Harnessing Complex Emergent Metaphors for Effective Communication in Palliative Care: A Multimodal Perceptual Analysis of Hospice Patients’ Reports of Transcendence Experiences

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What is This?
Harnessing Complex Emergent Metaphors for Effective Communication in Palliative Care: A Multimodal Perceptual Analysis of Hospice Patients’ Reports of Transcendence Experiences

Bruce L. Arnold, PhD\textsuperscript{1,2} and Linda S. Lloyd, DrPH\textsuperscript{3}

Abstract

Terminally ill patients can have unexpected, enigmatic, and profound cognitive shifts that significantly alter their perception of themselves, thereby eliminating their fear of death and dying. However, there are no systematic studies into these remarkable yet ineffable transcendence experiences. They therefore remain easily overlooked or viewed as isolated anomalies and therefore excluded from quality-of-life patient considerations. We use a multimodal methodology for identifying the prevalence and thematic properties of complex emergent metaphors patients use to report these experiences. Although previous research has pioneered the importance of understanding conventional or primary metaphors at the end of life, our findings indicate the considerable potential of more complex metaphors for reducing barriers to effective communication in palliative care.

Keywords

end-of-life experiences, transcendence, metaphors, communication, quality of life, mixed methods, multidiscipline, effective communication

Introduction

This research began serendipitously when witnessing hospice patients reporting sudden, unexpected, enigmatic, and remarkable experiences that had significantly altered their perceptions of self, dying, and death. Are these just isolated anecdotal cases? How do patients talk about such events, when they almost defy our common use of language, so we can recognize and understand them? Many unanswered, elusive yet compelling questions in palliative care are multidisciplinary in character, thereby raising formidable conceptual and methodological challenges. Among these are hospice patient reports of “transcendence experiences” that produce a significantly enhanced state of well-being and quality of life while approaching death.

There is little doubt that improved communication between patients and clinicians significantly contributes to high-quality end-of-life care. Yet, the unpredictability of the clinical course and patient uncertainties remains among the barriers confounding efficient communication throughout palliative care.\textsuperscript{1,2} No wonder, as rarely are fully formulated thoughts simply waiting for discovery and fluid expression when patients are finally able to talk about previously unknown or unaccepted parts of their life and mortality. Nowhere is this more evident than when patients struggle to capture indefinable and uncertain qualities of transcendence experiences in everyday language.

As a result, clinicians and researchers are vulnerable to overlooking and misidentifying both the occurrence and the importance of these transitional events among the terminally ill patients. Spirituality, among other significant experiences important to quality of life, has been overlooked in the past. Fortunately, spirituality and accompanying communication issues have been better researched and are now more commonly embedded in palliative care practices. However, the transcendent dimensions of spirituality or existential shifts have received little attention, remaining an “ignored dimension” of the terminally ill patients.\textsuperscript{3}

Attempting to describe the ineffability of emergent lived experiences of transcendence, rather than describe familiar belief systems, forces a considerably more incongruous use of language. A few palliative care researchers have drawn from

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The recent developments in the cognitive sciences to show terminally ill patients turn to figures of speech, such as conventional metaphors, for augmenting patient comprehension and communication of unfamiliar and confusing end-of-life experiences.\(^4^,5\) These findings are significant for at least 2 reasons. First, they illustrate the utility if not necessity of multidisciplinary approaches for patient-based and problem-based research not amenable to more conventional investigative approaches. Second, they encourage innovative thinking into communication as one of the foundations of clinical procedures and skills for optimal palliative care.\(^6\) Various types of metaphors, not just the more commonly recognized conventional metaphors, are frequently used throughout conversations. Conventional metaphors have been the focus in earlier palliative care research and provide a segue to question how other types of metaphors are used to organize more abstract, complex, and unusual experiences so that they can be verbally expressed, such as end-of-life transcendence experiences.

Metaphors serve to partially and also coherently structure one’s experience not merely in their own terms but rather in terms more literally familiar and readily verbally expressed. This involves a cognitive gestalt that organizes salient features of complex experiences to reconfigure them to conform to more comprehensible grammatical lexicon uses of language.\(^7\) Conventional, or primary, metaphors are the most commonly used in everyday conversations and have therefore naturally served as the starting point of understanding their use for end-of-life experiences. Oncology discussions frequently use conventional “war” metaphors, for example, patients “battle cancer” or “bravely fight cancer.”\(^8\) However, more unusual, ineffable, abstract, and highly affective experiences that cannot be expressed using one particular metaphor, such as end-of-life transcendence experiences, require the use of more novel, complex, and emergence types of metaphors. These metaphors create and blend primary metaphors, as submetaphors, into more complex families or themes from which new and coherent meanings emerge, partially representing salient features of unusual and more ethereal experiences; although identifiable with coherent qualities, by their nature and function, they unfortunately neither tend to be as consistent or as clearly delineated as the more familiar conventional metaphors.\(^9\)

The essence of science is that we observe what there is to be observed, whether it is difficult or not, using the most appropriate methods for addressing our questions.\(^10\) Experimental and quantitative methods are often not useful approaches for studying the importance of experiences, beliefs, and attitudes of those participating in health and palliative care. Qualitative methods are better suited for systematically collecting evidence on naturally emerging language, symbols, concepts, and descriptions individuals use to establish meaning to their experiences of both routine and unusual phenomenon. In addition, they can provide foundations for developing quantitative research as well as contributing to evidence-based research.\(^11^,12\) However, conventional qualitative methods are not quite sufficient for answering our research questions about transcendent experiences at the end of life. Our study therefore offers a new prototypical qualitative multimodal method for identifying the prevalence and thematic properties of the figures of speech hospice patients rely upon to communicate the ineffable qualities of their transcendence experiences. Our goals are to provide a preliminary inquiry into (1) how prevalent are end-of-life transcendence experiences? (2) given their apparent sui generis qualities, how do patients use linguistic mechanisms to organize and thereby verbally express them so that they are recognizable by others? (3) How might these findings affect patient care through more effective communication strategies?

**Study Approach and Sample**

Eligible patients were adult English-speaking persons receiving care at San Diego Hospice and The Institute for Palliative Medicine (SDHIPM) between 2009 and 2011. Other eligibility criteria included able to maintain wakefulness and attention for 20 minutes or longer without noticeable or reported discomfort, no significant cognitive impairment or minimally cognitively impaired (MCI) but at least oriented 3 times with no documented altered mental status (disorientation, confusion, psychosis, and delirium), and providing informed consent.

The SDHIPM research staff reviewed updated patient records daily and consulted clinicians when necessary for assessing the eligibility status. Research staff contacted eligible patients to explain the project and invite participation. Patients expressing interest were then contacted by the principal investigator or the member of the research team who further explained the project, interview process, and scheduled a convenient time for the interview. Patients were contacted 1 hour prior to the scheduled interview to confirm willingness to participate and eligibility due to the unstable medical status and fragility associated with this study population. Sources of participant attrition included being too ill, confused or fatigued, family grief issues, hospitalization, and death. The final random sample consisted of 85 patient interviews between 20 minutes and 1 hour and 19 minutes duration. To develop trust, only the interviewer and the patient were present during the interviews, and each interview began and concluded with friendly informal conversations unrelated to research. Patients were aware the interviewer was associated with SDHIPM but was not a member of their hospice care team. Informed consent was obtained prior to each interview.

**Methodology**

Since we are investigating emergent and unfamiliar phenomenon not readily communicated, it was important to use the least obtrusive data collection instrument to reduce interviewer bias. Unstructured interviews were used as they introduce few if any preconditions, thereby allowing patients’ unfettered opportunity to choose their topics of importance or interest. Interviews began with a general question about their end-of-life experiences, and then study participants were free to use their own words and figures of speech without any pacing, direction, or priming from the interviewer.\(^13^,14\) Patients were
interviewed once to avoid misrepresenting specific patient types in our sample. Ample evidence indicates verbal encoding serves as a valid measure of cognitive structures and processes when individuals are allowed to “think aloud” rather than respond within the confines of predetermined research questions.15 Although no single phrase or figure of speech may be sufficient for everyone, the power of a single metaphor to redeem what seems unredeemable should not be underestimated.16 The final data set consisted of digitally audio recorded verbatim transcriptions of 85 patient interviews.

Conventional qualitative data analysis strategies typically restrict the analysis of interview data to transcribed text without inclusion of the source audio data. Because our senses are continually interacting throughout the perceptual processing of empirical stimuli, partitioning sensory input introduces significant bias that reduces validity when interpreting qualitative interview data. Our perceptual senses are not independent. It is therefore not prudent they be considered separately during qualitative interview data analysis. Our senses are inherently multimodal, especially given that each modality carries sematic information about spoken phonemes.17,18 For instance, anyone reading song lyrics while simultaneously listening to the song understands meaning nuances are optimally recognized through the blending of perceptual and audio stimuli. To accommodate a more sensitive analysis, we designed a prototypical multimodal perceptual analysis strategy integrating both audio and text processing and coding of stimuli data.

Empirical research findings from a large number of disciplines demonstrate that human listeners as “lay judges” can correctly infer and recognize affective states and attitudes from voice samples, regardless of their literal spoken content.19,20 Multimodal coding decisions were informed by grounded theory methodological procedures that are recognized as a viable way for investigating emergent features of complex patient experiences.21,22 Our multimodal coding strategy allowed simultaneous visual (interview transcriptions) and auditory (digital audio files) sensory input to better identify the subtle, complex, and often affective semantics of patient metaphors. Although metaphors represent complex cognitive processes, this does not necessarily mean their language form and content are irrelevant to the study of metaphor as representing unobservable cognitive processes.23 To best recognize and code metaphors with transcendence qualities, the principal investigator read each transcribed interview twice while listening to the audio recording of the interview and coded transcendence sections. An experienced health sciences research assistant with no prior exposure to the patients or interview data repeated this process. Intercoding reliability protocols were developed through repeated independent and collaborative integrative reading and listening of interviews throughout the focused and axial iterative coding analysis process. We employed a university literature and poetry expert to cross-check our use of complex metaphors. QSR-NVivo9 qualitative coding software facilitated the simultaneous iterative written-audio coding process as a multimodal strategy for increasing validity and interobserver reliability between coders.

**Results**

Our findings include patient sample characteristics and patient comments representing the submetaphors that provide the components that make up the complex end-of-life transcendence metaphor. As seen in Table 1, transcendence experiences may not be as anomalous as expected, given that 13 (15.3%) of 85 patients reported transcendence experiences. Patient characteristics such as sex, marital status, and spiritual or religious affiliation were not significantly different between the broader group and the transcendence subgroup. Patients with cancer as their primary diagnosis appear to be more likely to have transcendence experiences. Overall, the findings suggest no noticeable pattern between the 2 patient subgroups, suggesting these experiences are not orderly states with predictable properties but appear to emerge unexpectedly from other unobservable forces.

Regardless of their extraordinary and complex qualities, transcendence experiences are not individually subjective and random in their content or form. Instead, like all life systems, they exhibit observable cognitive boundaries and patterns. Findings are presented in Table 2 in a thematic format that both illustrates the submetaphors that constitute transcendence experiences reported by 8 of the 13 patients and maintains the context from which the metaphors emerged in patient narratives. By their nature, transcendence metaphor themes are emergent and exhibit fluid and convergent boundaries that hamper rigorous classification. Some are more easily decipherable, less obtuse, than others without their supplemental audio data, and these were selected to represent the more prominent themes of transcendence experiences. We therefore provide examples that constitute complex submetaphors representing patients’ verbal manifestation of transcendence end-of-life experiences from 6 of the 13 patients.

**Ineffability**

Patient comments attest to the unfamiliarity and ineffability of their transcendence experiences and the accompanying frustration when trying to put them into words. One patient reported, “It’s hard to describe” while another wanted to inform others but, “I didn’t have any way of communicating it . . . .” When the apparent need to share these experiences is thwarted, it can be isolating and perplexing, “It’s almost frustrating because you can’t almost articulate it, and I want to so much because it is very possible for everyone to have what I have.”

**Mundane**

Although transcendence experiences themselves appear to be remarkably unique, they seem to emerge from common, even mundane activities suddenly and unexpectedly transformed into something new and fresh, often accompanied by enhanced sensory experiences. Patients comment on the metamorphosis of simple and common daily activities into more exciting and satisfying ones. For example, one patient comments “It’s nice
to do the simple things in life that people take for granted are wonderful to me.” Another patient reports, “They seem so simple and so funny to yourself, because you want to grab somebody and say; wow, this coffee tastes really good!” One patient reflecting upon previous relationships suddenly realized that he has taken people for granted, rather than enjoying more rewarding interactions with them, commented, “I never learned certain things you know, didn’t learn how to be really socialized, didn’t learn to inquire of another person.”

**Perceptual Shifts**

Some patients provided insights into the immediate experience when the transcendence emerged. One patient stated, “I actually had a transcendental kind of experience. I saw, well my sense of the experience while I was in it was that it was a really long time. I was still standing when I came out of it, so I think it was just a couple of seconds. I saw what I called a radiance.” Still another patient said “Everything is magnified, clarified … the simplicity. Simple. Simple. Elegant. Beautiful. And I hang on to that with everything I’ve got.” Another patient shared, “But then it happened and I was awaken, this was about 3 weeks ago … a monumental occurrence although I didn’t realize it at the time … that had to do with the end of days.” These observations indicate a sudden shift from one existential state to another more rewarding existential state.

**Peace and Contentment**

Perhaps the most significant feature of the transcendence experience, especially for clinical concerns about quality of life, is associated with the significant and sudden change in patients’ perception of their mortality and pending death. One patient informed us, “I haven’t been really afraid of death since then. It was incredible. I am not afraid of dying anymore.” Another patient reported, “It’s like you’re in this envelope of just pure love and contentment. I wake up grateful. I go to bed grateful, I laugh a lot. You know you live in the real world but you don’t have to always live in that reality. You can rise above that.” An armed services veteran patient stated, “I’ve been even more at
Table 2. The Complex Transcendence Metaphor.

<table>
<thead>
<tr>
<th>Submetaphors</th>
<th>Submetaphor emergent and creative lexicon in context</th>
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<tbody>
<tr>
<td>Ineffability</td>
<td>Something miraculous is really going on with me not physically but more emotionally and spiritually. It's hard to describe. I couldn’t believe that it had happened and I didn’t have any way of communicating it . . . It’s almost frustrating because you can’t almost articulate it, and I want to so much because it is very possible for everyone to have what I have.</td>
</tr>
<tr>
<td>Mundane</td>
<td>It’s nice to do the simple things in life that other people take for granted are wonderful to me. Get out, go to the grocery store. To me, I make it a game. And just to be out in the sunshine, you know, it’s the little things, like I said, it’s so much the little things that I can sit and appreciate, feel the warm of the sun, you know, to be able to complain that it’s a nice sunny day but oh that breeze is cold. It’s, it’s nice, it really is. I mean, it’s kind of like, little things you take for granted. They seem so simple and so funny to you, to yourself, because you want to grab somebody and say; wow, this coffee tastes really good! It’s not bitter as . . . because you weren’t paying attention before, it was just something that was going into a cup and you’re just drinking it. Because things that um, most people take for granted . . . I, you know, didn’t or don’t or haven’t. Not don’t but . . . um . . because I never learned certain things you know, didn’t learn how to be really socialized, didn’t learn how to inquire of another person - How are you? How you doing?</td>
</tr>
<tr>
<td>Perceptual shifts</td>
<td>I actually had a transcendental kind of experience. I saw, well my sense of the experience while I was in it was that it was a really long time. I was still standing when I came out of it, so I think it was just a couple of seconds. I saw what I called the radiance. It was just a brilliantly beautiful light. I had this incredible sense of well-being, an incredible sense of well-being, beyond anything I’ve ever experienced before. You know you live in the real world but you don’t have to always live in that reality. You can rise above that. I think that this is probably, truthfully, the best time of my life. Because I see so clearly. Everything is so magnified, clarified. And I think that there is something, there is a lot that people forget in the mundane, in the simplicity of life. The simplicity. Simple. Elegant. Beautiful. But then something happened and I was awaken, this was about three weeks ago. Now I said that was sort of like an example of you know, something that can happen and . . . . There was or is something else that happened that was of a monumental occurrence although I didn’t realize it at the time . . . . that had to do with the end of days.</td>
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<tr>
<td>Peace and contentment</td>
<td>It’s just a very calm feeling and a positive feeling. Trying, not trying but actually believing that I am being helped and that something is going right instead of everything going wrong or getting worse. I saw what I called the radiance. It was just a brilliantly beautiful light. I had this incredible sense of well-being, an incredible sense of well-being, beyond anything I’ve ever experienced before. And since then, I just went home from that floating on air. I couldn’t believe that it had happened and I didn’t have any way of communicating it . . . I haven’t been afraid of death since then. It was incredible. I am not afraid of dying anymore. It’s like you’re in this envelope of just pure love and contentment. And I walk in that every day. I wake up grateful. I laugh a lot. You know you live in the real world but you don’t have to always live in that reality. You can rise above that. And I think you have to know who you are. If you don’t know who you are, you may have more of a difficult time of it. But I’m not afraid to die. That’s one thing, I’m not afraid to die. I know who my maker is. I know where I’m going. I’ve made peace with the past. I’ve forgiven. I can’t think of anything left for me to do that needs to be rectified. So it’s all, all this is good. But then something happened and I was awaken, this was about three weeks ago. Now I said that was sort of like an example of you know, something that can happen and . . . . There was or is something else that happened that was of a monumental occurrence although I didn’t realize it at the time . . . . that had to do with the end of days. And, that thing I could say was learning about love and learning about the importance of giving . . . and giving; specifically, feedback to various people . . . to myself, to you . . . . Um . . . because this is not a way that I use to be. I’ve been even more at peace than I even dared think I would be. The next morning I looked out here and I saw that flag and I thought, yes it’s going to be ok.</td>
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while another case study illustrates a terminally ill patient’s psychological and spiritual adaptive processes can include some features of transcendence experiences.24,25

Nevertheless, recent multidisciplinary palliative care research extends the boundaries of how we think about patient–clinician communication and provides a conceptual and empirical foundation for our research. Drawing from Lakoff and Johnson’s classical work showing the common use of figures of speech as linguistic evidence representing underlying cognitive processes,26 researchers demonstrate the significant role analogies, in general, and metaphors, in particular, play in patient–clinician communications, particularly in palliative care settings that are prone to being emotionally charged and uncertain situations.27,28 Metaphors serve as repositories for otherwise unobservable cognitive mechanisms. Shifting our thinking beyond the literal surfaces of language provokes a more expansive and comprehensive consideration of communication, including how patients express transcendence experiences.

Metaphor configurations are determined by the specific phenomenon they represent. Conventional metaphor types used in previous palliative care research therefore provide an important but only preliminary foundation for our study, given the sui generis qualities of patients’ transcendence experiences. Conventional metaphors represent phenomena easily expressed in everyday language. However, it is important not to reduce metaphors to only their conventional usage in conversation. Lakoff and Johnson clearly demonstrate how we regularly, but usually unknowingly, use more complex and creative metaphors for making sense of the more abstract experiences of our everyday lives, in particular, time, events and causes, the self, and morality.29 Transcendence experiences make use of these types of metaphors as representations of complex and emergent experiences that usually lie just beyond levels of awareness and that blend and organize conventional metaphors (submetaphors) into more general themes by making novel use of recognizable verbal expressions (eg, “something miraculous is going on,” “I see so clearly,” “simplicity of life”).30

Our research uncovered 4 metaphors organized as the submetaphors of the transcendence metaphor family: ineffability, mundane, perceptual shifts, and peace and contentment. These appear to have 3 underlying or tacit similar dynamics associated with the transitional qualities of end of life: emergence, complexity, and kinetic force. Transcendence submetaphors are emergent in that they represent unanticipated and multidimensional experiences that arise spontaneously as unexplainable gestalts that significantly reorganize patients’ perceptions of self and their immediate environment. They are complex, consisting of logically arranged multiple themes of ineffability, mundane, perceptual shifts, and peace and contentment that represent components of their parent metaphor of end-of-life transcendence experiences like atoms that form molecules. The underlying cognitive foundation that blends the submetaphors into this complex metaphor, repeatedly illustrated in patient comments, is that of transition from pre- to posttranscendence states or “life as a journey.” Finally, patients’ submetaphors suggest a distinct kinetic quality. Not only do they emerge unexpectedly, they also appear forceful enough to permanently reconfigure entire perceptions of the end of life as rewarding rather than fearful. Another patient inspiring calls the experience an “awakening.”

Metaphors of various types permeate everyday language but, ironically, are so commonly used that they usually go unrecognized. Their iniquitousness in clinical practice is equally overlooked, even though clinical thinking is deeply metaphorical throughout all areas of medicine.31,32 Our findings highlight their necessity for the terminally ill to express unfamiliar experiences that significantly improve their quality of life but are likely to be misinterpreted or overlooked as isolated anomalies. Recognizing how patients use metaphors to express various end-of-life experiences could promote effective and creative communication in palliative care and enhance patient satisfaction.

The enigmatic nature of transcendence experiences represented in patients’ complex emergent kinetic metaphors poses considerable challenges to research. We designed our multimodal approach to meet these challenges through inclusion of sensory inputs for identifying semantic properties of transcendence metaphors. However, some caution in interpreting our results is prudent. Our study relies upon a patient sample from only one hospice and therefore may not be representative of other hospice or terminally ill patient populations. Although the sample size is adequate for our purposes, it does not allow investigation of possible subgroup variances. Contextual factors, such as resource availability, and the type and delivery of hospice care by various team members, were not available for inclusion. The validity and reliability (credibility, dependability, confirmability, transferability) of using metaphors as observable representations of patient experiences may be construed as provisional. Nevertheless, metaphors are also pragmatically necessary for investigating cognitive mechanisms within the natural settings (eg, hospice care) in which they occur. Fortunately, improving effective communication through insight into metaphors benefits from recent methodological developments that provide increasingly well-defined standards and criteria for increasing the rigor and clinical utility of patient-centered qualitative research.33-35

Our findings provide a tenable preliminary framework for recognizing some of the central properties of terminally ill patients’ transcendence end-of-life experiences. Although conventional metaphors are more amenable for fine-grained coding because of their closer proximity to literal uses of language, complex, creative, and emergent metaphor analysis necessarily requires a more broad-brush and heuristic analysis as the first step in their identification and organization. The next logical step in this analysis, which is not within the scope of what we present here, is to develop more fine-grained coding procedures and categories to further unpack still hidden transcendence experience meanings. Any investigation of metaphor use also invites a reconsideration of effective communication through insight into how various types of metaphors can facilitate a more comprehensive understanding of patients’ experiences for inclusion in palliative care assessments, diagnosis, and plans of care. Problem- and patient-based workshops
and continuing education programs could provide practical examples of how various types of conventional and more complex metaphors are already used and how they can be identified and understood to more effectively communicate with patients, their families, and palliative care colleagues. Pilot programs with medical students show how they already rely upon metaphors in their everyday and clinical language and illustrate the considerable potential for improved communication and creative thinking between clinicians and with patients.36 Specific teaching strategies and templates for harnessing the many benefits of metaphors have been developed and provide models with considerable promise37 for reducing communication barriers in palliative care, thereby promoting creative thinking and practices, especially when confronted with transcendence and other unfamiliar experiences that commonly accompany the end of life and that have a place in supportive patient plans of care. Medicine blends the sciences and arts and is therefore arguably the quintessential multidisciplinary problem-based profession. This is particularly the case throughout palliative medicine, so we are therefore optimistic for the potential metaphors hold for delivering optimal palliative care.

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