

Terminal Lucidity in Children: A Contemporary Case Collection

Natasha Tassell-Matamua¹, Karalee Kothe², Michael Nahm³, Marjorie Woollacott⁴,
Chris Roe⁵, Bruce Greyson⁶, Maryne Mutis⁷, and Renaud Evrard⁷

¹ Centre for Indigenous Psychologies, School of Psychology, Massey University

² Department of Psychology, University of Colorado

³ Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany

⁴ Department of Human Physiology, University of Oregon

⁵ Faculty of Health, Sport and Behavioural Sciences, University of Northampton

⁶ Division of Perceptual Studies, School of Medicine, University of Virginia

⁷ Interpsy Laboratory, University of Lorraine

The unanticipated occurrence of unusually enhanced mental clarity just before death has been reported across time and cultures and has come to be known by the term “terminal lucidity.” Cases that appear to be characteristic of terminal lucidity in children have been sporadically documented in historical and more recent literature, yet no studies have systematically examined the characteristics of terminal lucidity in children. Employing a 42-item online survey, this study collected case reports of terminal lucidity in 11 children aged 16 years and under. We recorded disease progression and treatment regime, behavioral and emotional changes prior to and during terminal lucidity, the proximity of terminal lucidity to death, and the terminal lucidity duration. Results revealed that terminal lucidity tended to occur within the final hours to minutes before death of the child and typically manifested as notable changes in mental abilities, as well as marked behavioral and emotional changes. Terminal lucidity did not seem to be precluded by any changes in medical regime and seemed to happen in spite many children being in semi- or comatose states just prior to the lucidity episode. Such results suggest a surge of mental clarity in terminally ill children does occur in spite of medical expectations that it should not, which may have implications for enhancing end-of-life care in terminally ill children, as well as for developing understandings about the nature of consciousness at the end-of-life.

Keywords: terminal lucidity, children, end-of-life, death, unusual death experiences

Etzel Cardeña served as action editor.

Natasha Tassell-Matamua  <https://orcid.org/0000-0002-1644-3821>

Due to the sensitive nature of the data, it is not openly available online. However, it is available by making a request to Natasha Tassell-Matamua. The Massey University Human Ethics Committee, Aotearoa New Zealand, provided ethical approval for the study (Southern A, Application 22/52). All participants were given information detailing the study aims and were required to give consent electronically before participating in the survey.

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. This work was supported by funding from the Bial Foundation (Application ID: 129/2022) awarded to Natasha Tassell-Matamua. The authors thank Allan Kellehear and Alex

Gomez-Marin for their contributions to the research team over the past several years.

Open Access funding provided by Massey University: This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0; <https://creativecommons.org/licenses/by/4.0>). This license permits copying and redistributing the work in any medium or format, as well as adapting the material for any purpose, even commercially.

Authorship of this article is according to relative contribution from most to least. Natasha Tassell-Matamua obtained funding, substantially revised the initial drafts of the article, critically reviewed and revised the final article, prepared the final version of the article for submission, and is responsible for submission and revisions. Karalee Kothe analyzed quantitative findings, wrote several initial drafts of the article, and critically reviewed and revised the final article. Marjorie Woollacott is the overall lead of the research team and

continued

Recorded across history and cultures, exceptional experiences associated with death appear to be part of the fabric of human experience. Although contemporary anecdotal reports occur with regularity in popular literature and more recently, social media, systematic investigation of such experiences is comparatively limited in Western scholarship. Yet, exceptional experiences at or near death remain intriguing, perhaps on account of the perplexing questions they raise about the nature of consciousness.

Central to this article is a type of exceptional experience characterized by an unexpected surge of mental clarity shortly before death. Various known as “the rally” (Kastenbaum, 2000), the “premortem surge” (Schreiber & Bennett, 2014), “energy surge” (Julião et al., 2023), and “lightening up” before death (Macleod, 2009), the term “terminal lucidity” (TL) is now widely used to describe such experiences (Nahm & Greyson, 2009). The surge of mental clarity that typifies TL is unanticipated and usually contravenes medical expectations. Sometimes accompanied by enhanced verbal communication and/or physical capabilities, TL manifests in a variety of ways, but most often as an improvement in cognitive responsivity characterized by meaningful communication and the use of logical, organized sentences. In some cases, TL also comprises emotionally rational statements that provide reassurance the dying person and their significant others will be “OK”; understanding and acceptance of impending death, which can be accompanied by positive affect including happiness, joy and peace, and an excitement to “return home”; reporting the presence of and communicating with nonvisible entities, including deceased others or religious and spiritual figures; and an apparent journeying between different realities. Sometimes momentary reluctance, sadness, anxiety, and fear may also be reported by the dying person. Although they can be of variable duration and intensity, such surges in mental clarity tend to happen within minutes, hours, or sometimes even days before the person dies (Batthyány & Greyson, 2021; Nahm & Greyson, 2009).

Currently, there exist no theories or models that can sufficiently account for the entire range of characteristics that may manifest during TL episodes. Part of the challenge may reside in the fact that all published accounts of TL are based on eye-witness testimony, rather than on retrospective recall of the person who experiences TL. Consequently, the phenomenology of TL can only be inferred from the perspective of those who have not experienced it but instead witnessed it. Moreover, some of the general characteristics of TL episodes, such as their “unexpected” nature and their occurrence “before death,” are difficult to quantify, resulting in discussions about how TL can best be defined (e.g., Nahm, 2022a, 2022b, 2024a; Peterson et al., 2022). This is also relevant with regard to its distinction from the related term and concept of “paradoxical lucidity” (PL), which has been introduced into scholarly nomenclature a few years ago (Mashour et al., 2019). It refers to an episode of unexpected, spontaneous, meaningful, and relevant communication or connectedness in a patient who is assumed to have permanently lost the capacity for coherent verbal or behavioral interaction due to an advanced neurodegenerative brain condition (Mashour et al., 2019; Nahm, 2024a). Even though PL can also occur shortly before death, closeness to death is no definition criterion for its occurrence, whereas TL always implies the proximity of death. Moreover, TL can occur in patients with and without advanced neurodegenerative brain conditions (Nahm, 2022a, 2024a).

Although still a growing area of academic interest, research on TL has increased over the past two decades, particularly exploring populations of older adults with dementia (see Brayne et al., 2008; Karlawish et al., 2024; Mueller et al., 2025; Nahm et al., 2012; Normann et al., 2006; Ramirez et al., 2023, 2024; Schreiber & Bennett, 2014; Teresi et al., 2023). Such interest has likely been fueled by the intriguing questions TL raises about the relationship between brain processes and cognitive awareness and functioning in adults, particularly on the precipice of death. For example, how is it possible for the dying brain, regardless of whether a neurodegenerative condition is

critically reviewed and revised the final article. Michael Nahm, Chris Roe, Bruce Greyson, Maryne Mutis, and Renaud Evrard critically reviewed and revised the final article. All authors approved the final article and agree to be accountable for all aspects of the work.

Correspondence concerning this article should be addressed to Natasha Tassell-Matamua, Centre for Indigenous Psychologies, School of Psychology, Massey University, Private Bag 11222, Palmerston North, New Zealand. Email: n.a.tassell-matamua@massey.ac.nz

preexisting or not, to have a spontaneous and instantaneous surge in mental functioning, when for all intents and purposes, such functioning can probably no longer be supported/sustained? Although a number of studies have documented surges of neuronal activity around the time of death (e.g., Chawla et al., 2009; Xu et al., 2023), it remains to be determined how far they can account for surges of mental clarity near death (van Lommel & Greyson, 2023).

While the lens and funding remain focused on TL in older adult populations and the implications such understandings may have for dementia care (e.g., National Institute of Health RePORTER, 2025), little work has been done to understand TL in children. Yet, TL in children is an equally important clinical consideration, for a variety of reasons. For example, it cannot automatically be assumed that the TL experiences of children and adults manifest in the same way and for the same physiological or psychological reasons. Psychologically, the cognitive capacities of the sort characterizing TL are assumed to be dependent on a developmentally appropriate and non-compromised functioning brain. Yet, in the cases of very young children who experience TL, their cognitive capacity may exceed that expected of their development for their chronological age according to established theories (e.g., Roehrs et al., 2024). Although such theories have been critiqued due to many children displaying intelligences beyond what such models imply is possible (Pelaez et al., 2008), there remains a need for further critique and questioning about how TL in such children might be accounted for in terms of current accepted models of cognitive development.

What is currently known about TL in children draws from a handful of case reports (e.g., Cantipratanus, 1270/1605; Doka, 2020; Hyslop, 1918; Lerma, 2007; Morse & Perry, 1990; Nahm et al., 2012; Scriver, 1681), three published cases occurring in a pediatric oncology clinic between 2012 and 2018 (Roehrs et al., 2024), as well as several other case examples that have been collected since 2023 (Tassell-Matamua & Kothe, 2025; Woollacott & Tassell-Matamua, 2025). For example, a report from the 13th century describes how an infant who was near death suddenly became very alert, started to laugh, lifted his arms, and then died soon after (Cantipratanus, 1270/1605), while a touching report from the 17th century describes how an 18-month-old girl, who lay convulsing, stopped very suddenly, opened her eyes, seemingly

became very alert, smiled, lifted her arms, and called “Ei, beautiful, ei beautiful!” (Ei schön, ei schön!), before dying (Scriver, 1681). An examination of this accumulated literature suggests TL appears to manifest in children in much the same way as it does in adults. Yet, TL cases have not previously been collected in a systematic way, and because knowledge about TL in general remains limited, it cannot be assumed that the TL experiences of children and adults are phenomenologically or causally indistinguishable or that the implications TL has for children and adults, particularly during the dying process, are the same.

Cardeña et al. (2017) suggested there is a need to explore exceptional experiences, such as TL, to advance understandings about the full range of human behaviors and their implications. Echoing this, we propose that research into exceptional surges of lucidity experienced by children on the precipice of death can contribute to enhancing such understandings. Studying TL in children could clarify ongoing debates about how to define TL and provide more robust criteria; it could enhance understandings about the medical and situational circumstances under which TL occurs, including how it may or may not be dependent on a certain level of neurological or psychological development as defined by current models; it may also provide insight into the impact witnessing TL in children has on caregivers and how this might be appropriately nurtured or mitigated.

Therefore, the aims of the present study were to collect case reports of TL in children aged 16 years and under from across the globe and examine whether there were consistent characteristics across them, as well as any notable antecedents. To this end, we recorded disease progression, treatment, and medication regime; behavioral and emotional changes prior to and during the TL episode; the proximity of the TL episode to death; and the duration of the TL episode. We also invited respondents to provide descriptions of the TL they witnessed, to better elucidate what the experiences might entail.

Method

Respondents

A total of seven respondents who had witnessed TL in a child were recruited with a purposive sampling method via existing professional

networks. Aged between 44 and 76 years, six respondents were currently or had previously worked as a physician, nurse, hospice worker, or social worker. The remaining respondent was an older sibling of the deceased child who had experienced TL. Respondents completed one questionnaire per episode of TL in a child that they had witnessed.

Questionnaire

The 42-item online questionnaire was used to collect information about the TL episode in a child that respondents had witnessed. Items requested respondents to provide information about the child's cognitive abilities before and during the TL episode, as well as information about the medical condition of the child, including treatment regime and medications, and how and when they died. Using the preferred Joint Information Systems Committee online platform (<https://onlinesurveys.jisc.ac.uk>), the questionnaire was designed with "conditional" functionality, enabling responses to each item to determine whether additional items would become available. For example, if a respondent indicated "yes" to the item asking whether the child regained communicative abilities during TL, they would proceed to further questions detailing the child's communication. If the respondent indicated "no," questions detailing communicative abilities would not be provided. Respondents were also given the opportunity to provide open-ended responses to questions. Questionnaire responses were collected from July 2023 through to May 2025, after which the information was synthesized and analyzed.

Ethics

The study was approved by the Massey University Human Ethics Committee, Aotearoa New Zealand (SOA 22/52), and the online questionnaire was hosted by the University of Northampton, United Kingdom. All participants were provided with an information sheet that specified details of the study and were required to provide consent electronically via the online questionnaire platform, before they could respond to the questions. No personally identifiable information of respondents or the person whose TL episode they described was collected.

Results

Although a pool of 22 cases of presumed TL in children (seven females, 12 males, three unspecified) was initially collected, 11 cases were not suitable to include as exemplars of TL, either because the child was above 16 years old or because there were no details in the responses to suggest the child met the criteria for TL as specified by our team for the purposes of the present study. Because TL can co-occur with other end-of-life experiences, such as deathbed visions, we have chosen to include only those cases that explicitly met our primary criteria for TL, which is based on Nahm's (2022a) definition, that is, TL being an unexpected surge of mental clarity before death. While we have previously described some of the cases below in other outlets (e.g., Roehrs et al., 2024; Tassell-Matamua & Kothe, 2025; Woollacott & Tassell-Matamua, 2025), here we provide a more comprehensive overview of the remaining 11 cases obtained during our data collection period. Detailed overviews of all 11 cases, which include both quantitative and qualitative information, are provided in Tables A1–A11 in the Appendix. Descriptive analyses with some verbatim quotes are provided below.

Demographic Information

Across the 11 cases (seven male, four female), children ranged in age from 19 months to 16 years old. The children's ethnicities were predominantly Caucasian¹ ($N = 8$), followed by Hispanic or Latino ($N = 2$) and unknown ($N = 1$). The most common medical condition at the time of TL and subsequent death was leukemia ($N = 6$), while the remaining children had either immune disease ($N = 2$), kidney disease ($N = 2$), or a brain tumor ($N = 1$).

The duration of TL was a few seconds to less than an hour for most of the children ($N = 7$). Three children had TL episodes that were more than an hour but less than a day in duration, while the TL of one child lasted more than a day. Most children ($N = 9$) experienced one continuous TL episode, while the remainder ($N = 2$) appeared to experience multiple lucid events before dying. The proximity to death of the TL varied for each

¹ The term "Caucasian" is used to refer to ethnicities that have a contemporary or historical European origin and might otherwise be referred to by a variety of other terms such as White, European, and Pākehā, among others.

of the children. Over half of the children ($N = 7$) died within 24 hr of the TL episode, while a further three died within 5 days. The time between TL and death is unknown for the remaining child. Only one of the respondents, who witnessed TL in Cases 2, 3, and 7, provided a qualitative response for the question related to the proximity of TL to death, stating, "the children would die pretty quickly after the moment of TL." Table 1 provides demographic details for each case.

Mental Impairment Before and During TL

There were obvious differences in mental impairment before and during TL. Ten of the children had severe mental impairment before TL, while one child had mild impairment. One respondent chose "other" for one child and then provided a description indicating the child was not visibly conscious, which we have included in the "severe" category. During TL however, most of the children ($N = 8$) had no mental impairment, while the remainder had either mild ($N = 2$) or moderate ($N = 1$) impairment.

When asked to qualify how the type of mental impairment manifested, respondents noted some children had lost the ability to interact with their surroundings and interact with people before the TL episode, but during the TL episode these abilities returned. Some respondents offered qualitative responses to further explain the changes. For example, Case 7 "shifted from a semi-comatose state into alertness, was able to communicate to the nurses," while prior to the lucid event, Case 8 "was not responding to healthcare providers or parents.

During the event, she was communicating normally." Case 3 was also described as "her behaviour was her normal self, but not in pain and very peaceful." Other responses also indicated a sense of peace had descended on the child during TL. For example, the respondent who witnessed TL in Case 2 stated, "he was alert and talking. Seemed to know everyone as though he was perfectly well. Was also peaceful. Knew he was going to die and was not afraid at all," while the respondent who witnessed TL in Case 6 stated that "after coming back out of the coma and having clarity, he also seemed to have a sense of peace and acceptance for what was going on."

In regaining their ability to interact and communicate with others, 10 children demonstrated an apparent new ability to interact with unidentified others who were not visible to anyone else (one respondent did not answer this question). For example, Case 11 "was only talking to someone only he could see. He did not look at the others in the room," and Case 8 "seemed to be communicating with people who were not present, having conversations and dialogue as if she was back to her normal state of health." Other children indicated they were communicating with particular people they knew, such as Case 7 who "communicated to the nurses to tell his parents he would be ok, and that so-and-so was going to help him cross over. This was a big shift from the semi-comatose state before," and Case 2 who "reported talking to [a] deceased grandma." Two children described interacting with other children who were in hospital at the same time as them, but had since died, such as Case 5 who was

Table 1
Demographic Details for All 11 Cases

Case	Age	Sex	Ethnicity	Diagnosis	Comatose prior to TL	TL length	TL proximity to death	No. of TL episodes
1	12	Male	Caucasian	Brain tumor	Yes	10–59 min	13–24 hr	>1
2	9	Male	Caucasian	Leukemia	Yes	10–59 min	1–2 hr	1
3	7	Female	Caucasian	Leukemia	Yes	10–59 min	1–2 hr	1
4	16	Female	Hispanic	Leukemia	—	1–10 min	1–2 min	1
5	9	Male	Caucasian	Leukemia	Yes	<1 min	2–5 days	>1
6	16	Male	Caucasian	Kidney failure	Yes	More than a day	2–5 days	1
7	—	Male	—	Kidney failure	Yes	10–59 min	Unsure	1
8	3	Female	Hispanic	Immune disease	Yes	1–24 hr	13–24 hr	1
9	12	Female	Caucasian	Leukemia	—	1–10 min	1–5 min	1
10	1.6	Male	Caucasian	Immune disease	—	1–24 hr	24–48 hr	1
11	8	Male	Caucasian	Leukemia	—	<1 min	2–12 hr	1

Note. — indicates no response was given. TL = terminal lucidity.

communicating with “children that had been on the cancer ward and had died,” while Case 3 described communicating with “another cancer kid who had died.” One child (Case 4) described interacting with “a light and the presence of Christ.” Interestingly, Case 10 discussed joining a deceased sibling whom the parents had not mentioned to the child before: “He talked about joining his brother who was a still-birth, and he told his parents he was going to be fine,” while Case 1 described communicating with a deceased uncle who he had not known, as the uncle’s death predated the child’s birth: “had ‘met’ someone that made him laugh and happy. When he described this person to his mother, she said to me ‘he is describing my younger brother who died when I was younger.’”

During their moment of lucidity, some of the children’s interactions involved making a point of reassuring their caregivers about their imminent death. For example, Case 3 “told her parents not to worry about her as she had seen another child who had died a short time before and the child would be with her,” and as noted above, Case 7 “communicated to the nurses to tell his parents he would be ok.” Remarkably, Case 10, who was just 19 months old at the time of death, “communicated with his parents that he ‘was ready to go home’ and that ‘he and parents would be OK’ using sign language and verbal language.” Although the description of Case 8 did not explicitly state that the child directly reassured her parents, the respondent described an indirect reassurance that manifested as “during the conversations with her parents, she ‘reviewed’ all the important people in her life and ‘prayed’ for them.”

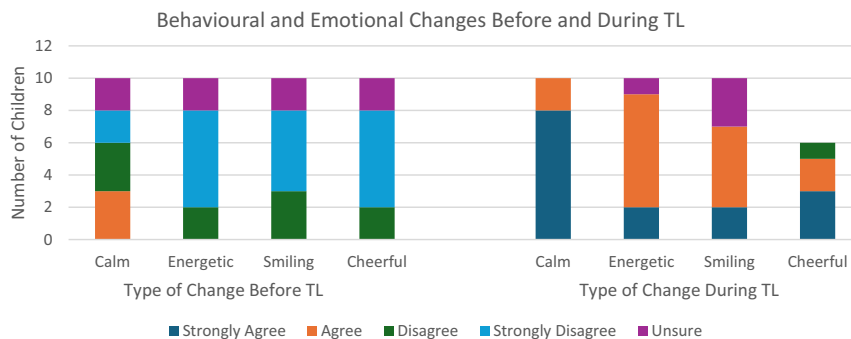
A variety of other behavioral and emotional changes were also exhibited to varying degrees during TL compared to before TL for 10 children (one respondent did not answer these questions). As Figure 1 indicates, respondents agreed or strongly agreed that most children ($N = 10$) were calm during the TL episode, which contrasted with their level of calm before the TL episode. When asked if the children were more energetic during TL, respondents strongly agreed ($N = 2$) or agreed ($N = 7$), whereas before TL respondents either disagreed ($N = 2$) or strongly disagreed ($N = 6$). Respondents agreed ($N = 5$) or strongly agreed ($N = 2$) that the children appeared to smile during TL but disagreed ($N = 3$) or strongly disagreed ($N = 5$) that the children appeared to smile before TL. While only six respondents answered the question about cheerfulness during TL, there is still a noticeable difference in responses, with most strongly disagreeing ($N = 6$) or disagreeing ($N = 2$) that the child was cheerful before TL, compared to strongly agreeing ($N = 3$) or agreeing ($N = 2$) that the child was cheerful during TL.

Possible Causes of TL

To ascertain whether respondents had opinions about the possible causes of TL, we asked them to state whether there were any changes to medical condition or to treatment regime or whether the child had a fever before the TL episode, as well as indicate whether they believed any of these factors could reasonably be considered as potential causes of TL. Most of the children ($N = 9$) had a marked change to their medical condition

Figure 1

Behavioral and Emotional Changes Before and During the TL Episodes of 10 Children



Note. TL = terminal lucidity. See the online article for the color version of this figure.

prior to TL, with descriptive information provided by respondents indicating their conditions deteriorated. For example, Case 1 “became more sleepy, no energy and drifting in and out of consciousness,” Case 2 “became very, very ill and did not respond to treatment in the days before lapsing into semi-coma,” and Case 6 had “seizures lasting upwards of 14 hr and then going into a coma.” The description given for Case 11 was simply “he was deteriorating.” One of the children’s conditions did not change, and one of the respondents was not sure if there had been a marked change in the child.

Yet, many of the children ($N = 7$) did not have a marked change in medication or treatment just prior to the TL, although two children did have a change, while for the remaining two children respondents indicated they were unsure whether they did or did not have a change. Four of the children did not have a fever prior to their TL episode, while respondents indicated they were unsure whether the other seven had a fever or not.

Most of the respondents ($N = 9$) believed changes in the child’s condition, medication, or treatment could not have been causally responsible for the TL episode. One respondent did not provide an answer to this question, while the remaining respondent (who witnessed Case 1) was unsure but provided clarification for responding this way, stating “I have put unsure as how would one know. I don’t think the medications were responsible for the experiences he had, but I cannot say that fully, as I am not sure.”

Discussion

Although cases of TL in children have previously appeared in literature, most of what is known about TL stems from reports derived from adult populations, most often comprising older aged dementia patients. The present sample of TL cases represents a departure from other lucidity episodes reported in recent literature, on account of the age of the children, who, we assume, had fewer life experiences; were less culturally conditioned regarding ideas of life, death, and the afterlife; were developmentally different from older adults; and, most notably, were not diagnosed with any form of dementia. To our knowledge, this study is the first of its kind to intentionally collect contemporary accounts of TL in children aged 16 years and under, with the objective of examining

whether consistent characteristics exist across the cases, including in any potential antecedents.

Characteristics of TL

Despite active debates about how lucidity episodes should be defined (e.g., Nahm, 2022a, 2022b, 2024a; Peterson et al., 2022), TL is currently accepted as an unanticipated surge of mental clarity that occurs in the final minutes, hours, and sometimes days before death. Consistent with previous literature, the TL episodes in our sample tended to occur in the final minutes and hours before death (a further three children died within days), and they also tended to be of short duration, typically lasting from a few seconds to hours. In general, this specific finding combined with our findings regarding cognitive responsivity during the TL episode supports current definitions that describe TL as a surge of mental clarity. The close proximity of TL to death also supports the assertion that TL as a phenomenon can and should be differentiated from the related term paradoxical lucidity (Nahm, 2022a). However, Case 6 does not fit this pattern, as the TL lasted for longer than a day, yet the child still exhibited many of the features that were evident in the other cases and are commonly reported in adult cases of lucidity. Although medical condition and treatment do not appear to predict when and why TL occurred in the present cases, we cannot rule out their possible role in determining the duration of TL. For example, Case 6 was not on any medication, so it is possible the absence of medication may have allowed a prolongation of his TL. In the absence of more detailed clinical records, it is not possible to know for certain, but this finding does implore future research to acquire clinical records to enable a more thorough analysis of the potential influence of medications on the duration, and indeed on the occurrence, of TL in children.

Although all 11 cases are unique, there are some other notable features congruent with what is currently known about lucidity episodes. For example, many of the children displayed changes to cognitive responsivity during their TL, which included regaining awareness of their surroundings and regaining the ability to communicate and interact with others. Notable behavioral observations suggestive of emotional changes were also reported in most of the children, to the extent that they were more energetic, cheerful, smiling more, and appeared to be calmer during their TL than

before their TL occurred. While all of these features have been observed to varying degrees in adult cases of lucidity (see Brayne et al., 2008; Karlawish et al., 2024; Mueller et al., 2025; Nahm et al., 2012; Normann et al., 2006; Ramirez et al., 2023, 2024; Schreiber & Bennett, 2014; Teresi et al., 2023), whether children's TL is phenomenologically equivalent to TL in adults remains open to future speculation and research. Ascertaining whether there are in fact phenomenological differences may have important implications for, as an example, decision-making processes related to end-of-life care for terminally ill children.

An intriguing feature that many children reported, which is also consistent with descriptions of lucidity in adult samples, is the presence of and communicating with nonvisible entities, a phenomenon known as deathbed visions (Barbato, 2024; Claxton-Oldfield, 2024; Fenwick & Fenwick, 2008; Fountain & Kellehear, 2012; Houran & Lange, 1997). Ten of our child cases appeared to experience deathbed visions as part of their TL episode, suggesting a synchronous relationship between these phenomena. This indicates that such visions constitute a regular feature of TL, but it seems likely that they are rarer in episodes of lucidity that occur much earlier than a few days before dying, for example, in the context of PL. Future research should continue to explore the interrelated nature of TL and these impactful visions. Notably, one child also described interacting with Jesus, and some described interacting with deceased children who had died recently at the hospital in which they were staying. Three children referred to a deceased family member, and at least two of the children (i.e., Cases 1 and 10) had not known the deceased others, their uncle and a stillborn sibling, respectively, during their life. How these children obtained knowledge of their deceased relatives is difficult to explain in conventional terms. Collecting and studying such cases in more depth may therefore contribute added evidence that challenges physicalist theories of consciousness. While the relatively youthful nature of TL research prohibits definitive conclusions to be drawn at this stage, moving forward it may be necessary to explore other explanatory possibilities regarding knowledge acquisition during TL episodes, such as non-brain-based perspectives that embrace the notion that conscious experience, including how knowledge is acquired, is correlated with but not necessarily

reliant on a healthy functioning brain (Kelly et al., 2015; Nahm, 2024b; Tassell-Matamua & Holden, 2020).

Another notable feature that some of the children displayed is an awareness they were about to die (Case 2) and concern regarding the impact of their passing on their caregivers, which was expressed as the children reassuring their parents that they would be OK (Cases 3, 7, 8, 10). We assume many of the children had been exposed to narratives suggesting their illnesses would lead to their subsequent deaths and they also would have been cognizant of their caregiver's implicit and explicit reactions to that. Therefore, the fact they were aware they would die is perhaps not that surprising. What is more interesting is their acceptance of their own death, as well as their awareness of the impact on their caregivers, particularly given their ages. Dominant narratives imply that children are thought to not fully comprehend the permanent nature, potential causes, inevitability, or likely impact of death until they are 8 years and older, at least in Western cultures (Longbottom & Slaughter, 2018). However, such narratives tend to focus on the biological aspects of death awareness as well as focus on the cognitive development of the child in relation to death awareness, without necessarily considering socio-cultural, ecological, emotional, and spiritual development (Honey & Dark-Freudeman, 2025). It is interesting, therefore, that Cases 3, 8, and 10, in which the children were aged 7 years, 3 years, and 19 months, respectively, suggest an understanding of the impact of death on loved ones during that moment of rapid cognitive revival which transcends established convention and dominant narratives regarding how and when children understand death and points to a need for revision of such convention that accounts for phenomena such as TL in children.

Possible Antecedents to TL

There were no obvious or consistent antecedents to TL across our 11 cases. Children were of varying ages, sexes, and differing medical conditions and had different medication and treatment regimens at the time of the TL. More than half of the children did have leukemia, but given others did not but still experienced TL, it is not likely that leukemia itself is a causative agent to TL. However, we cannot rule out that there may be something physiologically specific

to leukemia, which is also evident in kidney disease and immune disease (the diagnoses of four of the other children) that triggers TL. For example, could these illnesses lead to a deterioration of neurophysiology that in itself serves as a catalyst for the TL episode? The link between specific illnesses and TL and indeed whether such illnesses are implicated in some other physiological process that then leads to TL are areas that could be examined in future research on TL in children.

Equally, none of the children passed away unexpectedly (e.g., had a fully functioning brain until a sudden traumatic accident that caused their death), since all had a medical condition that caused their health to worsen over time. Adding to this, the condition of most of the children markedly changed in the direction of deterioration just prior to their TL episode. Determining whether TL is experienced exclusively with long-term illnesses or whether it can also occur in the final moments of a child's life who has an unexpected death (i.e., a fully functioning brain that becomes compromised from a sudden incident, but then the child unexpectedly regains mental clarity) is something requiring further investigation. An equally intriguing question for further explication is whether a marked deterioration in medical condition is a prerequisite for TL, and if so, how is TL possible given such declines? For example, some of the children in our study (i.e., Cases 1, 2, 3, 5, 6, 7, 8) were in semicomatose or comatose states prior to their TL episode. That they were able to traverse the spectrum of cognitive capabilities from semicomatose to lucid awareness (in most cases) in the relatively short time frames that their TL lasted contradicts established thinking about what is possible in light of the children's medical conditions and imminent prognoses.

While our focus has been on determining whether TL is triggered by or potentially linked to quantifiable factors (i.e., diagnosis, treatment, age, among others), we did not assess whether more subjective factors could be involved in the occurrence of TL. For example, the 11 children described here had terminal illnesses that involved an expected and observable decline in health over time. It is likely such children would have been exposed to discourses about their own deaths that may have elevated their understandings about the dying process. It is possible therefore that the occurrence of TL may, in part,

be a consequence of the more subjective factor of social conditioning. Near-death experience literature suggests sociocultural conditioning and expectations might be a causative mechanism for the occurrence of near-death experiences (e.g., see Tassell-Matamua & Holden, 2020). Although this is typically dismissed as an explanation for the totality of near-death experience features, whether sociocultural conditioning (e.g., expectations that the child is going to die of their illness and meet Jesus upon their death) plays a role in TL is an area for future investigation.

Limitations

There are several limitations to our study that must be acknowledged. The small size of our sample of child cases of TL and the lack of diversity regarding ethnicities, medical conditions, and ages limited our ability to more thoroughly explore a range of potential antecedents for TL, as well as its presentation and interpretation. Although we have no reason to doubt the veracity of the reports provided to us by respondents, we cannot rule out potential inaccuracies due to retrospective recall of the cases. Our recruitment relied on professional acquaintanceship networks of the research team, and such networks may have been more familiar with and inclined to report supposed TL experiences they had witnessed, and they may have been more interested in spiritual topics than average medical personnel in pediatric hospitals. This may have resulted in a biased sample. Most of our sample were professional health care providers. While this provided some useful insights, future studies may benefit from including more or exclusively focusing on the reports of parents and/or close caregivers, who carry a higher degree of epistemological authority over their child's experiences than professionals, which means they observe nuances to their children's experiences that professionals may miss. Finally, and importantly, we applied a retrospective approach to our inclusion criteria after some of the cases had been collected. This meant that while some of the 22 original cases might have been considered as TL by the respondents, after assessing the cases, some were not considered as such by our research team and so have not been included in this current publication. The unpublished 11 cases will instead be reported in a forthcoming publication.

Conclusion

To our knowledge, this study is the first of its kind to systematically collect contemporary cases of TL in children. It appears many of the typical features of lucidity episodes that have been identified in adult samples are also common to our cases of TL in children. Children seem to experience a surge of mental clarity that is often reflected by a regaining of communicative abilities, a peaceful acceptance and awareness of their impending death, and the emotional intelligence to reassure their loved ones and say goodbye. Sometimes, TL in children can also manifest as their interacting with deceased loved ones or religious figures and acquiring knowledge that is difficult to explain through conventional sensory modalities. While there remains much more to explore and learn about TL in children, this study is a necessary and important first step to building a more robust understanding of what TL is, including how current definitions might be refined in light of what is currently known and what implications TL in children have for enhancing understandings about those precious final moments at the end of physical life.

References

- Barbato, M. (2024). Deathbed visions and the moment of death. In M. C. Best (Ed.), *Spiritual care in palliative care: What it is and why it matters* (pp. 593–605). Springer. https://doi.org/10.1007/978-3-031-50864-6_40
- Batthyány, A., & Greyson, B. (2021). Spontaneous remission of dementia before death: A study on paradoxical lucidity. *Psychology of Consciousness: Theory, Research and Practice*, 8(1), 1–8. <https://doi.org/10.1037/cns0000259>
- Brayne, S., Lovelace, H., & Fenwick, P. (2008). End-of-life experiences and the dying process in a Gloucestershire nursing home as reported by nurses and care assistants. *American Journal of Hospice & Palliative Care*, 25(3), 195–206. <https://doi.org/10.1177/1049909108315302>
- Cantipratanus, T. (1605). *Miraculorum et exemplorum memorabilium sui temporis libri duo* [Two books of miracles and memorable examples of his time]. Ex Typographia Baltazaris Belleri. (Original work published 1270)
- Cardaña, E., Lynn, S. J., & Krippner, S. (2017). The psychology of anomalous experiences: A rediscovery. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1), 4–22. <https://doi.org/10.1037/cns0000093>
- Chawla, L. S., Akst, S., Junker, C., Jacobs, B., & Seneff, M. G. (2009). Surges of electroencephalogram activity at the time of death: A case series. *Journal of Palliative Medicine*, 12(12), 1095–1100. <https://doi.org/10.1089/jpm.2009.0159>
- Claxton-Oldfield, S. (2024). Deathbed visions: Visitors and vistas. *OMEGA-Journal of Death and Dying*, 90(1), 21–36. <https://doi.org/10.1177/00302228221095910>
- Doka, K. (2020). *When we die: Extraordinary experiences at the end of life*. Llewellyn Publications. <https://doi.org/10.1080/13576275.2023.2212630>
- Fenwick, P., & Fenwick, E. (2008). *The art of dying*. Bloomsbury Publishing.
- Fountain, A., & Kellehear, A. (2012). On prevalence disparities in recent empirical studies of deathbed visions. *Journal of Palliative Care*, 28(2), 113–115. <https://doi.org/10.1177/082585971202800208>
- Honey, M., & Dark-Freudeman, A. (2025). From theory to reality: Unraveling the development of mature death concept. *Death Studies*, 49(8), 1101–1119. <https://doi.org/10.1080/07481187.2024.2385388>
- Houran, J., & Lange, R. (1997). Hallucinations that comfort: Contextual mediation of deathbed visions. *Perceptual and Motor Skills*, 84(3), 1491–1504. <https://doi.org/10.2466/pms.1997.84.3c.1491>
- Hyslop, J. H. (1918). Visions of the dying. *Journal of the American Society for Psychical Research*, 12, 585–645.
- Julião, M., Wholihan, D. J., Calaveiras, P., Costa, E., & de Sousa, P. F. (2023). Energy surge: A deathbed phenomenon that matters. *Palliative & Supportive Care*, 21(2), 371–375. <https://doi.org/10.1017/S1478951522001754>
- Karlawish, J., Peterson, A., Kleid, M., Harkins, K., Largent, E. A., Süttes, S. D., & Clapp, J. T. (2024). Caregiver accounts of lucid episodes in persons with advanced dementia. *The Gerontologist*, 64(6), Article gnad170. <https://doi.org/10.1093/geront/gnad170>
- Kastenbaum, R. (2000). *The psychology of death* (3rd ed.). Springer.
- Kelly, E. F., Crabtree, A., & Marshall, P. (Eds.). (2015). *Beyond physicalism: Toward reconciliation of science and spirituality*. Rowman & Littlefield.
- Lerma, J. (2007). *Into the light*. Weiser/Career Press.
- Longbottom, S., & Slaughter, V. (2018). Sources of children's knowledge about death and dying. *Philosophical Transactions of the Royal Society B*, 373(1754), Article 20170267. <https://doi.org/10.1098/rstb.2017.0267>
- Macleod, A. D. (2009). Lightening up before death. *Palliative and Supportive Care*, 7(4), 513–516. <https://doi.org/10.1017/S1478951509990526>
- Mashour, G. A., Frank, L., Batthyány, A., Kolanowski, A. M., Nahm, M., Schulman-Green, D., Greyson, B., Pakhomov, S., Karlawish, J., & Shah, R. C. (2019).

- Paradoxical lucidity: A potential paradigm shift for the neurobiology and treatment of severe dementias. *Alzheimer's & Dementia*, 15, 1107–1114. <https://doi.org/10.1016/j.jalz.2019.04.002>
- Morse, M., & Perry, P. (1990). *Closer to the light: Learning from the near-death experiences of children*. Villard.
- Mueller, K. D., Hale, M. R., Goulette, O., Belay, H., Sanson-Miles, L., Benson, C., Hitchcock, M., & 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/10.1044/2024_PERSP-24-00033
- Nahm, M. (2022a). The importance of the exceptional in tackling riddles of consciousness and unusual episodes of lucidity. *Journal of Anomalous Experience and Cognition*, 2(2), 264–296. <https://doi.org/10.31156/jaex.24028>
- Nahm, M. (2022b). Terminal lucidity versus paradoxical lucidity: A terminological clarification. *Alzheimer's & Dementia*, 18(3), 538–539. <https://doi.org/10.1002/alz.12574>
- Nahm, M. (2024a). Defining terminal lucidity: Taking the need for accuracy and integrity seriously. *Journal of Near-Death Studies*, 42(1), 71–78. <https://doi.org/10.17514/JNDS-2024-42-1-p70-78>
- Nahm, M. (2024b). *The arcane nexus. Assessing the roots of non-local consciousness*. <https://noetic.org/prize-2024/>
- Nahm, M., & Greyson, B. (2009). Terminal lucidity in patients with chronic schizophrenia and dementia: A Survey of the Literature. *Journal of Nervous & Mental Disease*, 197(12), 942–944. <https://doi.org/10.1097/NMD.0b013e3181c22583>
- Nahm, M., Greyson, B., Kelly, E. W., & Haraldsson, E. (2012). Terminal lucidity: A review and a case collection. *Archives of Gerontology and Geriatrics*, 55(1), 138–142. <https://doi.org/10.1016/j.archger.2011.06.031>
- National Institute of Health RePORTER. (2025). *Paradoxical lucidity projects*. Retrieved July 27, 2025, from https://reporter.nih.gov/search/sVQN EtBGt0mU6RH_bK mreA/projects
- Normann, H. K., Asplund, K., Karlsson, S., Sandman, P. O., & Norberg, A. (2006). People with severe dementia exhibit episodes of lucidity. A population-based study. *Journal of Clinical Nursing*, 15(11), 1413–1417. <https://doi.org/10.1111/j.1365-2702.2005.01505.x>
- Pelaez, M., Gewirtz, J. L., & Wong, S. E. (2008). A critique of stage theories of human development. In B. A. Thyer (Ed.), *Comprehensive handbook of social work and social welfare* (Vol. 2, pp. 503–518). John Wiley. <https://doi.org/10.1002/9780470373705.chsw002020>
- Peterson, A., Clapp, J., Largent, E. A., Harkins, K., Stites, S. D., & Karlawish, J. (2022). What is paradoxical lucidity? The answer begins with its definition. *Alzheimer's & Dementia*, 18(3), 513–521. <https://doi.org/10.1002/alz.12424>
- Ramirez, M., Teresi, J. A., Ellis, J., Gonzalez-Lopez, P., Silver, S., Rutigliano, M., Vidal-Manzano, J., Boratgis, G., Devanand, D. P., van Meer, I., Bhatti, I., Bhatti, U., & Luchsinger, J. A. (2023). Unexpected lucidity in dementia: Application of qualitative methods to develop an informant-reported lucidity measure. *Aging & Mental Health*, 27(12), 2395–2402. <https://doi.org/10.1080/13607863.2023.2207167>
- Ramirez, M., Teresi, J. A., Silver, S., Gonzalez-Lopez, P., van Meer, I., Ghaemmaghamfarahani, I., Boratgis, G., Devenard, D., & Luchsinger, J. A. (2024). The lucidity in dementia experience: Perspectives from family and professional caregivers. *Age and Ageing*, 53(8), Article afae174. <https://doi.org/10.1093/ageing/afae174>
- Roehrs, P., Fenwick, P., Greyson, B., Kellehear, A., Kothe, K., Nahm, M., Roe, C., Tassell-Matamua, N., & Woollacott, M. (2024). Terminal lucidity in a pediatric oncology clinic. *Journal of Nervous and Mental Disease*, 212(1), 57–60. <https://doi.org/10.1097/NMD.0000000000001711>
- Schreiber, T. P., & Bennett, M. J. (2014). Identification and validation of premortem surge: A Delphi study. *Journal of Hospice & Palliative Nursing*, 16(7), 430–437. <https://doi.org/10.1097/NMD.0000000000001711>
- Scriber, C. (1681). *Seelen-Schatz. Vierdter Theil*. Lüderwald.
- Tassell-Matamua, N. A., & Holden, J. M. (2020). Near-death experiences: The mystical feeling of ‘crossing over’ and its impact on faith and spirituality. In K. Vail & C. Routledge (Eds.), *The science of religion, spirituality and existentialism* (pp. 51–66). Elsevier/Academic Press. <https://doi.org/10.1016/B978-0-12-817204-9.00005-6>
- Tassell-Matamua, N. A., & Kothe, K. (2025). Terminal lucidity. An introduction, some case examples in children, and questions they raise. In M. Nahm, M. Woollacott, & N. A. Tassell-Matamua (Eds.), *On the banks of the river Styx: New perspectives on terminal lucidity and other near-death phenomena* (pp. 6–19). Academy for the Advancement of Postmaterialist Sciences.
- Teresi, J. A., Ramirez, M., Ellis, J., Tan, A., Capezuti, E., Silver, S., Boratgis, G., Eimicke, J. P., Gonzalez-Lopez, P., Devanand, D. P., & Luchsinger, J. A. (2023). Reports about paradoxical lucidity from health care professionals: A pilot study. *Journal of*

- Gerontological Nursing*, 49(1), 18–26. <https://doi.org/10.3928/00989134-20221206-03>
- van Lommel, P., & Greyson, B. (2023). Invited commentary: Critique of recent report of electrical activity in the dying human brain. *Journal of Near-Death Studies*, 41(1), 3–8. <https://doi.org/10.17514/JNDS-2023-41-1-p3-8>
- Woollacott, M., & Tassell-Matamua, N. (2025). Lucidite terminale chez les enfants: Une etude encours [Terminal lucidity in children: An ongoing study]. In C. Fawer (Ed.), *Ces enfants qui dissent voir ou entendre des defunts* [Children who say they see or hear the deceased] (pp. 85–99). Editions Exergue.
- Xu, G., Mihaylova, T., Li, D., Tian, F., Farrehi, P. M., Parent, J. M., Mashour, G. A., Wang, M. M., & Borjigin, J. (2023). Surge of neurophysiological coupling and connectivity of gamma oscillations in the dying human brain. *Proceedings of the National Academy of Sciences*, 120, Article e2216268120. <https://doi.org/10.1073/pnas.2216268120>

(Appendix follows)

Appendix
Information on All 11 Cases

Table A1
TL Child Case 1

Case No. 1: Child's details									
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever	
12	Male	Caucasian	Brain tumor, partially resected and radiated	Sleepiness, no energy, in/out of consciousness	Morphine Cyclizine	Yes	No	No	
Terminal lucidity details									
Characteristic				Length	No. of episodes	Proximity to death			
<ul style="list-style-type: none"> • Maintained ability to interact/communicate with others • Recognized surroundings • Understood written language • Regained physical abilities/movement • Interacted with deceased others not visible to anyone else 				10–59 min	>1	13–24 hr			
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before	Behavior, mood, and emotions during			
Mild				None	Calm Not energetic Not cheerful Not smiling	More calm More energetic More cheerful			
Description of TL provided by respondent									
<p>People used to tell him he would be able to run and play again after he died (he had lost the use of his legs). He was not comfortable with this thought and wanted to work in a library helping the librarian with helping to get books. When he became unconscious for many hours, he woke again and told his mum that he had met a funny, happy man. He went on to describe his mum's younger brother who had died in her teenage years that she had never spoken to him about. She was very emotional as she told me he was going to be taken care of by her brother. He also said, "and there is a big library there and the lady there wants me to help with the other children." This was very comforting for the family after he died.</p>									
Respondent details									
Nurse of patient (female, Caucasian, 63 years)									

Note. TL = terminal lucidity.

(Appendix continues)

Table A2
TL Child Case 2

Case No. 2: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
9	Male	Caucasian	Leukemia, treated for 1–2 years	Semicomatose, nonresponsive, mumbling, nonresponsive to treatment	Complex regime	Yes	No	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained awareness of surroundings Regained ability to speak with others in logical, organized sentences Regained head movement Awareness of impending death, but no fear Interacted with deceased others not visible to anyone else Reassured loved ones and said “goodbye” 				10–59 min	1	1–2 hr		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				None	Not calm Not energetic Not cheerful Not smiling		More calm More energetic More smiling	
Description of TL provided by respondent								
<p>I worked as a social worker in a community hospital serving children and youth with severe chronic illnesses or major life-threatening illnesses. Nurses told me about the passing of two children with cancer. The nurses reported an episode of terminal lucidity for both children, and for both, their parent(s) had been sent home to get a shower and eat something as the children had been very sick for several days and had lapsed into a semicomatose, nonresponsive state. Nurses reported that both children talked about dying and having talked or met with someone who had died and would be there to help them cross over. It was heartbreaking for parents to miss this time with their children who died before they returned to the hospital.</p> <p>James was a 9-year-old boy who had relapsed with leukemia. In the days before he died, he told me about seeing a white light and talking with Jesus. One morning, he talked with me while in his room and I was in the hallway. He wanted me to come in and yelled back verbal responses to my thoughts. When he lapsed into the semicomatose state that nurses had described in other dying children, I worked with staff and volunteers to keep the family at bedside, tend to their needs, and support them when he came to alertness just before dying. He told his parents not to worry about him as grandma was going to be with him. He remained alert and seemed peaceful and not in pain for less than an hour before dying in his mom's arms.</p>								
Respondent details								
Social worker of patient (female, Caucasian, 67 years)								

Note. TL = terminal lucidity.

(Appendix continues)

Table A3
TL Child Case 3

Case No. 3: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
7	Female	Caucasian	Leukemia	Vomiting large amounts of blood due to internal bleeding	Unsure	Yes	Yes	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained awareness of surroundings Regained ability to recognize and interact with others Regained movement of head, ability to sit up Regained ability to speak in logical, organized, complete sentences Awareness of impending death Reassured loved ones to not be concerned Interacted with deceased others not visible to anyone else 				10–59 min	1	1–2 hr		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				None	Not calm Not energetic Not cheerful Not smiling		More calm More energetic More smiling	
Description of TL provided by respondent								
<p>I was working with a little girl who had leukemia. She was not responding to treatment and became very ill the day before Christmas. The medical doctor did everything she could to keep the child alive, saying that she was not going to have a child die on Christmas. The child did survive the holidays but on the 27th began vomiting a lot of blood. She and I were playing and talking. She would stop at times to vomit and then go on with what we were doing. On the 28th, she lapsed into a semicomatose state and was mumbling in her sleep. Her parents and younger brother remained with her. We brought in lounge chairs and food for them. I met with the little boy to see how he was doing and to give the parents a break. That evening, she came to alertness. Nurses reported that she told her parents not to worry about her as she had seen another child who had died a short time before and the child would be with her. Nurses report that the patient was alert, spoke clearly, and seemed at peace during this time. She died within an hour of becoming alert. I was home ironing clothes when she died. I felt a pain in my chest and knew that she had died. I called the hospital, and the nurse said that a dozen nurses had just called and asked about this child. It was as if we all felt her leaving. The mom later told me that Maggie had seen the deceased child at a funeral service for another pediatric patient. Maggie told her mom that the deceased child was sitting in a chair that had sunlight beaming down on it. The mom did not see the deceased child, but Maggie referred to her by name.</p>								
Respondent details								
Social worker of patient (female, Caucasian, 67 years)								

Note. TL = terminal lucidity.

(Appendix continues)

Table A4*TL Child Case 4*

Case No. 4: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
16	Female	Hispanic	Acute lymphoblastic leukemia, bone marrow aplasia	Hemoglobin level 1 g/dl Platelets were 30	Hydration	Yes	No	No
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained awareness of surroundings Regained ability to recognize and interact with others Regained ability to speak clearly using logical, organized words Regained ability to move head, sit up in bed, and lift arms and legs Interacted with nonvisible others 				1–10 min	1	1–2 min		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				Moderate	Calm state Not energetic Not cheerful Not smiling		More calm More energetic More smiling	
Description of TL provided by respondent								
<p>A 16-year-old girl was unconscious due to the final stages of her life. She was gasping for air, her blood pressure was not showing on the monitor, so I brought her to the bedside and asked her near her left ear, "I'd like to know what you're seeing?" She then sat up, turned to look at me with a deep, dark stare, as if I were not there anymore, and said, "there's a light." Then she collapsed, a tear rolling down her eyes. I remained silent; I gathered my courage and asked her, "who's in the light?" She stopped sitting down and just said, "this is Christ." I then stayed with her for 10 min and she died 5 min after I left the room.</p>								
Respondent details								
Doctor of patient (female, Hispanic, 44 years)								

Note. TL = terminal lucidity.

(Appendix continues)

Table A5
TL Child Case 5

Case No. 5: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
9	Male	Caucasian	Leukemia	In and out of hospital over a period of a year Not visibly conscious	Antileukemia	No	No	No
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> • Recognized and interacted with others during intermittent TL episodes • Regained ability to speak in logical, organized sentences • Became thankful to caregivers and family • Awareness of transitioning to death • Precognitive abilities of future life 				<1 min	>1	2–5 days		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				None	Unsure		More calm More energetic More smiling More cheerful	
Description of TL provided by respondent								
<p>We were trying for a bone marrow transplant. But things changed. He began to respond and be healthier. The patient was feeling better because he said he had been to a place called Summerland, over a rainbow bridge. There were other children there and they told him that he could not stay, so he came back and got better, physically. He did okay under treatment until the age of 8 and he died at 9. At 8, he was getting worse. The patient was now at children's hospital and not doing well. He was on difficult medications. He was like a little old man. He began to visit Summerland in times when he was failing. He would come back and report to the caregivers that he had interacted with other children, by name, who had died at the children's hospital. A child would die, and then he would go to Summerland. This happened repeatedly. The patient then talked to his mom and said, "I want to go to Summerland for good." Mom called me and we went to the patient and explored that. That is the grace of this kid, who was going back and forth from Summerland. Mom said, "Okay, you can go." They then stopped treatment. The staff agreed. This child had known nothing but cancer treatment, in bed, and so forth. He wanted to go to Summerland. I was there. He had gone in and out. He became unconscious. It was goodbye time. Before, he became unconscious, he said, "the bridge, the rainbow bridge. There they are. Summerland!" and then he passed.</p> <p>The last thing he told his mother, when he was alive is that "I'm coming back to you as a girl." The mom already had a daughter, and had devoted herself to the patient, and divorced. That is the last thing he said. She said, "I'm not getting married again, I'm not having more children." But she met a fellow later, they got married, she had a girl, and she came down with leukemia, and they understood she was the patient. She was treated and she lives.</p> <p>He had also drawn a picture of Summerland.</p>								
Respondent details								
Health care provider of patient (female, Caucasian, 76 years)								

Note. TL = terminal lucidity.

(Appendix continues)

Table A6
TL Child Case 6

Case No. 6: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
16	Male	Caucasian	Chronic kidney failure, starting at birth	Seizures lasting 14 hr before coma	None	Yes	Unsure	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained awareness of surroundings Recognized and interacted with others Seemed to have a sense of peace and acceptance of his situation Demonstrated greater clarity Met deceased others 				More than a day	1	2-5 days		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before	Behavior, mood, and emotions during		
Severe				None	Unsure	More calm More energetic More smiling More cheerful		
Description of TL provided by respondent								
<p>My youngest brother had chronic kidney failure starting at birth. By the age of 16 years, his body was growing wearier from the battle. He had some seizure episodes, and then one day, he started to have a seizure that went on for multiple hours, and then he went into a coma. The ICU doctors said if and when he could come out of the coma, there would be so much brain damage from the seizures, he would most likely be in a vegetative state. One week after going into the coma, he returned to a waking state and appeared to have full consciousness. My parents and the medical staff were completely taken aback by his clarity. In fact, he managed to become well enough to get out of ICU and onto the pediatrics floor in the hospital. That following evening, I went to his bedside to visit, and I was telling him that it would soon be time for him to go home and see his cats and some of the things that he enjoyed at home. He did not look me in the eye, he looked down at the foot of his bed, and he said, "yeah I have a feeling I'm getting out of here real soon." My mom received a phone call later that night. He called to talk with her, and during the conversation, he asked about each and every family member and how they were doing. He had a special nickname for my mom, and when he went to hang up the phone, he said "OK goodbye Sugar." Inside of a couple hours later, the hospital had called to say he had transitioned. My father had shared with me that he and my brother had a very special moment. When he came out of the coma, he looked at my dad, and my dad understood a clear message through his eyes and he said basically the message was, "I know that you know and you know that I know, that I am back for a brief moment and then it will be time to go." We were ever so grateful for a chance to be with him in those final moments.</p>								
Respondent details								
Sister of patient (female, Caucasian, 59 years)								

Note. TL = terminal lucidity; ICU = intensive care unit.

(Appendix continues)

Table A7
TL Child Case 7

Case No. 7: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
—	Male	—	Chronic kidney failure, starting at birth	Semicomatose, before moving into coma	Unsure	Unsure	Unsure	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> • Regained awareness of surroundings • Recognized and interacted with others • Regained ability to understand spoken language • Communicated with deceased others not visible to anyone else 				10–59 min	1	Unsure		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before	Behavior, mood, and emotions during		
Severe				None	—	—		
Description of TL provided by respondent								
<p>The first time I saw a child experience terminal lucidity, they had been ill for a very long time and were very, very sick. They had lapsed into a semicomatose state, and they were mumbling, like they were talking to somebody. The parents had been there round the clock for days. The nurses said to parents, “go home and shower, get a meal and come on back.” When the parents were sent home and the child came to that alertness and wanted to say goodbye, no one was there. So, he spoke to the nurses, he said, “tell my mom and dad that I will be ok, so-and-so is going to help me cross over, so-and-so is going to be with me.” And, this case, as with all cases, they would die pretty soon after the alert moment and die pretty peacefully. They would close their eyes and pass.</p>								
Respondent details								
Social worker of patient (female, Caucasian, age not provided)								

Note. — indicates response not given to question. TL = terminal lucidity.

(Appendix continues)

Table A8
TL Child Case 8

Case No. 8: Child’s details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
3	Female	Hispanic	Hemophagocytic lympho-histiocytosis	Multiorgan failure with profound liver failure and subsequent encephalopathy Coma	Umbilical cord transplant Chemotherapy Immunotherapy	Yes	Yes	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained ability to verbally communicate in logical, organized full sentences Recognized and interacted with others Regained ability to sit up and move head Interacted with deceased others not visible to anyone else 				Between 1–24 hr	1	13–24 hr		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				None	Not calm Not energetic Not smiling Not cheerful		More calm More energetic More smiling More cheerful	
Description of TL provided by respondent								
<p>Her parents were extremely involved in every aspect of her care, and they developed a vast amount of medical knowledge over the 2 years of her treatment, as our team had spent a vast amount of time explaining her condition. As we had exhausted all the known treatments available and her condition worsened, I spent many days with the family discussing these facts as I was trying to convey the need for focusing on palliative care. Parents were both initially very resistant to the idea/concept of DNR/DNI, and thus, these conversations continued daily as their daughter had progressive liver failure, including becoming severely jaundice and encephalopathic. She was no longer speaking, eating, or responding to parents/providers, and the ICU physicians were worried that she was an aspiration risk, prompting intensification of DNR/DNI conversations with parents. After nearly 2 weeks of intense conversations with parents (including family members and Catholic priest) and more rapid deterioration in their daughter, parents were able to agree to a DNI and modified DNR status change. That evening, the patient “miraculously” awoke and asked for her usual “comfort” items (i.e., Lion King movie, parents, toys, and food). She had multiple conversations with her parents that evening, which they and the bedside nurse stated were “like a miracle.” During the conversations with her parents, she “reviewed” all the important people in her life and “prayed” for them. After several hours, she asked to “go to bed.” Over the next 24–48 hr, she never “awoke” again, and she ultimately died peacefully of cardiac arrest in her parent’s arms.</p>								
Respondent details								
Physician of patient (male, Caucasian, 46 years)								

Note. TL = terminal lucidity; ICU = intensive care unit; DNR = do not resuscitate; DNI = do not intubate.

(Appendix continues)

Table A9
TL Child Case 9

Case No. 9: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
12	Female	Caucasian	Relapsed acute lymphoblastic leukemia New-onset diabetes	Encephalopathic with diffuse slowing on EEG after having prolonged status at epilepticus	Anti-epileptics Rituximab	Yes	No	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained ability to communicate nonverbally through eye blinking Regained movement of head, despite having breathing tube inserted 				1–10 min	1	1–5 min		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before		Behavior, mood, and emotions during	
Severe				Mild	Not calm Not energetic Not smiling Not cheerful		More calm	
Description of TL provided by respondent								
<p>Child with relapsed acute lymphoblastic leukemia s/p haplo-identical marrow transplant (half-matched from her father) was admitted with worsening weakness, lethargy, and new-onset diabetes. She was eventually found to have developed antiglutamic decarboxylase antibodies as a complication from her transplant, as she had progressive neurological decline and new-onset status epilepticus. She was noted to be encephalopathic after her seizures were controlled with anti-epileptics, as she was unresponsive on exam with diffuse slowing on EEG. She became minimally responsive to her surroundings after the initiation of rituximab; however, she had acute worsening of her medical condition with acute abdominal distension and bleeding with loss of blood pressure/pulses. She was declared after ~20–30 min of resuscitative measures. Just prior to this event, mother noted that the patient opened her eyes and mouthed, “I love you” and “I’m ready to go home,” and mother noted she had NOT “seen her eyes” in several months.</p>								
Respondent details								
Physician of patient (male, Caucasian, 46 years)								

Note. TL = terminal lucidity; EEG = electroencephalogram.

(Appendix continues)

Table A10
TL Child Case 10

Case No. 10: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
<2	Male	Caucasian	Immune disease	Abdominal pain and distension concerning perforation of bowel		Yes	No	Unsure
Terminal lucidity details								
Characteristic				Length	No. of episodes	Proximity to death		
<ul style="list-style-type: none"> Regained ability to interact with others Regained ability to sit up and movement of the head Interacted with deceased others who were not visible to anyone else Reassured parents 				Between 1–24 hr	1	24–48 hr		
Mental impairment before				Mental impairment during	Behavior, mood, and emotions before	Behavior, mood, and emotions during		
Severe				Mild	Not calm Not energetic Not smiling Not cheerful	More calm More energetic More smiling More cheerful		
Description of TL provided by respondent								
<p>Patient was an almost 2 year old who underwent a bone marrow transplant at 16 months of age for ill-defined immune deficiency. He was recovering with “usual” transplant complications until he developed fevers and progressive neurologic symptoms with loss of ability to communicate, loss of motor function, and cognition. He was found to have HHV6 infection in his blood and spinal fluid, which was recalcitrant to treatment with three antivirals. He was hospitalized for the last 3 months of his life, as he had waxing/waning symptoms, which were attributed to inflammation from the immune response to HHV6 infection, and he would temporarily improve after receiving steroids or another immune suppressant. However, HHV6 levels would increase again, leading to further inflammatory responses in his CNS, heart, and bowel. Three days prior to his death, he became much more alert and interactive, which was preceded by his parents having decided they would NOT proceed with further “life-saving” medical interventions (i.e., surgeries, intubation). He was noted to be able to move, talk, and eat and communicate for ~24–48 hr prior to a rapid decline and death. On the night prior to his death, he communicated with his parents that he “was ready to go home” and that “he and parents would be OK” using sign language and verbal language.</p>								
Respondent details								
Physician of patient (male, Caucasian, 46 years)								

Note. TL = terminal lucidity; HHV6 = human herpesvirus 6; CNS = central nervous system.

(Appendix continues)

Table A11
TL Child Case 11

Case No. 11: Child's details								
Age	Sex	Ethnicity	Diagnosis	Clinical situation	Medication	Medical deterioration	Treatment regime change	Fever
8	Male	Caucasian	Leukemia	Bone marrow transplant	Pain management	Yes	No	No
Terminal lucidity details								
Characteristic					Length	No. of episodes	Proximity to death	
<ul style="list-style-type: none"> Regained ability to verbally communicate Regained ability to speak in logical, organized sentences Interacted with others not visible to anyone else 					<1 min	1	2–12 hr	
Mental impairment before					Mental impairment during	Behavior, mood, and emotions before	Behavior, mood, and emotions during	
Severe					None	Calm Not energetic Not smiling Not cheerful	More calm More energetic	
Description of TL provided by respondent								
<p>It was a boy, with blood cancer. He was under my care. He was dying and fading, on drugs, and there was the gathering of loved ones and care providers. His dying words with people around the bed. He looked beyond them and said he was looking at someone who was not in the room. He said, “where’s Andy?” Andy had been his brother who was deceased. Whoever he was speaking with had knowledge of where Andy was. He was looking for Andy. And the person he was addressing knew where Andy was. He died that day.</p>								
Respondent details								
Health care provider of patient (female, Caucasian, 76 years)								

Note. TL = terminal lucidity.

Received September 26, 2025
 Revision received December 17, 2025
 Accepted December 18, 2025 ■