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Experiences of Canadian oncologists with difficult patient deaths and coping strategies used

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ABSTRACT

Objectives We aimed to explore and identify what makes patient death more emotionally difficult for oncologists and how oncologists cope with patient death.

Methods A convenience sample of 98 Canadian oncologists (50 men, 48 women) completed an online survey that included a demographics section and a section about patient death.

Results More than 80% of oncologists reported that patient age, long-term management of a patient, and unexpected disease outcomes contributed to difficult patient loss. Other factors included the doctor–patient relationship, identification with the patient, caregiver-related factors, oncologist-related factors, and "bad deaths." Oncologists reported varying strategies to cope with patient death. Most prevalent was peer support from colleagues, including nurses and other oncologists. Additional strategies included social support, exercise and meditation, faith, vacations, and use of alcohol and medications.

Conclusions Oncologists listed a number of interpersonal and structural factors that make patient death challenging for them to cope with. Oncologists reported a number of coping strategies in responding to patient death, including peer support, particularly from nursing colleagues. No single intervention will be suitable for all oncologists, and institutions wishing to help their staff cope with the emotional difficulty of patient loss should offer a variety of interventions to maximize the likelihood of oncologist participation.

Key Words Oncologists, well-being, coping, patient death

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INTRODUCTION

Over the past few decades, an increasing focus has been placed on the emotional life of health care professionals and its potential effects on patient care and the personal lives of physicians, nurses, and other health care workers^{1,2}. More recently, the focus has been on the effect of caring for terminally ill patients at end of life, and the subsequent feelings of grief and sadness than can ensue in oncologists^{3–5}, nurses^{6–8}, and other physicians who have exposure to frequent patient death^{2,9–12}. In the cancer care context, this literature has additionally focused on how oncologists and other health care professionals cope with patient death^{13–20}. Much of the literature to date has been anecdotal, with physicians writing personal essays about their own experiences with patient death and offering advice or lessons learned to other physicians about how to cope with deaths $^{2,12,21-23}$.

Only a handful of studies have examined the experiences of Canadian oncologists with patient death. In an empirical study that examined oncologist grief, Granek and colleagues²⁴ interviewed 20 oncologists who treat adults and found that their grief is a unique emotional experience that includes feelings of self-doubt, guilt, failure, powerlessness, and sadness, as well as loss of sleep and crying. That study also found that oncologists use a cognitive strategy of compartmentalization and the practical strategy of withdrawing from families at end of life to avoid dealing with the emotional strain of patient death¹³. The physicians also turn to social supports, exercise, and faith as coping strategies in dealing with their grief when patients die¹³.

Correspondence to: Leeat Granek, Department of Public Health, Ben-Gurion University of the Negev, PO Box 653, Beer Sheva 84105 Israel. E-mail: Leeatg@gmail.com 🔳 DOI: https://doi.org/10.3747/co.24.3527 Other Canadian studies have looked at the experiences of oncologists with stress and burnout as a result of their jobs. For example, in a survey study of 35 Canadian gyne-cologic oncologists, 26% of respondents indicated that their job was extremely stressful and scored high on emotional exhaustion²⁵. In another study looking at the well-being of 131 medical oncologists in Ontario, approximately half the sample reported emotional exhaustion (53%) and low personal accomplishment (48%), and almost a quarter reported depersonalization (22%) as a result of their work²⁶.

In summary, despite the evidence that grief connected to patient death is a significant part of clinical oncology and can affect an oncologist's life, very few studies have looked at the experiences of oncologists with patient death in the Canadian context. Canadian oncologists work within a publicly funded health care system and have a high patient load. Although some research has examined the emotional toll of patient death on oncologists, few studies have looked at other important aspects of coping with and responding to patient death in the oncology setting. The objectives of the present study were therefore to explore and identify what makes some patient deaths more emotionally difficult for Canadian oncologists and how Canadian oncologists cope with patient death on a personal level.

METHODS

Participants and Procedure

A convenience sample of 98 oncologists from Canada (50 men, 48 women) participated in the study. Oncologists were recruited using online methods. Members of the Canadian Association of Medical Oncologists and the Canadian Association of Radiation Oncology were sent an e-mail message explaining the study and the time commitment involved in completing the electronic survey, and inviting their participation. The study was approved by the University Health Network research ethics board. All surveys were anonymous and confidential.

Measures

Sociodemographic and Clinical Information

A self-report questionnaire that asked for information about the participant's sex, age, marital status, country of birth, years of experience, mean number of patients seen each week, and mean number of patients who die while in their care each month.

Difficult Patient Loss and Strategies in Coping with Patient Death

The patient death survey was developed by the authors to assess the factors that make some patient deaths more challenging than others and the methods that oncologists use to cope with patient death. Preliminary items for the survey were generated from three sources: a literature review to identify any broadly similar questionnaires already developed, expert opinion (that is, from clinicians), and qualitative data from in-depth interviews that one author (LG) had previously conducted with adult oncologists^{13,24,27-29}.

After the survey had been developed, cognitive interviews were conducted with 5 oncologists. The cognitive

interview is a systematic way of evaluating new items in the process of questionnaire development with the population for whom the survey is intended (Caspar RA, Lessler JT, Willis GB on behalf of the Research Triangle Institute. Reducing Survey Error Through Research on the Cognitive and Decision Processes in Surveys. Presented at: 1999 Annual Convention of the American Statistical Association; Baltimore, MD, U.S.A.; 8-12 August 1999). Oncologists were asked to complete the survey in the presence of the research assistant and to use the "think aloud" technique to clarify the cognitive processes involved in completing the survey. Cognitive interviews include questions about comprehension of the survey items, memory retrieval of relevant information, decision processes, and response processes. Based on the cognitive interviews, the survey was edited as necessary until the research team was satisfied with the final product.

The final Difficult Patient Loss scale consisted of 18 items assessing whether oncologists agreed or disagreed with factors pertaining to challenging patient deaths. One example of the items in the scale is the statement "I find it particularly difficult when a patient dies," which could be completed with phrases such as "who I felt close to," "who reminds me of myself," and "when invasive treatment was used," among others. In addition, an open-ended qualitative question was presented to the oncologists: "Were there any other cases where you felt that a patient death was especially difficult for you? If so, please describe this situation."

The final Coping Strategies Scale consisted of 19 items assessing whether oncologists agreed or disagreed with factors pertaining to coping with patient death. One example of the items in the scale is the statement "When a patient dies," which could be completed with phrases such as "I talk to my spouse," "I talk to other oncologists who work with me," and "I take time off work", among others. In addition, an open-ended qualitative question was presented to the oncologists: "Do you use any other coping strategies to deal with patient death? If so, please describe them below."

The Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI)³⁰ is considered the reference standard for the assessment of burnout. However, its length (22 items) limits its utility in large surveys addressing multiple content areas. In the present study, burnout was therefore assessed using 2 items adapted from the full MBI that assess 2 different burnout domains. The first assesses emotional exhaustion ("How often do you feel burned out from your work?"); the second assesses depersonalization ("I have become more callous toward people since I took this job"). Those questions are answered on a 7-point Likert scale, whose response options range from 0 ("never") to 6 ("every day"). Those two items correlate strongly with the emotional exhaustion of burnout and depersonalization as measured by the full MBI³¹ and have also been shown to perform well as predictive factors relative to the full мы³².

The Hamilton Rating Scale for Depression

The Hamilton questionnaire³³ is designed to assess the severity of depression; it is the most widely used measure of depression severity in clinical trials (for example, Bagby

*et al.*³⁴). The Hamilton questionnaire consists of six items, each scored on a 3- or 5-point scale. The final score, which ranges from 0 to 22, is generated by summing the responses. A higher score indicates a higher level of depression. Internal reliability in the present study was good (Cronbach alpha = 0.84).

RESULTS

Sample Characteristics and Clinical Information

Table I presents the sample's sociodemographic characteristics and clinical information. Participants were mostly between the ages of 30 and 60 years, married, past the residency stage, and specialists with more than 15 years

TABLE I Participant sociodemographic and clinical information

Variable	Value
Participants (<i>n</i>)	98
Sex [% (<i>n</i>)]	
Women	49 (48)
Men	51 (50)
Age group [% (<i>n</i>)]	
20–30 Years	5 (5)
31–40 Years	28 (27)
41–50 Years	32 (31)
51–60 Years	22 (22)
61+ Years	13 (13)
Religious affiliation ^a [% (<i>n</i>)]	
Christian	55 (53)
Atheist	16 (15)
Agnostic	11 (11)
Jewish	6 (6)
Muslim	3 (3)
Other	9 (9)
Spirituality ^a [% (<i>n</i>)]	
Very spiritual	12 (12)
Moderately spiritual	51 (49)
Not spiritual	37 (36)
Marital status ^a [% (<i>n</i>)]	
Single	8 (8)
Married	88 (86)
Widowed	2 (2)
Separated	2 (2)
Mean children at home (<i>n</i>)	3±1.4
Stage of career ^a [% (n)]	
Resident	4 (4)
Expert	96 (94)
Time in oncology ^a [% (<i>n</i>)]	
<5 Years	19 (19)
5–10 Years	22 (22)
11–15 Years	13 (13)
>15 Years	44 (43)

of clinical experience. Of this sample, 70% saw up to 40 patients per week, and 30% saw more than 40 per week. Of these oncologists, 45% experienced 0–2 deaths per month in their practices, and 55% experienced 3 or more patient deaths per month. The mean scores for emotional exhaustion (1.93 ± 1.51) and depersonalization (1.29 ± 1.52) were in the lower range of the scales. The mean score on the Hamilton questionnaire (2.36 ± 2.86) was also in the lower rage, which is considered "no depression."

Factors That Make Patient Death Difficult for Oncologists

Table II presents 8 categories of factors that oncologists indicated made patient death particularly challenging

Specialty [% (<i>n</i>)]	
Radiation oncology	43 (42)
Medical oncology	55 (54)
Other	2 (2)
Weekly workload [% (n)]	
0-40 Patients	70 (69)
>40 Patients	30 (29)
Monthly exposure to patient death $[\% (n)]$	
0–2 Deaths	45 (44)
3+ Deaths	55 (54)
Province or territory of residence ^a [% (n)]	
Ontario	43.8 (42)
British Columbia	17.7 (17)
Alberta	14.6 (14)
Quebec	9.4 (9)
Nova Scotia	5.2 (5)
Manitoba	4.2 (4)
New Brunswick	3.1 (3)
Newfoundland and Labrador	1 (1)
Prince Edward Island	1 (1)
Northwest Territories	0 (0)
Nunavut	0 (0)
Saskatchewan	0 (0)
Yukon	0 (0)
Depression	
Present score ^b	2.36±2.86
Past self-report [% (<i>n</i>)]	
Yes	16.3 (16)
No	83.7 (82)
Mean Maslach Burnout Inventory score	
Question 1 ^c	1.93±1.51
Question 2 ^d	1.29±1.52

^a Total number of respondents is lower than the sample size because of missing responses.

^b By the Hamilton rating scale.

"How often do you feel burned out from your work?"

^d "I have become more indifferent toward patients since I started this work."

TABLE II	Difficult patient loss	, responses of 98	participants

Category	Response	Value [% (<i>n</i>)]
Doctor-patient relationship	Who I felt close to	71 (71)
Identification with patient	Who reminds me of myself	55 (54)
	Who reminds me of one of my family members	66 (65)
	Who reminds me of one of my friends	60 (59)
	When the patient had children under the age of 18	74 (72)
Patient age	When the patient was young	84 (82)
Long-term patients	When I've treated the patient for a long time	80 (78)
Unexpected disease outcomes	When the patient died unexpectedly	85 (83)
	When the patient died of complication and not from the disease	83 (81)
Caregiver-related factors	When the family was not prepared for the patient to die	72 (71)
	When the family had unrealistic expectations about the patient's prognosis and treatment	59 (58)
	When the patient's family blamed me for the patient's death	71 (69)
	When the patient's family was angry at me	67 (66)
Oncologist-related factors	When I feel I have not given them enough of myself	41 (40)
"Bad death"	When excessive treatment was used	44 (43)
	When invasive treatment was used	26 (25)
	When the patient was in pain when they died	81 (79)
	When the patient didn't say good-bye to their loved ones	63 (62)

for them. The 1st category included the doctor-patient relationship, where oncologists felt close to their patients (71%). The 2nd category included identification with patients, where patients reminded the oncologists of themselves (55%), patients reminded them of family members (66%), patients reminded them of friends (60%), and patients had children under the age of 18 (74%). The 3rd category had to do with patient age when patients were particularly young (84%). The 4th category included longterm patients-that is, patients that the oncologists had treated for a long period of time (80%). The 5th category included unexpected disease outcomes, such as when a patient died unexpectedly (85%) or from a complication and not from the disease itself (83%). The 6th category had to do with caregiver-related factors such as when the family was not prepared for the patient to die (73%), when the family had unrealistic expectations about the patient's prognosis and treatment (59%), when the patient's family blamed the oncologist for the death of the patient (71%), and when the patient's family was angry at the oncologist (67%). The 7th category had to do with oncologist-related factors, such as when the oncologist felt that they had not given enough of themselves to the patient and the family (41%). The final category had to do with "bad patient deaths" that included the perceived use of excessive (44%) and invasive treatments (26%), a patient who was in pain when they died (81%), and a patient did not have an opportunity to say goodbye to loved ones (63%).

Table III presents the qualitative data that oncologists provided in response to what makes patient death especially difficult for them, with quotations illustrating some of the themes found in the survey. In addition, oncologists named factors not found in the survey, such as the accessibility and impact of clinical trials on the lives of patients, patients who inspire them, and patients who turn to unconventional treatments before their death.

Strategies That Oncologists Use in Coping with Patient Death

Table IV presents 6 categories of coping strategies that oncologists use in dealing with patient death. Social support included talking with a spouse (38%), talking with another family member (12%), talking with a friend (11%), spending time with children (44%), and spending time with extended family (20%). Professional support included talking with a primary nurse or a nursing colleague (75%), talking with a social worker on the health care team (15%), talking with a spiritual care worker on the team (6%), talking with other oncologists with whom they work (61%), talking with oncologists with whom they don't work (22%), and talking with a psychologist or other mental health professional (2%) about patient death. Coping-related activities included hobbies (38%), exercise (38%), spending time outdoors (47%), and focusing on research (24%). Other coping strategies included turning to faith (21%), taking time off work (6%), and distraction-type activities such as drinking alcohol (5%) and avoiding thinking about the patient unless at work (31%).

Table v presents the qualitative data that oncologists provided about their coping strategies when patients die. In addition to expanding on the themes in the survey, oncologists named additional coping strategies that included mindfulness and meditation, turning to media, taking sleeping pills, and finding closure with patients who are near death or with the family after a patient death.

DISCUSSION

The objectives of the present study were to explore and identify the factors that make some patient deaths more emotionally difficult for oncologists and the methods that oncologists use to cope with patient death. The results provide a window into the emotional lives of Canadian oncologists when it comes to their experiences with patient death. Almost three quarters of oncologists (more than 70%) in our sample reported that difficult patient deaths occurred

TABLE III Qualitative responses to the question "Were there any other cases where you felt that a patient death was especially difficult for you? If so, please describe this situation"

Category		Response
Long-term patients	-	When I have looked after metastatic patients for many years—like 5 to 10—then it is really hard to hand them over to palliative care and stop seeing them. Then I just wait to hear they have died, which is awful.
Clinic trials		When I had enrolled them in a clinical trial which likely resulted in their sudden death. I feel really frustrated when a patient has especially been keen to take part in clinical trials, and I've been unable to obtain this opportunity for them. This is quite an issue right now, where immunotherapy seems to hold so much promise, and yet we can't get most patients a crack at this. There have been very few advances in treating ovarian cancer during my longish career, and I feel especially let down for those patients—that we haven't obtained any breakthroughs in treating this disease, where so many other diseases [of those I treat] have seen advances.
Inspiring patients		Patients who accepted their outcome with tremendous grace.
Sudden or unexpected death		Sudden death of a patient with good information indicating apparent improvement. Death from treatment complications are the hardest especially when patient is otherwise doing well.
Personal connection with patients	-	Another issue is where the patient and their family live close by or have shared friends or acquaintances with me, as I work in a smaller city.
Unconventional treatments		When they desperately seek unconventional, expensive, and useless therapies from opportunistic providers.
"Bad death"		When there was discordance between the patient's and the family's wishes, or when we were unable to transition an imminently dying patient from active to comfort measures—poor pain control. When the patient and their family do not believe that that they are dying and are unable to accept the inevitable.

TABLE IV Strategies used in coping with patient death, responses by 98 oncologists

Strategy	Activities	Value [% (<i>n</i>)]
Social support	I talk with my spouse.	38 (36)
	I talk with another family member.	12 (12)
	I talk with a friend.	11 (11)
	I spend time with my kids.	44 (42)
	I spend time with my extended family.	20 (19)
Professional support	I talk with the primary nurse or nursing colleague.	75 (73)
	I talk with the social worker.	15 (15)
	I talk with the spiritual care worker.	6 (6)
	I talk with other oncologists who work with me.	61 (60)
	I talk with other oncologists who don't work with me.	22 (11)
	I talk with a psychologist or another mental health professional.	2 (2)
Activities	I turn to my hobbies.	38 (37)
	l exercise.	38 (37)
	I spend time outdoors.	47 (46)
	I focus on my research.	24 (23)
Faith	I turn to faith.	21 (21)
Vacations	I take time off work.	6 (6)
Distractions	I drink alcohol.	5 (5)
	I don't think about the patient unless I'm at work.	31 (30)

Strategy		Response
Spending time with friends	-	Hang out with girlfriends. My extended family is not in Canada.
Mindfulness and meditation		Practice mindfulness. Meditation
Media	-	I read and think, listen to music or talk radio (CBC).
Sleeping pills	-	If I'm terribly distressed, I may take half a sleeping pill to help me get to sleep for a few nights. I don't ever use illicit drugs.
Finding closure with patients	-	I find that having closure with the patient's family after death helps. Spend time with patients who are not at acute death risk, and some who are.

TABLEV Qualitative responses to the question "Do you use any other coping strategies to deal with patient death? If so, please describe them below"

when they felt close to the patient, when the patient had children under the age of 18, when the patient was young, when the oncologist had treated the patient for a long stretch of time, when the patient died unexpectedly or of a complication, when the family was not prepared for the patient to die, when the patient's family blamed the oncologist for the patient's death, and when the patient was in pain when they died. Some of those findings—for example, closeness to patients, young patients, and complications, among others—were reported in the only other Canadian study that used qualitative methods to examine the experiences of oncologists with patient death²⁷. Our quantitative findings corroborate a wide consensus that those factors make patient death particularly emotionally challenging for oncologists.

Some of the factors involved in patient death are part and parcel of the experience of working with people with serious illness, but other factors can be ameliorated. For example, 71% of oncologists reported that patient death was particularly challenging when the family was unprepared for it, and 81% reported that it was hard for them when the patient who died was in pain. Substantial evidence indicates that the early integration of palliative care can prepare patients, their families, and the health care team for the end of life³⁵⁻⁴⁰, and in the process, it can also reduce miscommunication between patients, caregivers, and physicians^{35,36,41-43}. According to the National Consensus Project for Quality Palliative Care44, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care addresses physical, intellectual, emotional, social, and spiritual needs throughout the continuum of illness. Palliative care also facilitates patient autonomy, access to information, and choice'44. Thus, palliative care services whose mandate includes pain relief for patients can substantially reduce unnecessary pain and physical suffering at end of life for patients, and in the process, can also reduce suffering for the oncologist, who experiences emotional distress when patients die in pain.

As noted by the findings about difficult patient deaths, some aspects of caring for dying patients cannot be helped. We were therefore interested in examining how Canadian oncologists cope with patient death. What is striking about our results is that unlike the findings with respect to difficult patient death, where the oncologists showed a broad consensus, very few coping strategies were widely practiced among the oncologists. The only coping strategy that was reported by more than half the participants was talking with primary nurses and with other oncologists, reported by 75% and 61% of the respondents respectively. The importance of colleague or peer support cannot be understated in helping to ameliorate some of the emotional burdens of coping with patient death. For example, in the pediatric and adult oncology context, social support at work has been identified as an important factor in helping nurses17 and oncologists cope when their patients die^{13,18,20}. Moreover, it is noteworthy that three quarters of the sample reported that the primary nurse or nurse colleague is an integral part of their peer support network. In recent years, the primary care nursing model has been reduced or eliminated in many provinces, including in Ontario, where 44% of our research sample resided. Our research findings point to the tremendous importance of this model in strengthening relationships within the health care team that can aid in coping with the more emotionally challenging aspects of the work, including regular patient death. Encouraging an atmosphere of openness and sharing in the workplace about the emotions arising after patient death could help to reduce isolation for oncologists coping with deaths among their patients. Our findings suggest that this type of openness might be most likely in the context of physician-nurse dyads who work closely together or with other trusted colleagues, or both.

Other research (not necessarily in the Canadian context) found that physicians used social support, exercise, and faith as coping strategies in dealing with patient death^{13,14,17,19,20}; they also turned to work or developed a philosophy of life¹⁵. Our survey findings indicate that, although some of the coping strategies mentioned by our participants are corroborated by other studies, the individual coping preferences of oncologists are idiosyncratic. In recent years, institutions have attempted to incorporate debriefing sessions^{28,45,46}, day-long retreat workshops⁴⁷⁻⁴⁹, education sessions about coping^{50,51}, and week-long residential programs⁴⁶ to help health care professionals cope with patient death and other difficult aspects of working with terminally ill patients. Although these are excellent resources to offer to oncologists, our findings point to wide variability in preferred coping strategies, and no single intervention is likely to be suitable for all, or even most, oncologists. Coping interventions for oncologists should thus always be optional and should vary in approach and style so as to maximize the benefit for the physicians. Future studies should empirically find cost-effective

interventions that are tailored to the needs of oncologists coping with difficult patient loss.

Our study should be interpreted in the context of its limitations. First, the study was conducted using a convenience sample that could be subject to selection bias. It is possible that individuals who are more willing to share their experiences are also more willing to participate in a study, and that there are other coping strategies that were not represented in our findings. Second, our study was unable to determine whether the coping strategies reported are effective in ameliorating the effect of patient death on the oncologists. Third, our study findings suggest that the integration of palliative care might also reduce distress and suffering among oncologists. Further research should empirically test that hypothesis.

CONCLUSIONS

Our sample of Canadian oncologists listed a number of interpersonal and structural factors that make it particularly challenging for them to cope with patient death. Early integration of palliative care into the treatment trajectory might help to ameliorate some of those factors and, in the process, might improve quality of life for oncologists who have frequent exposure to patient death. Moreover, apart from the importance of peer support, Canadian oncologists listed a broad variety of coping strategies used in responding to patient death. Given that variety, no single intervention will be suitable for all oncologists, and institutions that want to help their staff cope with the emotional difficulty of patient loss should offer a variety of optional interventions, thus maximizing the likelihood that oncologists will participate in the interventions and that the interventions themselves will be useful for the health care staff.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood *Current Oncology*'s policy on disclosing conflicts of interest, and we declare that we have none.

AUTHOR AFFILIATIONS

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REFERENCES

- 1. Kearney MK, Weininger RB, Vachon ML, Harrison RL, Mount BM. Self-care of physicians caring for patients at the end of life: "Being connected... a key to my survival." *JAMA* 2009;301:1155–64.
- 2. Meier DE, Back AL, Morrison RS. The inner life of physicians and care of the seriously ill. *JAMA* 2001;286:3007–14.
- 3. Giddings G. The ties that bind: a reflection on physician grief. *Support Care Cancer* 2010;18:1355–7.
- Shanafelt T, Adjei A, Meyskens FL. When your favorite patient relapses: physician grief and well-being in the practice of oncology. J Clin Oncol 2003;21:2616–19.
- 5. Shanafelt T, Chung H, White H, Lyckholm LJ. Shaping your career to maximize personal satisfaction in the practice of oncology. *J Clin Oncol* 2006;24:4020–6.
- 6. Feldstein MA, Gemma PB. Oncology nurses and chronic compounded grief. *Cancer Nurs* 1995;18:228–36.

- Lenart SB, Bauer CG, Brighton DD, Johnson JJ, Stringer TM. Grief support for nursing staff in the ICU. J Nurses Staff Dev 1998;14:293–6.
- 8. Spencer L. How do nurses deal with their own grief when a patient dies on an intensive care unit, and what help can be given to enable them to overcome their grief effectively? *J Adv Nurs* 1994;19:1141–50.
- 9. Redinbaugh EM, Schuerger JM, Weiss LL, Brufsky A, Arnold R. Health care professionals' grief: a model based on occupational style and coping. *Psychooncology* 2001;10:187–98.
- 10. Redinbaugh EM, Sullivan AM, Block SD, *et al.* Doctors' emotional reactions to recent death of a patient: cross sectional study of hospital doctors. *BMJ* 2003;327:185.
- 11. Ahmad T. Wherein lies the balance between caring and detachment? *J Am Coll Cardiol* 2015;65:1481–2.
- 12. Kaye EC. Pieces of grief. J Clin Oncol 2015;33:2923-4.
- 13. Granek L, Mazzotta P, Tozer R, Krzyzanowska MK. Oncologists' protocol and coping strategies in dealing with patient loss. *Death Studies* 2013;37:937–52.
- 14. Moores TS, Castle KL, Shaw KL, Stockton MR, Bennett MI. "Memorable patient deaths": reactions of hospital doctors and their need for support. *Med Educ* 2007;41:942–6.
- 15. Shanafelt TD. Finding meaning, balance, and personal satisfaction in the practice of oncology. *J Support Oncol* 2005;3:157–62.
- 16. Holland JM, Neimeyer RA. Reducing the risk of burnout in end-of-life care settings: the role of daily spiritual experiences and training. *Palliat Support Care* 2005;3:173–81.
- 17. Papadatou D, Papazoglou I, Petraki D, Bellali T. Mutual support among nurses who provide care to dying children. *Illn Crises Loss* 1999;7:37–48.
- Stenmarker M, Hallberg U, Palmérus K, Márky I. Being a messenger of life-threatening conditions: experiences of pediatric oncologists. *Pediatr Blood Cancer* 2010;55:478–84.
- 19. Fanos JH. "Coming through the fog, coming over the moors": the impact on pediatric oncologists of caring for seriously ill children. *J Cancer Educ* 2007;22:119–23.
- 20. Granek L, Barrera M, Scheinemann K, Bartels U. Pediatric oncologists' coping strategies for dealing with patient death. *J Psychosoc Oncol* 2016:34:39–59.
- 21. Mount BM. Dealing with our losses. J Clin Oncol 1986;4:1127-34.
- 22. Wolpin BM, Chabner BA, Lynch TJ Jr, Penson RT. Learning to cope: how far is too close? *Oncologist* 2005;10:449–56.
- 23. Penson RT, Dignan FL, Canellos GP, Picard CL, Lynch TJ. Burnout: caring for the caregivers. *Oncologist* 2000;5:425–34.
- Granek L, Tozer R, Mazzotta P, Ramjaun A, Krzyzanowska M. Nature and impact of grief over patient loss on oncologists' personal and professional lives. *Arch Intern Med* 2012;172:964–6.
- 25. Elit L, Trim K, Mand-Bains IH, Sussman J, Grunfeld E on behalf of the Society of Gynecologic Oncology Canada. Job satisfaction, stress, and burnout among Canadian gynecologic oncologists. *Gynecol Oncol* 2004;94:134–9.
- 26. Grunfeld E, Whelan TJ, Zitzelsberger L, Willan AR, Montesanto B, Evans WK. Cancer care workers in Ontario: prevalence of burnout, job stress and job satisfaction. *CMAJ* 2000;163:166–9.
- 27. Granek L, Krzyzanowska MK, Tozer R, Mazzotta P. Difficult patient loss and physician culture for oncologists grieving patient loss. *J Palliat Med* 2012;15:1254–60.
- 28. Granek L, Mazzotta P, Tozer R, Krzyzanowska MK. What do oncologists want? Suggestions from oncologists on how their institutions can support them in dealing with patient loss. *Support Care Cancer* 2012;20:2627–32.
- 29. Granek L, Ben-David M, Shapira S, Bar-Sela G, Ariad S. Grief symptoms and difficult patient loss for oncologists in response to patient death. *Psychooncology* 2016;: [Epub ahead of print].

- Maslach C, Jackson SE, Leiter MP, Schaufeli WB, Schwab RL. *Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists Press; 1986.
- 31. West CP, Dyrbye LN, Sloan JA, Shanafelt TD. Single item measures of emotional exhaustion and depersonalization are useful for assessing burnout in medical professionals. *J Gen Intern Med* 2009;24:1318–21.
- 32. West CP, Dyrbye LN, Satele DV, Sloan JA, Shanafelt TD. Concurrent validity of single-item measures of emotional exhaustion and depersonalization in burnout assessment. *J Gen Intern Med* 2012;27:1445–52.
- 33. Hamilton M. Development of a rating scale for primary depressive illness. *Br J Soc Clin Psychol* 1967;6:278–96.
- 34. Bagby RM, Ryder AG, Schuller DR, Marshall MB. The Hamilton Depression Rating Scale: has the gold standard become a lead weight? *Am J Psychiatry* 2004;161:2163–77.
- 35. Temel JS, Greer JA, Muzikansky A, *et al.* Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010;363:733–42.
- 36. Zimmermann C, Swami N, Krzyzanowska M, *et al.* Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. *Lancet* 2014;383:1721–30.
- 37. Groh G, Borasio GD, Nickolay C, Bender HU, von Lüttichau I, Führer M. Specialized pediatric palliative home care: a prospective evaluation. *J Palliat Med* 2013;16:1588–94.
- Feudtner C, Kang TI, Hexem KR, *et al.* Pediatric palliative care patients: a prospective multicenter cohort study. *Pediatrics* 2011;127:1094–101.
- 39. Gans D, Kominski GF, Roby DH, *et al*. Better outcomes, lower costs: palliative care program reduces stress, costs of care for children with life-threatening conditions. *Policy Brief UCLA Cent Health Policy Res* 2012;:1–8.
- 40. Dickens DS. Comparing pediatric deaths with and without hospice support. *Pediatr Blood Cancer* 2010;54:746–50.
- 41. Wolfe J, Hammel JF, Edwards KE, *et al.* Easing of suffering in children with cancer at the end of life: is care changing? *J Clin Oncol* 2008;26:1717–23.

- 42. Jones BL. Companionship, control, and compassion: a social work perspective on the needs of children with cancer and their families at the end of life. *J Palliat Med* 2006;9:774–88.
- 43. Kassam A, Skiadaresis J, Alexander S, Wolfe J. Differences in end-of-life communication for children with advanced cancer who were referred to a palliative care team. *Pediatr Blood Cancer* 2015;62:1409–13.
- 44. National Consensus Project for Quality Palliative Care. *Clinical Practice Guidelines for Quality Palliative Care.* 3rd ed. Pittsburgh, PA: National Consensus Project; 2013.
- 45. Keene EA, Hutton N, Hall B, Rushton C. Bereavement debriefing sessions: an intervention to support health care professionals in managing their grief after the death of a patient. *Pediatr Nurs* 2010;36:185–9.
- 46. Rushton CH, Sellers DE, Heller KS, Spring B, Dossey BM, Halifax J. Impact of a contemplative end-of-life training program: being with dying. *Palliat Support Care* 2009;7:405–14.
- 47. Fitch MI, Matyas Y, Robinette M. Caring for the caregivers: innovative program for oncology nurses. *Can Oncol Nurs J* 2006;16:110–15.
- 48. Serwint JR, Rutherford LE, Hutton N, Rowe PC, Barker S, Adamo G. "I learned that no death is routine": description of a death and bereavement seminar for pediatrics residents. *Acad Med* 2002;77:278–84.
- 49. Hinds PS, Puckett P, Donohoe M, *et al.* The impact of a grief workshop for pediatric oncology nurses on their grief and perceived stress. *J Pediatr Nurs* 1994;9:388–97.
- 50. Eagle S, Creel A, Alexandrov A. The effect of facilitated peer support sessions on burnout and grief management among health care providers in pediatric intensive care units: a pilot study. *J Palliat Med* 2012;15:1178–80.
- Rushton CH, Reder E, Hall B, Comello K, Sellers DE, Hutton N. Interdisciplinary interventions to improve pediatric palliative care and reduce health care professional suffering. J Palliat Med 2006;9:922–33.