidez al borde de la muerte*. <https://link.gale.com/apps/doc/A762462203/IFME>
2. Malcom, K. (2023). *Evidence of conscious-like activity in the dying brain*. Michigan Medicine, University of Michigan. <https://www.michiganmedicine.org/health-lab/evidence-conscious-activity-dying-brain>
3. Mueller, K. D., Hale, M. R., Goulette, O., Belay, H., Sanson-Miles, L., Benson, C., & Gilmore-Bykovskiy, A. (2025). A scoping review of episodes of lucidity in people living with dementia near the end of life: The potential role of speech-language pathology in research and practice. *Perspectives of the ASHA Special Interest Groups*, 10(2), 463–476. https://doi.org/10.1044/2025_persp-24-00189
4. Mutis, M., & Evrard, R. (2025). Between parapsychology and spirituality: How can terminal lucidity help healthcare professionals? *En Presented Papers* (p. 176).
5. Panmand, P., Gondhane, D. A., Gotarne, P., Kamble, A., & Andhale, V. (2025). Review and compilation of cases on terminal lucidity. *International Journal of Pharmacognosy and Herbal Drug Technology*, 2(6), 1–7. <https://doi.org/10.64063/3049-1630.vol.2.issue6.1>
6. Regalado, J. G., Molina, V. I. R., & López, J. J. E. (2025). Síndrome de bienestar premortem o lucidez terminal: Descripción, epidemiología y posible fisiopatogenia del fenómeno. *Medicina Interna de México*, 41(4), 250–254. <https://doi.org/10.24245/mim.v41iAbril.9693>
7. Saval, E. (2022). *Incógnitas y desafíos de la lucidez terminal*. Salvatnet.
8. Silva, T. O., Levy, K., & Kerr, C. W. (2025). End-of-life experiences in patients: An exploratory review of types, characteristics, and implications for the mind–brain relationship. *International Journal of Psychiatry*, 37(2), 142–156. <https://doi.org/10.1080/09540261.2025.2503726>
9. Sumédico Vida Sana. (2022). *El extraño fenómeno que provoca que las personas “mejoren” antes de morir*. <https://www.sumedico.com/vida-sana/cuidado-personal/2022/12/2/el-extrano-fenomeno-que-provoca-que-las-personas-mejoren-antes-de-morir-42351.html>