ORIGINAL PAPER



Cognitive and Behavioral Changes Arising From Spirituality

Joy Penman¹

Accepted: 19 June 2021 / Published online: 25 June 2021 © Crown 2021

Abstract

This article aims to explore the concept of spiritual transformation and address the question, 'How does spirituality bring about changes in cognition and behavior?' It draws on the findings of a larger qualitative study that explored the essence of spirituality and spiritual engagement from the perspective of palliative care clients and caregivers. Four clients and ten caregivers from across regional South Australia participated in the larger study utilizing van Manen's phenomenology. Secondary analysis of the qualitative data was undertaken to highlight the statements and phrases that portrayed the marked changes in thinking and behavior catalyzed by spirituality. The findings relate to the participants' spiritual beliefs and practices that helped them journey through the process of death and dying. Spirituality is a plausible explanation of the transformation that occurred, manifested by new thinking and behavior.

 $\textbf{Keywords} \ \ Spirituality \cdot Spiritual \ transformation \cdot Palliative \ clients \cdot Palliative \ care \ caregivers \cdot Cognitive \ and \ behavioral \ change$

Introduction

Spirituality is an individual's attempt to find meaning and purpose in life (MacKinlay, 2006; Mitchell et al., 2010). The conceptual understanding of spirituality has expanded to include relationships among human beings, nature and God (Penman et al., 2013; Wiklund, 2008) and establish connections with the church community, music, family and friends (Harrington et al., 2019). The definition of spirituality was elucidated during a conference sponsored by the Archstone Foundation of Long Beach, California in 2009. The agreed-upon definition was the 'aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way

Monash University, Room D334, Level 3, 35 Rainforest Walk, Clayton Campus, Clayton, VIC 3800, Australia



they experience their connectedness to the moment, to self, to others, to nature, and to the significant or sacred' (Pulchalski et al., 2009, p. 887).

Terminally ill individuals report greater religiosity and/or spirituality than healthy or non-terminally ill (Reed, 1987). Spirituality appears to be heightened at the end of life. People often become open to discovering unique spiritual meanings after a crisis that threatens health; their faith becomes strengthened, and they are better able to cope and engage in activities that provide a new definition of themselves. Encountering life-limiting conditions may cause people to re-examine their spirituality by reviewing their life and questioning its meaning (Dueck et al., 2006; Ironson et al., 2006). Spiritual levels seem to increase with shortened lifespan and uncertainty (Park, 2008).

Nurses are also rediscovering spirituality for various reasons (Tanyi et al., 2006). Holistic care is at the forefront of health, and nurses strive to incorporate spiritual care in clinical practice. Moreover, there is a significant link between spirituality and health (Allen & Marshall, 2010; Gow et al., 2010), which is relevant to nursing care. Spirituality can cause change/s in people; some authors call this change spiritual transformation (Dueck & Johnson, 2016; Williamson & Hood, 2012). Spiritual transformation is defined as a radical shift in consciousness and behavior, manifested in the internal and external lives due to religious/spiritual change, and is amenable to observation and analysis (Dueck et al., 2006). Paloutzian (2005, p. 334) refers to it as 'a change in the meaning system that a person holds as a basis for self-definition, the interpretation of life; and overarching purposes and ultimate concerns.' Some changes are framed within a religious context, called conversion (Williamson & Hood, 2012), but some are not. Spiritual transformations can be 'sudden awakenings' or can be from gradual growth. The religious and non-religious consequences of spiritual transformations influence the individual's faith, outlook, behavior and interaction with others (Midura, 2015).

The purpose of this article is to elucidate the concept of spiritual transformation viewed from the perspective of palliative care clients and their caregivers as they conveyed what it was like to engage in spiritual matters. Other objectives are to characterize the transformation that occurred for the participants and discuss the implications of transformation catalyzed by spirituality. It is based on a more extensive qualitative descriptive study titled 'The phenomenon of spirituality: palliative care clients' and caregivers' experiences in engaging with spiritual matters,' where following thematic analysis, one of the themes that emerged was personal 'transformation' (Penman et al., 2013).

Background

In health and wellness, human behavior is critical in bringing about meaningful, successful and enduring health outcomes. It has been observed, however, that it is a huge challenge to bring about cognitive and behavioral change in order to achieve positive health (Kelly, 2014, cited in Michie et al., 2014). One cannot assume that individuals could or would change their perceptions and behaviors because it is



good for them. In short, providing knowledge and information is not sufficient to cause change.

Several interacting factors come into play when wanting to make a change, and these include the individual's beliefs, values, habits of thinking and doing, readiness, emotion, the circumstances and environment (Michie et al., 2014). A case in point is the children's immunization campaign which has been successful in curtailing childhood diseases (Lee & Bishop, 2015). Utilizing several strategies evoking strong emotions and realistically depicting the terrible health consequences of diseases such as diphtheria and tetanus, the campaign proved a success. However, it took many years of convincing the public that immunizations were beneficial, and still being challenged today by conscientious objectors (Australian Institute of Health & Welfare, 2018). The same could be said about the anti-tobacco campaign (Liss, 2013) and the more recent coronavirus vaccination (McCarron & Bako, 2020).

Attempts to explain why behaviors change are encapsulated in theories (Braungart et al., 2019). There are many of them, and they include environmental, personal and behavioral characteristics as significant factors. Each change theory or model focuses on different factors in explaining how the behavior changes. The behaviorist point of view, for instance, contends that imitation and reinforcement influence the process of change. In contrast, the social cognitive theory posits that behavioral change is affected by the individual's thoughts and characteristics that elicit specific responses from the social environment and vice versa. Reasoned action argues that an individual considers the consequences of his/her behavior before enacting it. The intention is critical in this theory, as is also the impression of society about the behavior. Of the list of 80 and more possible mechanisms for cognitive and/or behavior change (Michie et al., 2014), spirituality or spiritual transformation taken from the religious or secular perspective was not mentioned.

As earlier mentioned, many studies show that an intense crisis may cause people to re-examine their spirituality (Dueck et al., 2006; Ironson et al., 2006). The spiritual dimension comes into focus when people face a crisis, including life-threatening illnesses. It is argued that spirituality plays a vital role in assisting the individual's coping with illness and improving quality of life (Clarke, 2010; LeConté, 2017). Individuals with life-limiting conditions and their loved ones describe times of questioning and loss of faith during a crisis, as well as discovery, growth, inner peace and acceptance (Byrne, 2002). However, exactly how these experiences happen is not clearly understood.

According to the literature, spirituality can transform lives. For example, James (1982) postulates that religious transformation known as conversions can lead to transcendence and redirection of life from the cultural psychology perspective. The dynamics involved in 'conversion' include five possibilities: 1) apostasy, which is the abandonment of religious commitment, 2) deconversion, which is the departure from a particular religious tradition, 3) intensification, which is a renewed dedication to one's faith tradition, 4) switching, which is the change in affiliation from one tradition to another and 5) cycling, which is leaving one's tradition to re-enter later (Spilka et al., 2004). Coe (1916, 2017) perceives conversion as four qualities of change: a profound change in self; an external source of control; an impact on



the character and life; and a sense of new freedom. Kirkpatrick (1995), McCallister (1995) and Pargament (2006) discuss different notions of transformation including the stimulation of the attachment system when confronting anxiety and distress, cognitive restructuring and change in self from emotional arousal experienced in the context of a religious event, and a marked change in self in response to stress, respectively. These transformations are referred to as both religious and spiritual experiences (Dueck & Johnson, 2016).

Thus, there are many variations of definitions of spiritual transformation; however, common to them is the notion of personal change (Williamson & Hood, 2012). Be it a sudden or gradual change, it results from a sacred encounter and entails a change in vertical and/or horizontal relationships. Vertical refers to a relationship with God, while horizontal refers to a relationship with others (Cayetano-Penman, 2012; Williamson & Hood, 2012). The framing of experiences in relation to God is known as transcendence (Hood et al. 2009), which is understood as extending beyond the limits of ordinary experience. The transformation, identified in the larger study, experienced by the palliative care clients and caregivers, will be explicated to grasp the concept of how spiritual transformation may transpire and what is its significance.

Methodology

Research Sample

The participants in this study were diagnosed with a life-limiting condition or had cared for a loved one or were caring for a loved one with a life-limiting condition (Cayetano-Penman, 2012). The inclusion criteria were: over 18 years of age, able to speak English, received confirmation of diagnosis, are/were palliative care clients or caregivers, and residing in rural South Australia. The potential participants were recruited through rural and regional palliative care teams.

Research Design

Van Manen's phenomenological approach (1997) was used for the larger study. This involved research activities such as: being immersed into the phenomenon and capturing an exhaustive description; examining the lived experience by re-learning to look at their world; reflecting on the themes; and balancing the contexts and reflecting on the whole picture.

A secondary analysis of the qualitative data was conducted to address the question, 'How does spirituality bring about changes in thinking and behavior?' In carrying out secondary analysis, the aspects of spiritual transformation were re-examined and re-analyzed to develop an original topic (Payne & Payne, 2004). The secondary analysis allowed the pursuit of a distinct research topic from that of the original work (Heaton, 1998). It was performed to maximize the use of the data and generate new knowledge. Sherif (2018) asserted on qualitative secondary analysis,



"... is most effective when used with high-quality, relevant, rich, and complex datasets." With careful examination and assessment of preexisting qualitative data, this approach could increase the validity and reliability of secondary analysis research findings.

Methods of Data Collection

In-depth interviewing was appropriate to use because it allowed the exploration of the elements of the phenomena (Whitehead & Whitehead, 2016). The participants expressed their views, attitudes, feelings and experiences with greater clarity and depth. There was also the opportunity to verify meanings in the process. The interviewer began by asking the client or the caregiver, 'What is it like for you to experience a life-limiting condition?' or 'What is/was it like for you to care for a loved one who has/had a life-limiting condition?' A typical interview averaged about 1.5 h. Each interview was audiotaped and professionally transcribed.

Methods for Data Analysis

Two methods were used. The 'wholistic' approach examined the text as a whole, and its fundamental meaning was grasped. The 'selective' approach involved reading the text several times and highlighting those statements and phrases that seemed significant to represent the themes explicating spirituality and spiritual engagement (van Manen, 1997). Both analytical approaches were also used to illuminate the concept of spiritual transformation.

Ethical Considerations

A protocol for the research was submitted to the Human Research Ethics Committee (HREC), according to the National Health and Medical Research Council guidelines. Ethics approval was obtained from the university HREC. Informed consent was obtained from all interviewees.

Issues of Trustworthiness

Several strategies to ensure trustworthiness were employed. An audit trail was kept; every decision made about the research process was described and justified (Morse, 2015). Following the interviews, some clarifications were made with the participants concerning meaning and interpretations. Moreover, the researcher acknowledged her beliefs about spirituality and spiritual engagement as these might influence her interpretation of the data. The use of peer review and direct quotations from the participants in the research findings also ensured that the data presented portrayed only the participants' meanings (Thomas & Magilvy, 2011).



Findings

Participant Descriptions

There were fourteen participants, ten women and four men (Cayetano-Penman, 2012). Five were Australian-born, two non-Australian-born and seven Asian Australians from different countries. The average age was 59 years. Of the fourteen, four were palliative care clients, and ten were palliative care caregivers. Nine belonged to the Catholic church, while five belonged to Protestant churches. (See Table 1.) Cancer was the primary diagnosis for the majority of the participants. Barbara, Diana, Frederick and Nathan were the palliative care clients' pseudonames; Ana, Catherine, Eleazar, Gina, Hilary, Isabelle, Jonathan, Kelly, Leah and Maria were the pseudonames used for the caregivers.

The Essence of Spirituality and Spiritual Engagement

The theme 'belief in God' was the primary motivator of spirituality brought to light in facing death from the palliative care clients' and caregivers' perspective (Cayetano-Penman, 2012). Another theme was 'coping' as clients anchored their handling of their situations with spirituality. Spirituality was a powerful force and an empowering driver for the majority of the participants. For the caregivers, the horizontal 'relationship' embodied spirituality because they were attempting to sustain and extend the interpersonal relationship with their loved one, for whom the remaining time was limited. Clients and caregivers portrayed spirituality as helping in their coping with their past or present circumstances. 'Transformation' was one of the themes that embodied the essence of spiritual engagement (Penman et al., 2009, 2013).

Spiritual Transformation Conveyed by the Palliative Care Clients

With the reality of death and dying, spirituality became a priority for the participants, and it became central in their lives during the time. In this study, spirituality propelled people into positive thoughts and actions. As such, it provided many real and potential benefits, coping specifically, and was valuable for those who engaged in it. The participants demonstrated the direct links between spirituality and transformation. In focusing on spiritual transformation, their experiences were varied; however, culture, religion and personal circumstances impacted how they framed spirituality and transformation.

The meaningfulness of suffering, impending death and heightened spirituality brought about personal transformation, altering perceptions and behavior about self and others. The transforming experience affected the sense of self and challenged the participants' thinking, feeling and doing. As a result of the transformation, there was a change in character, direction and actions that enabled



ıts
ticipant
of part
istics (
Character
Table 1

	and to comment	and the				
Participant	Age	Client/Caregiver	Ethnicity	Male/Female	Disease	Religion
Barbara	77	Palliative care client	European immigrant	Female	Bowel cancer	Catholic
Diana	59	Palliative care client	Asian immigrant	Female	Cancer of the kidney	Catholic
Frederick	48	Palliative care client	Australian- born	Male	Leukemia	Protestant
Nathan	58	Palliative care client	Australian- born	Male	Mesothelioma	Protestant
Ana	61	Ex-caregiver	Asian immigrant	Female	Niece had breast cancer	Catholic
Catherine	34	Current caregiver	Asian immigrant	Female	Husband had lung cancer	Catholic
Eleazar	70	Current caregiver	Australian-born	Male	Wife had kidney cancer	Catholic
Gina	50	Current caregiver	European immigrant	Female	Father had bowel cancer	Catholic
Hilary	70	Ex-caregiver	Asian immigrant	Female	Husband had stomach cancer	Catholic
Isabelle	09	Ex-caregiver	Asian immigrant	Female	Husband had cancer in the spine	Catholic
Jonathan	57	Ex-caregiver	Asian immigrant	Male	Mother had chronic heart disease, died of kidney failure	Protestant
Kelly	62	Ex-caregiver	Asian immigrant	Female	Husband had lung cancer	Catholic
Leah	89	Ex-caregiver	Australian- born	Female	Husband had prostate cancer	Protestant
Maria	50's	Current caregiver	Australian- born	Female	Husband had mesothelioma	Protestant



clients and caregivers to be more loving and caring, patient and sacrificing for the 'other.'

Below are excerpts illustrating some of these perceptible changes. The participants' words were used and altered appropriately for greater clarity and understanding. Their statements were cited by indicating a reference code, page number and line number documented on the interview transcripts.

New Thinking of Palliative Care Clients

There were many instances of spiritual transformation exemplified by clients who demonstrated a change in thinking. For example, Barbara's strong faith significantly impacted her outlook and thought patterns following her diagnosis.

Barbara: My spirituality makes me feel powerful as it gives me strength and courage to persevere in life. (B4, 40-41)

She became hopeful and more accepting.

Barbara: I want to be hopeful. (B1, 7) Having a strong faith causes me to accept the fact that death is inevitable and that it is nothing to be afraid about. (B4, 38-39)

Another consequence was renewing of the mind, being more positive about her situation and resolve to move forward.

Barbara: I banish cancer from my mind; I replace it with positive thoughts and feelings, like love, safety, forgiveness, reconciliation and hope. Then I become peaceful and restored, spurring me further along. (B1, 20–25)

This change in outlook was also noticeable among other palliative clients like Frederick, Nathan and Diana. On the one hand, the re-intensification of one's faith as well as shifting the focus to loved ones happened to Frederick.

Frederick: My worst one [fear of dying] would just be worrying about the wife and probably the grandkids because we have been giving them [grandchildren] a lot of support...but you just got to leave it in God's hands. (F10, 6–9)

Nathan, on the other hands, had a deconversion experience, where he departed from his faith tradition to embrace another. Nathan was holding on the 'universal force' through reiki.

Nathan: I believe in the universal force and my circulative therapist to heal me.... I can tap into this force to control my mesothelioma [malignant cancer usually affecting the lungs]. (N5, 8–11)

Diana's spiritual transformation was manifested in a change in her views about relationships.

Diana: ... My spiritual beliefs extend to [caring for] others; I am concerned for others; kindness to others is spirituality too, and so is being involved in the community ... (D6, 21-23)



New Behaviors of Palliative Care Clients

With the change of thoughts came changes in behavior. Diana and Frederick exemplified new behaviors as a product of spiritual transformation. Diana's transformation was evidenced by a marked change in the quality of relationships with others.

Diana: ... I think engaging in spiritual matters refers to the intimate times when people helped (D4, 19) ... a friend would accompany me to the doctor, sleep with me in the hospital, or cook for me. (D4, 20-21) ... It is like building community. (D5, 24)

Following the diagnosis of a life-limiting condition, Frederick experienced a religious conversion, evidenced by becoming more prayerful. Prayer is generally understood to mean talking with God, and Frederick thought that 'it [prayer] was powerful.' He was also of the opinion that spiritual talk energized the body, and Diana concurred.

Frederick: *Praying is probably the main one* [that helps me through this ordeal]. (F5, 15) Diana: *Every time people visited, we would pray.* (D6, 29)

New Thinking of Palliative Care Caregivers

The caregivers demonstrated their capacity to reorganize their lives when confronting death and dying. They too changed in their thinking as they tried to adapt to their situations.

Transformation of thinking for caregiver Maria took the form of becoming cognizant of other ways of healing. Consider her statements revealing a change in direction:

Maria: Prior to his [husband] illness, I never believed in complementary therapies, but seeing the hope this therapy gave to my husband, I changed and became more accepting. (M6, 15-21)

Instances of spiritual transformation showing a change in focus were identified from other caregivers. Becoming adaptive, referring to the ability to undertake anticipatory or reactionary reorganization to minimize the impact of death or impending death, has been observed. There now seemed to be a larger purpose and meaning for Eleazar, while for Leah and Catherine, there was an intensification of faith as they clung to God and his miracles. These were verbalized as follows:

Eleazar: Realizing life is short, it is important to make each interaction count. I need to take stock and smell the roses every day... My wife is mortal and so am I. (E6, 27-28) Leah: You change. I think you go closer; you definitely go closer to God and to each other [your loved one]. (L6, 20-22) Catherine: Maybe there is still a cure for him ... who knows? I believe in miracles. (C2, 39)

The spiritual transformation could extend internal and external protective factors, such as self-reliance, relationships and good health, to cope with present



circumstances. A key result was the ability to adapt to change. The essence of suffering and death enabled the caregivers to be more loving and caring, more patient and sacrificing for their loved one. Caregivers Isabelle, Jonathan and Ana showed changes through heightened empathy and gaining the capacity to be more loving, compassionate and selfless.

Isabelle: I was there [in the hospital] from morning till night. ... It was most difficult because I would push him [in the wheelchair] around the garden, shower him, stay up with him ... (I6, 20-23)

Jonathan: My spiritual conviction helped me care for my ailing mother. (J7, 9). Ana: If only I can suffer instead of my niece, I will willingly do this for her. (A5, 5)

New Behaviors of Palliative Care Caregivers

Similar transformative behavioral changes were evident among the caregivers. At the heart of these changes were action-oriented approaches promoting collective and individual changes toward more effective social interaction, involving gaining coping skills and strategies, self-organization, flexibility and ability to transform to adapt successfully. For example, Gina exemplified spiritual transformation when she revealed that her role and actions were altered from daughter to caregiver to patient advocate from the time of her father's diagnosis of bowel cancer. The transformation brought about a definite change in character and action; there was a conviction to take charge and persevere with the situation.

Gina: ... From that day forward [diagnosis of her father's terminal illness], I resolved to gain the courage to face the problem, to take charge as necessary because Mum and Dad seemed paralyzed at the thought of death. (G3, 8-11)

From the psychological perspective, the transformation could take the form of identification and enrichment of resilient qualities or protective factors. In coping with stressors or adversity, change might occur that would lead to positive adaptability as preparing for the death of a loved one as in Kelly and Ana's case:

Kelly: Following diagnosis, he [husband] said to me to be prepared. This was the start of a journey preparing me for his passing, selling the house, paying the bills ... (K7, 5–12).

Ana: These rituals and traditions [novenas, masses] helped me also. We had priests and pastors [from various faiths] visiting and praying for us. (A6, 46)

In identifying with the sacred, caregiver Jonathan conquered the fear of death with the knowledge that death is like sleep and that there was hope in Jesus' second coming. He was hopeful and persevering with life despite the challenges he was facing while caring for his mother.

Jonathan: Christians have a different kind of courage when it comes to death. Death is like sleep. Jesus will come and bring them home. (J9, 24–27).



Discussion

Confronting death forced individuals to see their vulnerability, as it reminded them of their mortality. The participants were made aware of their finiteness and limitations (Cayetano-Penman, 2012). Spiritual transformations unfolded for the study participants living the experience of spirituality when faced with a life-limiting condition. The study showed that heightened spirituality and life-limiting condition precipitated transformation affecting identity (for example, Jonathan resolved to care for his mother), sense of self (Nathan perceived reiki to help him gain control of his cancer), purpose (Kelly started preparing herself for her husband's passing), thinking processes (Barbara replaced negative thoughts and feelings with positive ones), relationships (Diana shifted her concern for others) and behavior (Frederick prayed and placed his trust on God).

Transformation reconfigured realities and relationships toward the self, others and/or God or a higher power. It appeared that spirituality was a way of coping with a life-limiting condition by strengthening ties with God and loved ones. In many ways, it was about greater connection and oneness. Moreover, it was found that spirituality deepened faith and appreciation of life for the majority of clients and caregivers, and the transformation was even regarded as sacred. For some, spirituality changed how they viewed themselves — from a wife and mother to a nurse, caregiver and/or companion — which meant that adjustments to these new roles were necessary. It was evident, however, that the changes helped them cope and adjust to their circumstances.

Religion has relevance to spiritual transformation (Spilka et al., 2003). Some of the 'conversion' changes were narrated by the participants. Frederick and his total trust in God depicted the intensification of faith. Nathan and his belief in the universal power was an example of the abandonment of religious commitment and departure from religious faith. Spiritual transformation with religious conversion was also described as having a positive outlook on life (Jonathan believed in the 'second coming'), unified self (Eleazar focused on self-care), mystical encounter with God (Catherine believed in miracles), new habits of affection (Isabelle made sacrifices for the husband) and commitment (Gina advocated for the care of her father). Thus, there were many forms of spiritual transformation manifested in the study.

Indeed, transformation was a significant, but not a surprising finding. Pertinent to these personal changes was Mezirow's (1991) transformative learning where the transformation involved changes in locus of control, personal competence or self-concept and a broadening of outlook as it 'moves the individual toward a more inclusive, differentiated, permeable (open to other points of view) and integrated meaning perspective' (Mezirow, 1991, p. 7). The participants demonstrated these changes as they revealed adjustment, acceptance and positivity in an otherwise tragic situation. The interconnections of the mind, spirit and body were the focus of attention when explaining the relationship between spirituality and health, according to Clarke (2010); what affected the body impacted upon the mind and the spirit. Following the integration of the mind, spirit and body, a



transformation occurred, and these included prayers, meditation, affirmation and complementary therapies (Luskin, 2004). The bio-psychosocial effect of spirituality was a possible mechanism that influenced health outcomes (Katerndahl, 2008).

Transformative learning resonates with Frankl's notion of finding meaning in suffering (2006). Having hope, strength, meaning and purpose are concepts of spirituality (Harrington, 2016), which facilitated self-transformation. Frankl commented that in overcoming adversity:

When we are no longer able to change a situation, we are challenged to change ourselves. Everything can be taken from a man but one thing: the last of the human freedoms – to choose one's attitude in any given set of circumstances, to choose one's way.

Additionally, resilience development was relevant here. In order to become resilient, palliative care clients and caregivers must gain the capacity to reorganize themselves with change. This reorganizing of self was part of personal transformation. A key concept was the ability to adapt to change, which is the primary ingredient of resilience (Robinson & Carson, 2016). Spirituality allowed for developing of coping skills and strategies (LeConté, 2017), self-organization, flexibility and the ability to transform to adapt successfully. The transformation could positively interpret the illness by providing a framework by which stressful events may be interpreted and addressed (Reed & Rousseau, 2007).

This radical change that the individual could transcend the illness or stressful event and become enriched and rewarded by the experience is a crucial finding in the area of health and well-being. Spirituality is suggested as a plausible mechanism to bring about meaningful and successful cognitive and behavioral change that could ultimately result in positive health outcomes. Personal transformation has a potential application for clients and caregivers having to deal with any type of change. Cases in point are the need to change the diet and sedentary lifestyle, overcome drug addiction, adjust to COVID-19 and/or manage stress. However, the outcomes may or may not be enduring and may or may not always be positive, but it is a noteworthy research avenue to explore further.

Limitations of the Study

Possible limitations of the study relate to the small number and selection of participants and non-return of transcripts. However, increased numbers do not necessarily provide new meanings (Guest et al., 2006). The non-return of transcripts to participants may be a limitation; however, none took up the offer to examine the transcripts, but all agreed to provide further clarifications if needed.



Conclusion

In this study, the experience of a life-limiting illness created unique challenges for the individuals involved and their loved ones. Such challenges emanated from the diagnosis and extended beyond the terminal phase of the disease. It stressed vulnerability in anticipating harm and the expectation that one would be unable to cope with what was to come. In response, spirituality was heightened, which resulted in personal changes. Both clients and caregivers altered their views, attitudes, beliefs and behavior during their direct or vicarious encounter with a lifechanging experience — impending death or death itself. These changes involved modifications in thought and behavior. Spirituality endowed participants with the ability to transform themselves in the way they viewed life, death, suffering and in the way they related and connected with others. Part of personal transformation was spiritual transformation — rooted in the changed condition of the mind, heart and behavior. Leah, a caregiver, aptly concluded, 'As the body becomes weak, the spirit becomes strong.' The findings may be applied in the broader clinical contexts to impact patients' need to change cognition and behavior to achieve better health outcomes.

Declarations

Conflict of interest All authors that they have no conflict of interest.

Human and Animal Rights Research involving human participants and/or animals. This research is based on a larger study and does not involve participants and/or animals.

Informed Consent Consent was obtained in the initial research. This study did not involve informed consent.

References

Allen, D., & Marshall, E. S. (2010). Spirituality as a coping resource for African American parents of chronically ill children. American Journal of Maternal Child Nursing, 35(4), 232–237. https://doi. org/10.1097/NMC.0b013e3181de3f76

Australian Institute of Health and Welfare. (2018). Children's Headline Indicators. https://www.aihw.gov.au/reports/children-youth/childrens-headline-indicators/contents/5-immunisation

Braungart, M. M., Braungart, R. G., & Gramet, P. R. (2019). Applying learning theories to healthcare practice. In S. B. Bastable (Ed.), *Nurse as Educator* (4th ed., pp. 63-110). Jones & Bartlett Learning Publications.

Byrne, M. (2002). Spirituality in palliative care: what language do we need. *International Journal of Palliative Nursing*, 8(2), 67–70, 72–74. doi: https://doi.org/10.12968/ijpn.2002.8.2.10241

Cayetano-Penman, M. J. (2012). The phenomenon of spirituality: palliative care clients' and caregivers' experiences in engaging with spiritual matters [Doctoral dissertation, University of South Australia]. Centre for Regional Engagement, University of South Australia Repository.

Clarke, J. (2010). Body and soul in mental health care. Mental Health, Religion and Culture, 13(6), 649–657. https://doi.org/10.1080/13674676.2010.488416

Coe, G. A. (1916, 2017 Third impression). The psychology of religion. The University of Chicago Press.



- Dueck, A., & Johnson, A. (2016). Cultural psychology of religion: Spiritual transformation. Pastoral Psychology, 65, 299–328. https://doi.org/10.1007/s11089-016-0690-8
- Dueck, A., Reimer, K., Linscott, A., & Shin, H. (2006, April 5–7). Spirituality, language and behavioural transformation. Spiritual Transformation Public Symposium, Metanexus Institute, University of California, Berkeley.
- Frankl, V. E. (2006). Man's search for meaning. Beacon Press.
- Gow, A. J., Watson, R., Whiteman, M., & Deary, I. J. (2010). A stairway to heaven? Structure of the religious involvement inventory and spiritual well-being scale. *Journal of Religion and Health*, 50(1), 5–19. https://doi.org/10.1007/s10943-011-9518-0
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. Field Methods, 18(1), 59–82. https://doi.org/10.1177/1525822X05279903
- Harrington, A. (2016). The importance of spiritual assessment when caring for older adults'. *Ageing & Society*, 36, 1–16. https://doi.org/10.1017/S0144686X14001007
- Harrington, A., Williamson, V., & Goodwin-Smith, I. (2019). Understanding the diverse forms of spiritual expression of older people in residential aged care in Australia. *Journal of Religion and Health.*, 58(5), 1561–1572. https://doi.org/10.1007/s10943-018-00742-1
- Heaton, J. (1998). Secondary analysis of qualitative data. In P. Alasuutari, L. Bickman, & J. Brannen (Eds.), Handbook of social research methods. Sage. https://doi.org/10.4135/9781446212165.n30
- Hood, R. W., Hill, P. C., & Spilka, B. (2009). The psychology of religion: An empirical approach (4th ed.). The Guilford Press.
- Ironson, G., Kremer, H., Ironson, D., George, A., & Balbin, E. (2006, April 5–7). Spiritual transformation in the face of illness: AIDS. Spiritual Transformation Public Symposium, Metanexus Institute, University of California, Berkeley.
- James, W. (1982). The varieties of religious experience. Penguin Books.
- Katerndahl, D. A. (2008). Impact of spiritual symptoms and their interactions on health services and life satisfaction. Annals of Family Medicine, 6(5), 412–420. https://doi.org/10.1370/afm.886
- Kirkpatrick, L. A. (1995). Attachment theory and religious experience. In R.W. Hood Jr (Ed.), *Handbook of religious experience* (pp. 446–475). Religious Education Press.
- LeConté, J. D. (2017). "Wearing my spiritual jacket": the role of spirituality as a coping mechanism among African American youth. Health Education and Behaviour, 44(5). https://doi.org/10.1177/ 1090198117729398
- Lee, G., & Bishop, P. (2015). Microbiology and infection control for health professionals (6th ed.).

 Pearson
- Liss, S. M. (2013). CDC's anti-smoking ad campaign spurred over 100,000 smokers to quit; Media campaigns must be expanded nationally and in the States. https://www.tobaccofreekids.org/press-releases/2013_09_09_cdc
- Luskin, F. (2004). Transformative practices for integrating mind-body-spirit. *Journal of Alternative and Complementary Medicine*, 10(1), S-15-S-23. doi: https://doi.org/10.1089/1075553042245872
- MacKinlay, E. (2006). Spiritual care: recognizing spiritual needs of older adults, In E. Mackinlay (Ed.). *Aging, spirituality and palliative care* (pp 59–71). The Haworth Pastoral Press. https://doi.org/10.1300/J496v18n02_05
- McCallister, B. J. (1995). Cognitive theory and religious experience. In R.W. Hood Jr (Ed.). *Handbook of religious experience* (pp. 312–352). Religious Education Press.
- McCarron, R. M., & Bako, S. (2020). Covid-19: UK agrees "early access" deal with companies to get 90 million vaccine doses. *BMJ*. https://doi.org/10.1136/bmj.m2914
- Mezirow, J. (1991). Transformative dimensions of adult learning. Jossey-Bass.
- Michie, S., West, R., Campbell, R., Brown, J., & Gainforth, H. (2014). ABC of behaviour change theories. Silverback Publishing.
- Midura, N. R. (2015). Spiritually transforming experiences: Relationship alterations within committed intimate partnerships after one person experiences a spiritual transformation. Alliant International University.
- Mitchell, G., Murray, J., Wilson, P., Hutch, R., & Meredith, P. (2010). Diagnosing and managing spiritual distress in palliative care: Creating an intellectual framework for spirituality useable in clinical practice. *Australasian Medical Journal*, *3*(6), 364–369. https://doi.org/10.4066/AMJ.2010.338
- Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212–1222. https://doi.org/10.1177/1049732315588501



- Paloutzian, R. F. (2005). Religious conversion and spiritual transformation. In R.F. Paloutzian & C.L. Park (Eds.). Handbook of the psychology of religion and spirituality (pp. 331–347). The Guilford Press
- Pargament, K. I. (2006). The meaning of spiritual transformation. In J. D. Koss-Chioino & P. Hefner (Eds.). Spiritual transformation and healing: anthropological, theological, neuroscientific, and clinical perspectives (pp. 10–24). AltaMira Press. https://doi.org/10.1111/j.1548-1352.2010.01097.x
- Park, C. L. (2008). Estimated longevity and changes in spirituality in the context of advanced congestive heart failure. *Palliative and Supportive Care*, 6(1), 3–11. https://doi.org/10.1017/S14789515080000 23
- Payne, G., & Payne, J. (2004). Key concepts in social research. *Sage*. https://doi.org/10.4135/9781849209 397
- Penman, J., Oliver, M., & Harrington, A. (2009). Spirituality and spiritual engagement as perceived by palliative care clients and caregivers. *Australian Journal for Advanced Nursing*, 26(4), 29–35.
- Penman, J., Oliver, M., & Harrington, A. (2013). The relational model of spiritual engagement depicted by palliative care clients and caregivers. *International Journal of Nursing Practice*, 19(1), 39–46. https://doi.org/10.1111/ijn.12035
- Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., Baird, P., Bull, J., & Sulmasy, D. (2009). Improving the quality of spiritual care as a dimension of palliative care: The report of the consensus conference. *Journal of Palliative Medicine*, 12(10), 885–904.
- Reed, P. G. (1987). Spirituality and well-being in terminally ill hospitalized adults. *Research in Nursing and Health*, 10, 335–344. https://doi.org/10.1002/nur.4770100507
- Reed, P. G., & Rousseau, E. (2007). Spiritual inquiry and well-being in life-limiting illness. *Journal of Religion, Spirituality and Aging*, 19(4), 81–98. https://doi.org/10.1300/J496v19n04_06
- Robinson, G., & Carson, D. (2016). Resilient communities: Transitions, pathways and resourcefulness. *Geographical Journal*, 182(2), 114–122. https://doi.org/10.1111/geoj.12144
- Sherif, V. (2018). Evaluating preexisting qualitative research data for secondary analysis. *Qualitative Social Research*, 19(2), Art. 7. https://doi.org/10.17169/fqs-19.2.2821
- Spilka, B., Hood Jr, R. W., Hunsberger, B., & Gorsuch, R. (2003). *The psychology of religion: an empirical approach* (3rd ed.). The Guilford Press.
- Tanyi, R., Werner, J., Recine, A., & Sperstad, R. (2006). Perceptions of incorporating spirituality into their care: A phenomenological study of female patients on hemodialysis. *Journal of Nephrology Nursing*, 33, 532–538. https://doi.org/10.1177/1054773807311691
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16(2), 151–155. https://doi.org/10.1111/j.1744-6155.2011. 00283.x
- van Manen, M. (1997). Researching lived experience: human science for an action sensitive pedagogy (2nd ed.). The Althouse Press.
- Whitehead, D., & Whitehead, L. (2016). Sampling data and data collection in qualitative research. In Z Schneider, D. Whitehead, G. LoBiondo-Wood, & J. Haber (Eds.). *Nursing and Midwifery Research: Methods and appraisal for evidence-based practice* (5th ed., pp. 111–1263). Elsevier.
- Wiklund, L. (2008). Existential aspects of living with addiction-part II: caring needs. A hermeneutic expansion of qualitative findings. *Journal of Clinical Nursing*, 17(18), 2435–2443. doi: https://doi. org/10.1111/j.1365-2702.2008.02357.x
- Williamson, W. P., & Hood, R. W. (2012). The Lazarus Project: A longitudinal study of spiritual transformation among substance abusers. *Mental Health, Religion & Culture*, 15(6), 611–635. https://doi.org/10.1080/13674676.2011.608527

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

