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Prior cancer-death events: what impact does this have on radiation therapy students?

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Abstract *Purpose:* In 2004, a study was undertaken to determine whether treating cancer patients affected the identity development of radiation therapy students in New Zealand. Initial data analysis revealed many students had experienced significant cancer-death events, such as family members or friends dying prior to entering the course. *Methods:* A further thematic analysis was undertaken of the transcript data to determine the effects of having a prior cancer-death event on students' attitudes and perceptions of death. *Results:* Sixteen of the 21 students indicated that they had experienced a cancer-death event before entering the course. Four main themes evolved from the analysis of the student transcripts. The themes were: impact of having a prior cancer-death event; parent relationships; compassion; and a reported feeling that their lives are meaningful. Students reported the impact of the prior death-event on their professional choice and other aspects of their lives. *Conclusion:* Previous research found that young adults tended not to want to talk to their parents about death. In this study students openly discussed with parents issues relating to previous cancer-death events and dying patients. Both female and male students in this cohort demonstrated high levels of compassion. They expressed increased feelings of empathy with family and friends facing life-threatening illnesses of others although not necessarily if minor illness was involved. Students also reported that their life was made more meaningful by their past experience with a cancer-death. Further research will aim to explore whether a prior death-related event influences a range of tertiary students with respect to their attitude to life, their relationships with other people and their career choices.

Keywords: cancer, death, death attitudes, radiation oncology, radiation therapy, students, young adults.

Introduction

A qualitative survey was undertaken in 2004 to explore the effect of treating cancer patients on identity development of radiation therapy students in New Zealand. An incidental finding from this study was the significant number of participants who had had a previous cancer-death experience. Sixteen of the 21 students aged 19 to 27 years had had a cancer-death event of a family member or close friend, prior to entry into the radiation therapy programme. This seemed a substantial number of students for a cohort group and so a further analysis was undertaken of the data of these 16 students to examine this issue in some depth.

Young adults' views of death and dying

Understandings of death and dying develop progressively throughout a child's life. ^{2,3} By the time a child enters early adolescence (approximately 11 or 12 years of age), the four components of the "adult" concept of death: universality, irreversibility, nonfunctionality and causality are well established. ⁴⁻⁶ Research into young adults and death has focused on bereavement, suicide, and risk-taking behaviours: such as smoking, unprotected sex, binge drinking, and unsafe driving. Young adults' attitudes to death and dying have also been related to themes in rock music, concerns over global events (such as nuclear proliferation) and life experiences. ^{5,6} Young adults are likely to have been vicariously exposed to death through television, movies, musical lyrics and even video games. ⁵ By young adulthood (17–30 years of age), ² some will also

have had real-life experiences with death involving family members and friends;^{5,7} some studies indicate that up to a quarter of undergraduate students have experience of death with some still grieving when they enter a university course.⁷ It is through these death and other related experiences, that young adults increasingly appreciate the physiological and psychological aspects of death.^{2,8,9}

Research relevant to this study includes the impact of death and bereavement on performance and socialisation of young adults; as well as gender, age and characteristics of students studying for the health professions.

Some students having experienced a prior death-event when they enter university programmes have been reported to still be grieving. This grieving process can impact on the performance and socialisation of university students. Ocial support group intervention programmes as described by Balk, Tyson-Rawson and Colletti-Wetzel can assist the bereavement process of university-age students. Their study, however, only addressed students suffering a bereavement while at university and did not identify if students were in a health-bound profession.

The impact of gender differences and death for young adults has been studied by Thorne and McLean.⁶ They examined gender differences in the emotional construction of life-threatening events, self-defined by those in late adolescence. Self defined life-threatening events included severe accidents; physical assaults and deaths of valued others and these were found to elicit either

Table 1: Overview of the original study.

Aim	The aim of this research was to determine what effect treating cancer patients has on the student's ability to develop their own identity
Design	Qualitative case study of year two radiation therapy students in New Zealand
Scope	Thirty year-two radiation therapy students, 19–29 years of age (21 of the students responded)
Data collection	21 open ended computer based questionnaires which utilised an anonymous participation/collection method were completed by the students
Analysis	Content analysis through thematic coding of transcripts

fear or sadness. The results revealed that females focused more on death than males. Specifically, females selected death as a life-threatening event more often and also used compassionate narratives to describe such events whereas their male counterparts used tough, action-packed narratives.⁶

The influence of family, in particular parents, on young females was highlighted as a reason why females are believed more compassionate than males.⁶ Females in white middle-class families in the USA are more likely to express condolences to grieving families compared with males, who were often excluded from such emotional conversations.⁶ Parents are more likely to extensively elaborate past events involving death with daughters rather than with sons, emphasising feelings of fondness for the dead and concern for survivors. This exclusion from practices related to grieving may restrict men's opportunities for talking about death and for expressing verbal concern for the wellbeing of the survivors.^{5,6} This belief proved to be at variance with the male students in this study.

Young adults are more likely to talk about death than young teenagers, but this is more likely to be with their peers than their parents. The literature indicates that young adults are likely to disassociate themselves from their parents if they have suffered a bereavement, and suggest that this disassociation is perhaps a defence against further loss.⁵

Only one study was located which referred to young adults with past death experiences and who had career aspirations in the health professions. The study investigated tertiary education level students' awareness of and involvement in in-patient hospice care and also aimed to ascertain information regarding student's own experiences with death and their preferences about death and dying. The majority of respondents were aware of hospices; however less than 25% had any direct involvement with a hospice; women being more knowledgeable. Over 90% of the respondents had seen a dead body, and one-third had witnessed a death. All student respondents were biology majors, thus increasing the possibility of exposure to a dead body and several were working in a health field at the time. With entry into one of the health professions being a goal for most of these students, this particular study suggests that young adults entering health fields are likely to have a broader understanding of death but it did not indicate whether a prior death event influenced students' career choice.

In summary, some research has been undertaken about young adults and experience of or response to death, but very limited research has been undertaken in relation to health profession-bound tertiary students. The aim of this study is to examine if, why and how a prior experience of a death from cancer, impacted on the students.

Methods

This study was undertaken following the incidental finding of

a larger study showing many radiation therapy students having experienced significant cancer-death events, such as family members or friends dying prior to entering the course. The data set was originally the focus of a descriptive qualitative case study of the effects that treating cancer patients have on radiation therapy students' identity development in New Zealand.¹ Ethical consent for the study was granted by Victoria University of Wellington (for the researcher) and University of Otago, Wellington (for access to the participants) in March 2004. Participants recruited to the study gave informed consent to participate in the study and for the data to be used in subsequent publications and the study processes conformed to the ethical standards associated with the approval. Table 1 provides an overview of the aims and methods of the original larger study.

Sixteen of the 21 students (76%) who completed the qualitative survey questionnaire, indicated that they had experienced a cancer-death event prior to entering the radiation therapy undergraduate course. The specific question students responded to asked if they had any personal experiences of a cancer-death.

In this study, the transcripts of the 16 students who answered affirmatively to the above question were reviewed to ensure all relevant data were considered and that the data were inductively re-analysed in relation to the focus on prior death-related events. ^{13,14} To do this, data were independently re-examined by the primary researcher, and a research colleague. Categories of data were developed and a label/code was assigned to each category which was recorded in the student transcript. All categories and then concepts and themes were independently collated and verified by both researchers. ^{13,15} The analysis also focused on emerging content with reference to the existing literature.

Fourteen students reported more than one cancer-death related experience. Four of these students reported that grandparents on both sides of the family had died. Twelve students reported that family members had died of cancer with 10 students identifying this was the death of one or more of their grandparents. Two students indicated that a close family member had died of cancer but did not indicate what the immediate relationship was. Six students also said close family friends had died and two students reported they had friends die of cancer while they were at school.

Results

Four main themes evolved from the analysis of the 16 student transcripts. The themes were: impact of having a prior cancerdeath event; parent relationships; compassion; and a reported feeling that their lives are meaningful.

Impact of having a cancer-death event

Four of the 16 students described the impact at the time of experiencing the cancer-death event; in particular the distress at watching close family members deteriorate. The following

student despite experiencing the deaths of grandparents on both sides of the family was drawn to study radiation therapy.

"My grandfather died from bowel cancer and my grandmother (other side of the family) had breast cancer and developed bowel primary which she died from. Both of them had very long illnesses and it was quite distressing seeing them deteriorate" (student no. 18, female).

Another student commented how little she understood about what was happening at the time a family friend died. At the age of 10 perhaps her family did not think it appropriate to discuss the illness and death and may not have realised how much it affected her. Interestingly, she is able to cast her mind back to this event and reflect on how it has influenced her current work.

"When I was a child, a friend of our family who was 10 years old died of leukaemia and one of my best friend's mums died of bone cancer. It's such a different experience looking back now from the other side of the fence and remembering how little I understood" (student no. 5, female)

Six students were able to step back and consider how their experience of having someone close die with cancer impacted by allowing them to express empathy during their current clinical work especially supporting those with cancer.

"I have had a number of close relatives die from cancer and I feel that this experience enables me to empathise with patients and their families. I feel that this experience gives me an understanding of cancer and how I respond to it. I feel that having personal experience of cancer is very valuable and enables me to do my job better" (student no. 16, male).

Three of the questions asked students to reflect on how their clinical work has affected their personal life and relationships with friends and family. Five students said it has helped them in their personal relationships with friends who were facing family/friend deaths. In the following quote a student talks about the impact of a family death on his ability to comfort a friend; this could almost be perceived as a professionalised role or response.

"But the main influence I can think of from my [prior cancer-death] experience is the comforting factor for friends whose parents/grandparents have been diagnosed with a life-threatening illness. Friends have expressed their worry and fear to me and from treating patients and dealing with their families it has made it easier to comfort friends who are in that situation" (student no. 2, male).

In contrast, three of these students (and five of the students overall) went on to say that they themselves found it difficult to cope with other people's minor problems which they perceived as trivial.

"It has also changed my opinions when responding to my friends' problems. I've found that I can't tolerate listening to my friends' everyday problems as much because other people have much bigger problems, e.g. living with cancer" (student no. 12, female).

Three students said that as a result of a cancer-death event they were specifically worried about their own health, possible illness and death. Working with cancer patients had heightened this awareness. The student below reflects anxiety about her attempts to try to keep her family well and expresses a rather unrealistic expectation that she can control their actions.

"I definitely think it has changed my view on life. It has made me much more appreciative of the people I have in my life (friends and family). It has also made me more aware of death. As if I no longer think of myself and my family as invincible. I feel a much stronger need to try to take care of my family and make them aware of what things could be harmful/cancer causing to them" (student no. 4, female).

Parent relationships

In this study, positive student-parent relationships were associated with previous cancer-death experiences, and resulted in supportive conversations about death. Fifteen of the 16 students made reference to this and the conversations they described were primarily about the people they knew who had died. The students also warned their parents about the risks of cancer and expressed anxiety that their parents may prematurely die. In the quote below this realisation has been heightened due to this student's clinical exposure.

"My Mum's dad died of cancer. I never really was interested to know about him or what he did just because I was young and never met him. But since I have now treated a lot of cancer patients and I realised he had cancer, I can now relate the two and my granddad now has a lot more meaning to me, because Mum and I have talked about it a lot more now" (student no. 3, female).

Similarly for the following student clinical exposure with cancer patients has made her want to talk to her mother about the impact of her grandmother's illness.

"My Oma had cancer when my mother was my age, and had a mastectomy. I haven't really talked with Oma about it, she is quite a private person and I understand that. I wouldn't want to make her uncomfortable. However, because I think this had quite an impact on my mother I do talk with her about it" (student no. 17, female).

Compassion

There seems to be a relationship between growing experience in the clinical area and the development of compassion and empathy. In this study the three male and 13 female students appeared equally as compassionate and expressive in their responses. This is despite the belief that young females are perceived to be more compassionate than young males.^{16,17} This is illustrated in the quote from a male student as follows:

"I think that treating people with cancer has made me more tolerant and understanding as these people often have good reasons to complain or be difficult to manage. Often if you look at the big picture of what they are going through it is easy to understand their behaviour ... My life view is broader as a result of working in the department and I think that I am more compassionate as a result of my experiences" (student no. 16, male).

The following student shows emerging maturity and compassion in her response.

"I feel more mature when it comes to talking to patients about having a life-threatening illness and I can also talk better to some of my friends and family who have little understanding about the subject. I also feel like I know how to deal with sad situations better — i.e. what to say to someone when their family member dies or when patients tell you how bad everything they have been through is. Often patients or a patient's family member would tell me all the horrible things that had happened to them, I used to feel sorry for them, but now I know you have to develop empathy and trust with them and let them know that what you are going to do is hopefully going to help them" (student no. 3, female).

Lives are meaningful

Being confronted by prior cancer-death events caused students to reflect on their values and beliefs. Ten of the 16 students highlighted values and interpersonal skills such as communication and empathy, as well as becoming more outgoing, gaining confidence when dealing with people and more compassionate towards others. The student below considers existential beliefs about the value of living which appear to be influenced by her relationship with patients.

"Dealing with cancer patients has made me realise how short life really is. It has made me want to live life to the fullest and take chances, make choices I previously may not have done in the hope that if I were to be diagnosed with a life-threatening illness, I would have little or no regrets" (student no. 14, female).

Discussion

Seventy six percent of the cohort of radiation therapy students participating in a study about identity development indicated they had experienced a prior cancer-death event. The number of students having had this experience seemed high compared to other studies that reported approximately a quarter of an undergraduate cohort having a death experience and this was all deaths not just cancer.^{5,7,18}

Four themes were identified in this study: the impact of having a prior cancer-death event; parent relationships; compassion; and a reported feeling that their lives are meaningful. There were a number of areas identified within these themes which would benefit from further study and these are highlighted through the discussion.

Research has been undertaken regarding young adults and the impact of death and bereavement but there are few studies about health professional students, prior death-related events and their impact. The current study suggests that prior death-related events (in particular cancer-related deaths) impact on a number of aspects of a young adult student's personal and professional life, both positively and negatively.

Students who had a prior experience of a cancer-death event expressed a heightened awareness of themselves and were aware of how their prior death-related event has allowed them to develop on a personal and professional level. Students reported understanding people better, having more self-confidence and being better able to talk to people in both their personal and professional lives. They commented that it had given them an awareness of the value of life, concluding that they now appreciate life more and better understand what is important to them.

Bluck, *et al.*¹⁹ believe individuals form significant memories about death experiences and the memories mark a time when individuals start thinking and living in a new way; it is possible that radiation therapy students in this cohort are doing just that. Davis and McKearney²⁰ also describe that after a loss or other traumatic experience people can report that their life is more meaningful, or that they have gained something from the experience. It may be that students in this study, because of their day-to-day work with people facing life and death challenges find meaning in new things and appreciate life more.²⁰ These are areas that require further study.

Having experienced a prior cancer-death event and then working with cancer patients seems to have made this cohort of female and male students talk to their parents more about death-related issues and these students have indicated a heightened awareness of the fact that one day their parents will die. The literature indicates that young people in late adolescence and early twenties are detaching emotionally from their parents;^{3,5} this seems particularly so, if they have experienced a death-related event.^{5,7} However, this study suggests that due to clinical experience with cancer patients, radiation therapy students possibly have a more open relationship with their parents.

The literature indicates that the influence of family, especially parents, on young females at the time of a death has been suggested to cause young females to become more compassionate than young males. The seemingly equally compassionate responses of females and males in this study could reflect the type of person that is attracted to, interviewed and selected for the radiation therapy programme. It is possible that having had a prior cancerdeath experience may have contributed to the development of the compassionate nature of these students but this would require further research.

Although five students were sympathetic to friends who were facing the death of family or friends, three of these five students specifically expressed little sympathy for friends with minor ailments such as the common cold. The prior cancer-death event may have resulted in the students being sympathetic to those with cancer (which is relatively uncommon) but not to those suffering from more common (and perceived as trivial) ailments. The students did not recognise that in their day-to-day life they will come across far more people with common illnesses that still require everyday empathy than the cancer patients who are receiving radiation therapy.

Although these numbers are small, it perhaps highlights an area where the students might need assistance²⁰ to explore issues of mortality and the impact on career choice or exploration of feelings before, during and after clinical placement. In New Zealand radiation therapists are not offered the counselling and supervision that is available to counsellors and some other health care workers who work with cancer patients. Clinical or counselling supervision^{3,21} is a regular meeting with another professional, who has training in the skills of supervision, to discuss casework and other professional issues in a structured way. The purpose is to assist the practitioner to learn from his or her experience and to progress in expertise, as well as to ensure good service to the client or patient. Clinical supervision could be of some value to the students to help them put their previous and work experiences into perspective. Similarly the University programme might investigate setting up a support group such as the one Balk, Tyson-Rawson and Colletti-Wetzel¹¹ recommended for grieving students.

Limitations

There are limitations with this study, including the small participant numbers and that the participants were recruited from one university in one city. In addition, so as to address anonymity considerations, no attempt was made to correlate the students' particular age with their responses.¹⁴

Conclusion

Sixteen of the 21 students in their first year of radiation therapy study indicated that they had experienced a cancer-death event before entering the course, including the death of a close family member, family friend or school friend. Limited previous research has been undertaken in this area. That which has been undertaken suggests that usually one quarter of tertiary aged students per cohort have experienced a personal death experience and those death-related events can impact on students' tertiary study experiences. A notably higher number in the cohort studied had experienced prior cancer-death events. A further analysis of the transcripts of these 16 students found four common themes. Students who had a prior cancer-death event talk to their parents about death-related issues; both male and female students equally express compassion; several reported that their life was more meaningful; and a prior cancer-death event appeared to help them

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integrate death events into their professional and personal lives. For a small number of students a prior cancer-death event did not necessarily help them to relate better to friends and family when responding to their apparently minor illnesses or issues.

Three areas for future research have been identified: values and appreciation of life, development of compassion; and the need for routine counselling and/or supervision.

Currently, the author is conducting further research which explores the incidence of death-related events (not just cancer) in student cohorts of other health professional disciplines as well non-health professional courses. The aim of this research will address the first two areas identified above and investigate whether prior death-related events influence students with respect to their attitude to life, their values and relationships with other people and their career choices.

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Declaration

The author was a lecturer at the University of Otago, Wellington when the students were on campus. When the students were invited to participate in the original study she had no teaching responsibilities with that cohort for the rest of that year.

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