

Oncologists' negative attitudes towards expressing emotion over patient death and burnout

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Abstract

Purpose The aims of this study were to examine the relationship between negative attitudes towards expressing emotion following patient death and burnout in oncologists and to explore oncologists' preferences for institutional interventions to deal with patient death.

Methods The participants included a convenience sample of 177 oncologists from Israel and Canada. Oncologists completed a questionnaire package that included a sociodemographic survey, a burnout measure, a survey assessing negative attitudes towards expressing emotion, and a survey assessing desired interventions to cope with patient death. To examine the association between burnout and negative attitudes while

controlling for the effect of sociodemographic variables, a hierarchical linear regression was computed.

Results Higher burnout scores were related to higher negative attitudes towards perceived expressed emotion (partial $r = .25$, $p < .01$) of those who viewed this affect as a weakness and as a sign of unprofessionalism. Approximately half of the oncologists found each of the five categories of institutional interventions (pedagogical strategies, emotional support, group/peer support, taking time off, and research and training) helpful in coping with patient death.

Conclusions Our findings suggest that high burnout scores are associated with negative attitudes towards expressing emotion and that there is a wide variation in oncologist preferences in coping with patient death. Institutions should promote interventions that are varied and that focus on the needs of oncologists in order to reduce burnout. Interventions that legitimize expression of emotion about patient death may be useful. Another way to reduce stigma would be to require oncologists to “opt out” rather than “opt in” to accessing a selection of social and/or individual interventions.

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Introduction

Over the last decade, there has been a growing interest in the emotional lives of healthcare professionals (HCPs), particularly as it relates to how HCPs respond to patient death [1–3]. In the oncology context, several studies have documented that oncologists feel grief when their patients die [4–10], that this grief can lead to burnout [9–11], and that they cope with this grief by compartmentalizing their emotions [12], by

developing a philosophy of life [13], by turning to social support, and by focusing on research [14–17].

On the whole, these coping strategies are ad hoc and are driven by the individual oncologists' needs and preferences to process the emotional challenges of their work [17]. With the growing recognition that patient death can potentially negatively affect oncologists' personal and professional lives, there have been institutional attempts to incorporate supportive interventions for oncology personnel. Some reports have proposed that physician support groups and forums to share experiences [18–21] might be helpful. Other research on healthcare professionals in oncology and in other fields has found that debriefing sessions [21–23], day-long retreat workshops [24–26], educational sessions on coping [27], and week-long residential programs [22] may also be effective.

These institutional interventions are promising in that they acknowledge that some oncologists struggle with the emotionally challenging aspects of their work including patient death. However, to date, few of these interventions have been empirically assessed, and those that have, have found limited effectiveness. From a subjective point of view, the HCPs who participated in these interventions reported that they were helpful [21, 24, 26], but the studies that used empirical outcomes including assessing burnout, perceived stress, and grief showed little, or almost no significant differences pre and post the interventions [20].

Given the evidence that oncologists feel grief when their patients die and that institutional interventions that attempt to help these oncologists deal with the emotional burden of their work often fail, or show no effectiveness, the question as to why these programs do not work is salient. Explanations for failed interventions often give methodological reasons for their lack of success (i.e., small sample sizes, inadequate representation of participants, and measures did not adequately capture the changes that happened as a result of the intervention). Another theory put forth by Granek and colleagues [17, 28] is that oncology remains a “macho” or gendered discipline, and as such, there is a stigma around expressing and showing emotions, in general, and vulnerability, in particular. This stigma may prevent oncologists from speaking openly and with ease when institutional interventions that involve sharing emotions over patient death are offered. In an in-depth qualitative study of Canadian oncologists, Granek found that “physician culture” in oncology included a stigma around death and dying and a stigma around expressing emotion that was considered to be a weakness. This organizational culture focused on cure, considered death to be a failure, and showed signs of a gendered culture that allowed female physicians to express emotions more freely and openly than male physicians [28]. For example, on why they would not talk to another

oncologist about their feelings of loss over patient death, one physician in this study remarked:

You don't want to be viewed as having weaknesses as a physician. The weakness is that you can't deal with patient loss, maybe you don't have the coping skills, or 'Why is it affecting this one person and nobody else is being affected or at least bringing it up?' And then, that person's perception of you may be altered so, oh this person's very sensitive, I'm really going to have to keep an eye on him (p. 3).

These qualitative studies were one of the few empirical examinations that uncovered the shame, embarrassment, and stigma around showing and expressing emotion in the oncology context. To date, however, few studies have quantitatively examined the relationship between negative attitudes towards expression of emotions in oncology and negative outcomes for the physicians' well-being and functioning including burnout. Burnout is described as having three main components including exhaustion, depersonalization, and inefficiency [29, 30]. The literature to date has reported that burnout in healthcare professionals can negatively affect patient care [31–34] and professionalism [35, 36] and is associated with poor quality of life for the healthcare professional. As such, in this study, we were interested in exploring the relationship between feelings of burnout among oncologists and negative attitudes towards expressing emotion following patient death. We expect to find a positive correlation between these two variables, such that higher feelings of burnout will be associated with higher negative attitudes towards expressing emotion following patient death. In addition, given that institutional interventions to help oncologists cope with patient death frequently show low effectiveness, we were interested in surveying oncologists about their preferences for institutional interventions that might help them deal with patient death.

Methods

Participants and procedure The participants included a convenience sample of 177 oncologists from Israel ($n = 27$ men and $n = 52$ women) and Canada ($n = 50$ men and $n = 48$ women). In line with best research practices, we used a culturally adapted recruitment strategy in each country [37]. The oncologist collaborator in each country advised us as to how to best be culturally appropriate and adapted to each group of oncologists we recruited. In Israel, oncologist collaborators recruited participants by sending an email to their departmental colleagues explaining the study that included information on the time commitment involved and a link to complete the study online and/or through face-to-face meetings at professional oncology meetings where we provided the option of

filling out the survey using a hard copy. There are approximately 170 practicing oncologists in Israel; therefore, the sample represents approximately 46% of the oncologists working in the country.

Canadian oncologists were recruited online only. Members of the Canadian Association for Medical Oncologists (CAMO) and of the Canadian Association for Radiation Oncology (CARO) were sent an email message by each of the associations from the principal investigator explaining the study and inviting them to participate in the research and complete the survey online. There are approximately 350 medical oncologists who receive the CAMO emails and 400 radiation oncologists on the CARO listserv. While it is not possible to ascertain the number of healthcare professionals who received, read, and/or opened these emails, if we take the most conservative approach possible and assume that all 750 healthcare professionals received, opened, and read the email, then 13% responded to the survey. Due to the different response rates, we compared Israeli responses and Canadian responses and found no statistically significant differences, thereby indicating that the recruitment method (or cultural variations between Israelis and Canadians) had no impact on the type and quality of data collected. The study was approved by the institutional research board prior to beginning the research. All surveys, whether using a hard copy or online, were anonymous and confidential.

Measures are as follows:

1. *Participant demographics*: A self-report questionnaire was used to collect demographics that included information on country, gender, age, marital status, past depression, stage of career, years of experience in oncology, mean number of patients seen each week, and mean number of patients who die in their care each month.
2. *Negative attitudes towards expressing emotion questionnaire*: The questionnaire was developed by the authors in order to assess oncologists' negative attitudes towards expressing emotion following the death of their cancer patients. Preliminary items for the survey were generated from three sources: a literature review to identify any broadly similar questionnaires already developed, expert opinion (i.e., clinicians/oncologists), and qualitative data from in-depth interviews that Granek previously conducted with adult oncologists [9, 10, 12, 17, 23, 28, 38].
After developing the finalized survey, cognitive interviews (CIs) with five Israeli and five Canadian oncologists were conducted [39]. Oncologists were asked to complete the survey in the presence of the research assistant and to use the "think aloud" technique to elucidate the cognitive processes involved in completing the survey. CI includes questions about the comprehension of the survey items, memory retrieval of relevant information, decision processes, and response processes. Surveys were edited as necessary based on the oncologist's CIs until the research team was satisfied with the finalized questionnaire.
The final questionnaire consisted of five items rated on a 5-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). (Appendix A). The final score is computed by summing all responses, with higher scores indicating higher negative attitudes towards expressing emotion over patient death. Internal reliability in the current study was good (Cronbach's α .88).
3. *Desired institutional interventions to cope with patient death questionnaire*: The questionnaire was developed by the authors in order to assess oncologists' preferences for institutional interventions for coping with patient death. The same procedure was followed for the *negative attitudes towards expressing emotion questionnaire* including culling preliminary survey items, conducting cognitive interviews, and team discussions to finalize the survey. The final questionnaire consisted of 14 items. Oncologists were asked to agree or disagree to whether the following items would help them cope with patient death. Items included interventions like "lectures about coping with patient death," "individual sessions with a psychologist or mental health professional," and "a supportive mentor." For the purposes of presenting the results in Table 4, we then grouped these items into five broad thematic categories of interventions that included pedagogical strategies, emotional support, group/peer support, time off, and research and training others.
4. *Single item of burnout (MBI-2)*: *Single item of burnout (BMI2)*: The Maslach Burnout Inventory (MBI) is considered the standard for the assessment of burnout. In this study, burnout was assessed using one single-item measures adapted from the full MBI: "I have become more indifferent towards patients since I started this work." This question specifically detects the depersonalization domain of burnout, which describes an unfeeling and impersonal response towards recipients of one's care or service [40]. We were interested in the unique experience of depersonalization because past studies have suggested that dissociative burden might be associated with oncologists' work. Moreover, while many studies have looked at the emotional exhaustion component of burnout, this aspect has received less attention in the literature.
Item responses are rated on a 7-point Likert scale, ranging from 0 ("never") to 6 ("every day"). This single item strongly correlates and performs well as a predictive factor to the relevant domain on the full MBI [41, 42].

Data analysis Analyses were performed using SPSS version 21.0. Bivariate correlations between independent and

dependent variables were calculated using Cramer's phi for categorical variables (i.e., country, gender, marital status, and past depression). Kendall's tau-bs were calculated for ordinal variables (i.e., age, stage of career, number of years in oncology, number of patients seen each week, and number of patient deaths each month) and Pearson's r for continuous variables (i.e., negative attitudes and MBI-2).

To examine the association between burnout and negative attitudes while controlling for the possible effect of sociodemographic variables, hierarchical linear regression analysis was used. Negative attitudes were entered as the dependent variable. Independent variables included demographic variables (country, gender, and past depression) in the first block and MBI-2 in the second block.

Results

Sample sociodemographic characteristics and clinical information

Sociodemographic characteristics and clinical information of the sample are presented in Table 1. The majority of participants were between 30 and 60 years old, were married, and did not suffer from depression in the past. The majority of the participants were specialists with more than 5 years of clinical experience and treated up to 40 patients each week.

The association between negative attitudes towards expressing emotion and burnout

The mean scores of the negative attitudes towards expression of emotion ($M = 8.53$, $SD = 3.5$) and burnout ($M = 1.43$, $SD = 1.6$) were in the lower range of the scales. Bivariate correlations between independent and dependent variables are presented in Table 2. There were significant small positive correlations between negative attitudes and burnout.

Hierarchical linear regression analysis was computed to examine the association between burnout and negative attitudes towards expressing emotion over patient death. The analysis revealed a significant effect, predicting 8% of the variance. As can be seen in Table 3, burnout was related to negative attitudes, such that higher burnout scores (partial $r = .25$, $p < .01$) were related to higher negative attitudes.

Upon completion of data collection and statistical analyses, we conducted a post hoc power analysis to examine the actual power of the current results, based on a sample size of 177 participants. We examined power for effect sizes recommended by Cohen [43]: small ($f = .08$, as was found in our current study) and large ($f = .40$). The alpha level used for this analysis was $p < .05$. The post hoc analyses revealed the statistical power for this study was .96 for detecting a small effect, whereas the power exceeded .99 for the detection of a large

Table 1 Participants' sociodemographic and clinical information ($N = 177$)

	% (N)
Country of residence	
Israel	44.6 (79)
Canada	55.4 (98)
Gender	
Female	56.6 (100)
Male	43.5 (77)
Age (years)	
20–30	3.4 (6)
31–40	35 (62)
41–50	31.1 (55)
51–60	19.2 (34)
61 and above	11.3 (20)
Marital status ^a	
Single	7.4 (13)
Married	85.1 (149)
Widowed	1.1 (2)
Divorced	1.1 (2)
Separated	1.1 (2)
Living with partner	4 (7)
Past clinical depression	
Yes	15.3 (27)
No	84.7 (150)
Career stage ^a	
Resident	14.2 (25)
Specialist	85.8 (151)
Number of years in oncology practice (years) ^a	
Less than 5	21.6 (38)
5–10	24.4 (43)
11–15	15.3 (27)
More than 15	38.6 (68)
Number of patient deaths per month	
0–2	51.4 (91)
3 and above	48.6 (86)
Number of patients treated per week	
0–40	62.1 (110)
More than 40	37.9 (67)

^a The total number of participants is lower than the sample size (177) due to missing responses to these questions

effect size. Thus, there was more than adequate power at the small effect size level.

Oncologists suggestions on what can help in coping with patient death

Table 4 presents the five categories of institutional interventions that oncologists marked as favorable in helping them cope with patient death (Table 4). Approximately

Table 2 Bivariate correlations between independent and dependent variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1 Country	–	–.17*	.2	.29*	–.03	.32***	.13	–.19*	.14	.32	.16
2 Gender		–	.27*	.17	.00	–.06	.14	.12	–.04	.33	.18
3 Age			–	.37	.14	.4**	.77**	.16*	–.09	–.04	–.21**
4 Marital status				–	.1	.29*	.3	.1	.15	.47	.27
5 Past depression					–	–.08	.17	.04	–.06	.33	.23
6 Career stage						–	.48**	.15	–.13	–.03	–.13
7 Number of years in practice							–	.16*	–.14*	–.03	–.15*
8 Number of patients treated weekly								–	.1	.03	.09
9 Number of patient deaths per month									–	–.04	.07
10 Negative attitudes toward expressing affect										–	.26**
11 Burnout											–

For gender, male = 0 and female = 1. For country, Israel = 0 and Canada = 1. For past depression, yes = 0 and no = 1. Cramer's phi was calculated for country, gender, marital status, and past depression. Kendall's tau-bs were calculated for age, stage of career, number of years in oncology, number of patients seen each week, and number of dying patients each month. Negative attitudes towards expressing affect and burnout represent Pearson's r
 $*p < .05$; $**p < .01$; $***p < .001$

half of the participants preferred pedagogical strategies including lectures about coping with patient death (50%), interactive seminars about coping with patient death (63%), training on how to cope with patient death during residency or fellowship (80%), and fact sheets on coping with patient death (38%). The emotional support category included validating emotions such as grief over patient death as part of the work of oncology (86%) and individual sessions with a psychologist or mental health professional (45%). Group/peer support included online forums to share experiences with other oncologists (36%), in-person forums to share experiences over patient death with other healthcare professionals (52%), a supportive mentor (67%), and group debriefing sessions over patients who have died (53%). The time off category included vacations (83%) and sabbaticals (68%). Finally, research and training included focusing on research (58%) and teaching students (62%).

Table 3 Hierarchical linear regression examining predictors of negative attitudes towards expressing affect over patient loss ($N = 177$)

Model	B	$SE B$	β	Partial r
Step 1				
Country	–.06	.53	–.01	–.01
Gender	.26	.53	.04	.04
Past depression	–1.13	.73	–.12	–.12
Step 2				
Burnout	.56	.16	.25	.25**

$R^2 = .08$, $F(4,172) = 3.65$, $p < .01$

$*p < .05$; $**p < .01$

Discussion

This study examined the relationships between oncologists' negative attitudes towards expression of emotion over patient death and burnout. We found that the more burnout the oncologists reported, the more they perceived expressed emotion as a weakness and as a sign of unprofessionalism. We were also interested in exploring what institutional interventions oncologists might desire in helping them cope with patient death. Interestingly, we found that among our sample, the suggestions varied tremendously about what oncologists' perceived might be useful to them. These findings have important implications for the types of interventions offered to oncologists in helping them cope with the emotional burdens of their work.

First, our findings point to a problematic paradox. On the one hand, more burnout was associated with negative attitudes towards expressing emotion over patient death. Although we cannot ascertain a causal link between the variables, these results suggest a cycle in which emotional compartmentalization in coping with patient death and burnout may be associated with poor oncologist's well-being and functioning which, in turn, feeds into more burnout. Future longitudinal studies can examine the nature of the association between these variables. One intervention might be to increase the number of group or peer support interventions in order to allow for emotional processing, reducing the social stigma around sharing emotions. Eighty-six percent of the sample indicated that they would find "validating emotions such as grief over patient loss as part of the work of oncology" helpful, while more than 50% responded that they would find in-person forums to share experiences over patient loss with other healthcare professionals and group debriefing sessions over patients who have

Table 4 Oncologists' suggestions on what can help in coping with patient death ($N = 177$)

Category	Suggestion	% (N)
Pedagogical strategies	Lectures about coping with patient death	50.3 (89)
	Interactive seminars about coping with patient death	62.9 (110)
	Training on how to cope with patient death during residency or fellowship	80.1 (141)
	Fact sheets on coping with patient death	38.4 (68)
Emotional support	Validating emotions such as grief over patient loss as part of the work of oncology	85.9 (152)
	Individual sessions with a psychologist or mental health professional	44.6 (79)
Group/peer support	Online forums to share experiences over patient loss with other oncologists	35.6 (63)
	In-person forums to share experiences over patient loss with other healthcare professionals (i.e., nurses and social workers)	52 (92)
	A supportive mentor	67.2 (119)
	Group debriefing sessions over patients who have died	53.1 (94)
Time off	Vacations	83.1 (147)
	Sabbaticals	68.2 (120)
Research and training others	Research	57.6 (102)
	Teaching students	62.1 (110)

died useful if offered to them. By providing and encouraging more opportunities to share emotions over patient death in the workplace, it may become a more commonplace and accepted practice among oncologists. On the other hand, oncologists who perceive expressing emotion negatively are unlikely to take part in group settings that encourage healthcare professionals to share their emotions. This may be one explanation as to why many of the institutional interventions to date have reported that some healthcare professionals find them useful, but they do not significantly improve outcomes when looking at the group as a whole.

The second finding presented in the institutional interventions that oncologists may find useful in coping with patient death corroborates our first finding. There is an extremely wide variation in what oncologists report they would find helpful in coping with patient death, and institutional interventions must take this into account when designing their programs. Our data about the intervention preferences also highlights another interesting facet of the first finding about negative attitudes towards expressing emotion over patient death. The only interventions that hovered above the 80% mark included “training on how to cope with patient death during residency or fellowship” (80%), “validating emotions such as grief over patient loss as part of the work of oncology” (86%), and “vacations” (83%). Thus, the vast majority of oncologists indicate that they would want more training at an earlier stage of their career about how to cope with patient death, more acknowledgement, and validation that negative emotions such as grief over patient death are a normal and acceptable part of the work, and more time off.

Aside from Granek's qualitative study on physician culture in the practice of oncology cited in the Introduction [28], to our knowledge, this is the first study

to examine oncologist's negative attitudes towards expression of emotion over patient death and its relationship to burnout. In line with our study findings, in the case of oncologists coping with patient death, institutional interventions should be varied in approach and give oncologists a wide range of both social and individual (and private) activities to participate that can help them cope with the emotional burdens of their work. We further suggest that oncologists should be asked to “opt out” of choosing from one of these options, rather than electing to “opt in.” For example, an institution might offer a number of interventions that could include, but are not limited to, one-on-one debriefing sessions with a mental health professional, a mentor support program with a supportive senior physician, group debriefing sessions with other oncologists lead by a professional moderator, half- or full-day retreats on coping with patient death, an opportunity to have some time off of clinical practice to teach students, etc., and ask oncologists to actively choose one that suits their needs and/or if they desire to opt out of all of the options. One way to reduce stigma in seeking help for emotional distress is by supporting the standard, and allowing oncologists to opt out if they feel they do not need the support. This approach will ensure that no one is required to ask for help and will legitimize, from an institutional perspective, that accessing support for emotional distress is a regular, normal, expected, and accepted part of the work. Another strategy might involve strong leadership where, for example, the department chair participates her/himself in some of these interventions and encourages others to do the same. Setting a strong example in the department may be an effective way in reducing stigma around seeking support for emotional distress associated with caring

for patients throughout the treatment trajectory and at the end of life.

Limitations Our study has limitations. Potential selection bias may have occurred due to the study sampling method. Those who responded to the survey may be more interested in, or affected by, issues such as burnout and patient death compared to their counterparts who chose not to respond. Moreover, while we compared the Israeli data to the Canadian data and found no statistically significant differences in the type and quality of the data collected, the Canadian response rate was lower (13%) than the Israeli response rate (46%). Second, the survey included self-report measures that may be subjected to social desirability bias. Third, although the decision to use a single item from the MBI was supported by previous studies [41, 42], it may have contributed to the wide range of the standard deviation observed in sample. Therefore, further studies should consider using the full scale of the burnout questionnaire. Fourth, while both the surveys measuring oncologist negative attitudes and desired interventions to cope with patient death were constructed using recommended methodological processes for best practices in survey design, further research might consider psychometric validation of the surveys. Lastly, our study is cross sectional, and thus, causality cannot be inferred.

Conclusions Given that high burnout scores were associated with negative attitudes towards expressing emotion and given that there is an extremely wide variation in oncologist preferences in coping with patient death, institutional interventions that are varied and focus on the needs of oncologists are required in order to reduce burnout in these physicians. Reducing burnout in oncologists is essential to healthcare professional, patient, and caregiver well-being. Interventions that legitimize, acknowledge, and validate expression of emotion about patient death can be especially useful.

Compliance with ethical standards

Conflict of interest The authors declare that they have no competing interests.

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