Supportive Care in Cancer (2019) 27:4723–4732
https://doi.org/10.1007/s00520-019-04789-y

ORIGINAL ARTICLE

Oncology healthcare professionals' perceptions, explanatory models, and moral views on suicidality

Leeat Granek[1] · Ora Nakash[2,3] · Samuel Ariad[4] · Shahar Shapira[5] · Merav Ben-David[6,7]

Received: 11 December 2018 / Accepted: 28 March 2019 / Published online: 10 April 2019

Abstract

Purpose To explore how oncologists, oncology nurses, and oncology social workers perceive suicidality (suicidal ideation, suicidal acts, and completed suicides) in patients with cancer that they are in contact with.

Methods The grounded theory method of data collection and analysis was used. Sixty-one oncology healthcare professionals from two university-affiliated cancer centers in Israel were interviewed.

Results The findings resulted in three main categories that included perceptions of suicidality, explanatory models of suicidality, and moral views on suicide. Healthcare professionals considered suicidality in their patients to be a cry for help, a sign of distress, or an attempt at attention seeking. Participants explained suicidality as stemming from a biological disease, from mental illness, as an aberration, or as an impulsive, irrational act. Moral views on suicidality were split among those who were mostly accepting of these patients' actions versus those who rejected it outright. A third group of healthcare professionals expressed ambivalence about suicidality in their patients.

Conclusions Healthcare professionals vary greatly in their perceptions on suicide. Some view the act as part of a patient's choice and autonomy while others view it negatively. Healthcare providers should receive support in handling patient's suicidality.

Keywords Cancer · Oncology · Suicide · Oncologists · Nurses · Social workers

It has been well documented that people with cancer are at increased risk for suicidal ideation [1], suicidal attempts [2], and suicidal acts [3, 4]. These findings have been documented across several countries, in which persons with cancer exhibited increased risk of suicide when compared with the general population [5–8]. While suicidality (i.e., suicidal ideation, suicidal attempts, and suicidal acts) in cancer patients are common, little is known about how healthcare providers (HCPs) working with these patients perceive them. The majority of research in this area has examined nurses in emergency rooms and/or in psychiatric units looking at how they perceive patients who attempted suicide [9–12]. Some of these studies have concluded that nurses mostly hold an empathic attitude toward patients who attempted suicide [13–15], while others have found that nurses hold negative views of these patients [12, 16, 17]. A few studies have also examined how nurses' attitudes may affect the care that patients with suicidal ideation and attempts receive. For example, some studies have found that nurses with moral objections to suicide may blame the patient [17] and are less likely to show empathy or to communicate well [18].

Within the cancer context specifically, few studies have explored HCPs' perceptions of suicidal behavior in their patients. The only study published to date looked at clinical psychologists, psychiatrists, and oncologists and found that oncologists were the least accepting of suicidal responses in their patients among the three groups [19]. Another study that

✉ Leeat Granek
Leeatg@gmail.com

1 Department of Public Health, Faculty of Health Sciences, Ben-Gurion University of the Negev, PO Box, 653, 84105 Beer Sheva, Israel

2 School for Social Work, Smith College, Northampton, MA, USA

3 Baruch Ivcher School of Psychology, Interdisciplinary Center, Herzilya, Israel

4 Department of Oncology, Soroka University Medical Center, Ben-Gurion University of the Negev, Beer Sheva, Israel

5 Gender Studies Program, Ben-Gurion University of the Negev, Beer Sheva, Israel

6 Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

7 Radiation Oncology, Sheba Medical Center, Ramat-Gan, Israel

looked at 300 general practitioners, psychiatrists, and internists found that these physicians held empathic views toward people who had attempted suicide, particularly among those with an incurable illness [20]. However, another study that looked at 206 doctors found the opposite effect: the physicians tended to hold mostly unfavorable attitudes toward people who attempted suicide [21]. Aside from this research, the majority of the available literature has explored physicians' (including oncologists) attitudes toward euthanasia and physician-assisted suicide and found that, across the globe, there is wide variation in support of these practices [22–26].

The lack of research on oncology HCPs' perceptions of suicidality is concerning. Oncology is not comparable to other medical fields such as emergency or psychiatric medicine. Cancer patients present with a range of diagnoses, from having a good prognosis with a high likelihood of survival to having advanced cancer, with a low probability of cure. Suicidality in this context becomes complex and context specific. In another study out of the current project, we presented a conceptual model of suicidality in the cancer context with an active will to live on one end of the pole to an active will to die on the other end of the spectrum that includes patients who desired euthanasia and/or who took their own lives. The middle of this spectrum included a decreasing will to live sliding into a readiness to die. Patients appeared to fluctuate along different points on this spectrum depending on a host of factors, including the degree of their mental and physical suffering [27]. The presence of this spectrum suggests that suicidality in the cancer context may be more dimensional than categorical and raises unique questions about how HCPs perceive suicidality within the oncology setting.

To our knowledge, no research to date has looked at oncology HCPs' perceptions on suicidality in their cancer patients. This is a concerning gap in the research literature given that cancer patients are at an increased risk of suicidality and that there is evidence that these attitudes can affect the kind of care that patients receive [17, 18]. As such, this study, which was part of a larger project looking at how oncology HCPs identify suicide risk and mental health distress in their cancer patients [27–30], explored how oncologists, oncology nurses, and social workers perceive suicidality in their patients.

Methods

Study design and participants The grounded theory method of data collection and analysis was used in this research [31]. Given that qualitative research aims to investigate the underlying aspects of behavior and is concerned with the richness rather than the representativeness of data, it requires smaller, focused samples instead of large, random samples. A purposeful sample of 61 oncology HCPs from two university-affiliated cancer centers in Israel were recruited and interviewed. The sample included 23 oncologists, 18 social workers, and 20 nurses who work with cancer patients and their families. Participant demographics are presented in Table 1. Eligibility criteria included being an oncologist, a nurse, or a social worker who worked full time with cancer patients and who are responsible for assessing mental health distress in patients and referring them to psychosocial care when needed.

Procedure Approvals were obtained from the Research Ethics Board prior to launching the study (IRB numbers 2105-13 and 2345-15). Potential participants at two cancer centers were emailed information about the study by the co-investigators

Table 1 Participant demographics

Oncologists ($N = 23$), social workers ($N = 18$), and nurses ($N = 20$)	
Characteristic	($N = 61$)
Gender % (N)	
Male	14.8 (9)
Female	85.2 (52)
Age[i] mean (SD)	45.7 (10.8)
Family status % (N)	
Married	78.7 (48)
Single	11.5 (7)
Divorced, separated or widow	9.8 (6)
Years in practice % (N)	
Less than 5 years	21.3 (13)
5–15 years	34.4 (21)
More than 15 years	44.3 (27)
Oncology unit[ii] % (N)	
Clinics[iii]	45.9 (28)
Day hospital	32.8 (20)
Ward or hospice	32.8 (20)
Radiation	18 (11)
Palliative care	9.8 (6)
Oncology ER	4.9 (3)
Caregivers clinic or psycho-oncology unit	4.9 (3)
Religious background % (N)	
Secular Jewish	59 (36)
Religious Jewish	21 (13)
Traditional Jewish	11.4 (7)
Other	8.1 (5)
No. of patients seen per week % (N)	
5–15	9.8 (6)
16–25	29.5 (18)
26–40	19.7 (12)
More than 40	40.9 (25)

[i] Only 50 participants answered

[ii] Some HCPs work in more than one place

[iii] Breast, gastro, neuro-oncology, hemato-oncology, ortho, skin cancer, head-neck, GI, and oncology service for the eye

and asked to respond if they wished to be contacted about the research. Due to the small number of social workers at each study site, four additional social workers were recruited from different cancer centers. Sixty-one HCPs responded and none declined to be interviewed after hearing more about the research. Participants signed a consent form and agreed to the interview being audio recorded. A semi-structured interview guide was used, and interviews were recorded and transcribed, with all identifiable information removed from the transcripts. Questions were broad and open-ended and pertained to the HCPs' personal perceptions about suicide. (i.e., "Can you tell me about your views on suicide in general? "Can you tell me how you perceive patients who attempt suicide or show suicidal ideation?"). The questions were focused on patients who had taken their own lives, and patients who endorsed suicidal ideation or suicidal attempts. No questions were asked about euthanasia or about physician-assisted dying. This interview guide was developed by the research team that included psychologists, oncologists, and social workers who work with cancer patients and was based on their clinical and research expertise and on an extensive literature review on suicide risk. The first five interviews were conducted together by the study PI, and a trained research assistant who has experience with clinical interviews and with qualitative methods. The remainder of the interviews were conducted by the research assistant at all study sites. Interviews were conducted in the language the participant spoke (Hebrew or English) and recorded and transcribed, with all identifiable information removed from the transcripts. Data collection took place between November 2015 and June 2016. Interviews took place face-to-face in the location the participant chose, usually, in the hospital in which they worked.

Data analysis Data collection and analysis took place concurrently. The study PI and a research assistant separately coded the first five transcripts, followed by team discussions on the developing coding scheme to ensure consistency between coders and validity of the emerging findings. Analysis was inductive with codes and categories emerging from participants' narratives and not from preconceived codes or categories. Constant comparison was used to examine relationships within and across codes and categories. Throughout the process of data collection and analysis, the study team met frequently to discuss emerging findings and to ensure consistency in the emerging coding scheme. We employed a constructivist inquiry that consistently focuses on the data and the possibilities for meaning that can be constructed from them. Data collection stopped when the team determined that we had reached saturation and that no new codes were created. NVivo 10 computer software was used to store and organize the data.

Findings

HCP's perceptions of suicidal ideation

When asked to talk about patients who expressed suicidal ideation, HCPs reported that these patients were crying out for help, were attention seeking, and/or were expressing distress. Each of these themes is described in more detail below.

Crying out for help HCPs perceived suicidal ideation in patients as a cry for help rather than a genuine desire to take their own lives. On this, one nurse remarked,

> A person who wants to die by suicide does not announce it, but they go and do it. They do not want to be stopped. A person who keeps announcing and saying it is someone who is crying for help (N3).

Attention seeking/acting out Other HCPs perceived suicidal ideation in patients as a strategy to seek attention or to act out. For example, one oncologist reported,

> I received a phone call from the ER that she tried to kill herself, swallowed pills. I came to see her at the internal ward. She said, "Now you understand I have to be seen first?!" With her it was more of a demonstrative thing, or a hysterical thing. It was done in the style of these girls who do it to draw attention, so we would understand she must receive special treatment (O9).

Expression of distress Finally, HCPs perceived suicidal ideation to be a reflection of the patient's emotional distress rather than a desire to end their lives. On this one social worker said,

> When a patient says to the staff: "I'll shoot myself in the head", it is a very problematic situation. It could be his way of expressing his frustration. It doesn't necessarily mean that he'll really do it (SW3).

HCP's explanatory models of suicide

HCPs spontaneously offered several explanatory models about suicide, describing it as a biological disease, a mental illness, an aberration, and/or an impulsive act. Each of these themes is described in more detail below.

Biological disease HCPs described suicide as a biological disorder caused by faulty brain chemistry. One nurse remarked, "It's influenced by biochemical processes in the brain" (N9).

Mental illness Others reflected that suicidality is caused by mental illness or may be a byproduct of a mood disorder. They described people in this state as reaching a place of helplessness and darkness that led them to want to end their lives.

Aberration HCPs also explained that suicidality was an aberration that was highly irregular. Suicide was described as a "stupid act" (O21), as "unnatural" (N19), as "unhealthy" (N9), as "irrational" (SW4), as "psychotic" (SW10), and as "non-normative" (SW7).

An impulsive act Finally, HCPs also offered an explanation that suicidal behaviors are an impulsive act. As one social worker explained, "It's very clear to me that it's a momentary decision" (SW4).

HCP's moral views about suicide

Moral views about suicidality fell into three categories. HCPs in the first category had an accepting attitude toward suicidality. HCPs in this category provided different reasoning to their moral stance including perceiving suicidal behaviors to be a personal choice and an individual right, a sign of strength and courage, and a reasonable choice in the context of end of life. Some providers in this category expressed empathy toward their suicidal patient and could identify with the reasoning behind the decision to take one's life. In the second category, HCPs expressed rejecting views toward suicidality perceiving it to be wrong, and/or a sign of weakness, as a social and environmental failure, and/or as incomprehensible. In the third category, HCPs expressed ambivalence toward suicidality holding neither an accepting nor rejecting attitude. Each of these themes is described in more detail below and additional supporting quotations are provided in Table 2.

Accepting views of suicidality

Individual right/personal choice Some HCPs considered suicidality to be an individual right and a personal choice. HCPs noted that they could not judge another person's suffering or what they were going through, and, thus, had no right to judge the decision to take their life. This moral stance is particularly pertinent in the context of oncology where HCPs often accompanied patients through long and distressing end of life trajectories leading them to believe that patients should have the right to choose to end their life despite the fact that euthanasia is not legal in Israel. Although HCPs did not explicitly share their views with their patients, some privately held the belief that suicide was the patient's choice. One social worker remarked,

> I believe that just as every person has the right over their body, so does every person have the right over their life. …in my work I can't express my personal attitude. I represent the system and the profession. But as a private person, I believe every person has the right to take their own lives (SW7).

Courageous/sign of strength Some HCPs perceived those who die by suicide as being brave, courageous, and strong describing those who were weak and sentimental as being unable to take their own lives. One nurse understood suicidality in the context of a terminal illness to be a heroic act. They remarked, "If [the suicide] is done out of a choice, with a rationale behind it, then they're heroes."

Reasonable in the context of end of life While this study probed specifically about suicidality and not about euthanasia or about physician-assisted dying, HCPs appeared to talk about both, indicating that, for them, it was difficult to draw clear lines between these domains. Euthanasia and physician-assisted dying is not legal in Israel, and there are strong cultural, religious, and moral taboos against all forms of suicide [32]. As eluded to in previous themes, some HCPs perceived suicide spectrum behaviors to be reasonable when patients were suffering and if patients were at end of life. In a North American context, this might be termed a "rational suicide" [33], but these terms are not used or accepted in Israel. As such, due to the fact that there is no legal and culturally acceptable option for euthanasia in Israel, HCPs struggled with defining and delineating what constitutes suicidal ideation and suicidal behavior in their patients. Many HCPs in this category openly questioned whether a suffering patient at end of life could be defined as suicidal, when, in their view, ending their lives seemed reasonable in the context of their health. One oncologist explained,

> I had cases of very terminal patients, who wanted to end their life. I don't even know if to define it as 'suicidal thinking', because a dying patient who doesn't want to suffer any more, I think it's understandable that they want to finish with the suffering (O14).

Empathy/identification This theme included HCPs who described having empathy and being able to identify with patient's wishes to end their lives. This empathy led them to be

Table 2 Oncology healthcare professionals' moral views on suicide

Category	Theme	Sub-theme	Quotation
Moral views on suicide	Accepting	Individual right/choice	Suicidal people are probably people who suffer greatly, and want to end the suffering. And suffering is subjective. We should try and identify, because we do have the means to help and to improve these people's condition and prevent the suicide. But in the end, bottom line, everyone is their own master. I cannot judge people and understand what they are going through, or what they have gone through in their life, so much that they decide to do this. So I do not even call it 'suicidality'. I say: it's adequate to the situation, but I cannot go into the head of a person who has gone through some trauma or something terrible, and consider their experience as less suffering than cancer patients. From my side, I see things that can be improved, but actually, we do not know (O14).
			--
			It's not for me to decide what's sin and what's not sin. I do not judge suicidal people. Judging them would be the last thing I will do (N1).
			--
			It's not mine. They killed themselves. The decision was theirs. I very much believe we must respect our patients' wishes, even when they want to take their own lives by suicide. The taboo on the issue of suicide is not justified in my view. In terms of the law, we, of course, will not allow it and will not assist it, but the attitude of the staff members is to reject and not to contain this will to die by suicide, when actually taking your own life is to die on your own terms, whenever you choose, how you choose. I believe that just as every person has the right over their body, so does every person has the right over their life (SW7).
		Courageous/sign of strength	Basically, it's a decision done by a brave person. To end your own life, you need to have courage. There are people who do it cool headedly because they know what will happen to them, and they are not ready to go through such an experience (O13).
			--
			I think that to die by suicide is an act of strength. It could be that, in fact, these people who take the pills and die by suicide, or do some other act, are the stronger people, not the weaker ones (O6).
			--
			To do something concrete one must have a lot of daring and courage. Most people do not have these (SW10).
		Reasonable in end of life context	I have patients, who said they feel like their quality of life is greatly deteriorating, and it's going to deteriorate more, and they would like to finish their own life before it's becoming insufferable. One can call it suicidal ideation, and one can say it's not. Because you can say they have reached the end of their respectable life, and they now wish to end it. I think every person should have the option to choose the time of their death, on their own terms, according to their situation in life. This is in the context of illness, not just in oncology, but in any incurable disease. That is, they can choose whether to live with their illness, or not to live with it (O2).
			--
			I may be in favor of people's possibility to end their life with dignity if they choose to. I am talking about when a person is terminally ill and suffering. Such a person does not have to beg for sedation, or travel to the Netherlands for sedation. They have the right to decide that that's it, they are done with life (N18).
			--
			It's mostly very sad with young people or with people who got into some crisis. But if people reach a situation of illness and suffering, then I can also understand this option and this choice. I do not think it's that terrible if a person decides to end their life when they suffer a lot, especially if they are going to die soon and they do not want to lose their humanity and lucidity (SW6).
		Empathy/identification	Theoretically, I can understand the complexity of life. With everything I encountered so far, I can understand that people sometimes lose their ability to continue onward. Certainly, when there's a genuine threat over their life and these are most of the people I see. I would want the same thing. I would not want to suffer just for the purpose of suffering. I cannot see any divine or religious justification for it. Just as I try to relieve the suffering of tens, hundreds, and thousands of people, I also hope I will not suffer pointlessly. I am willing to suffer when I see the light in the end of the tunnel, but if there is no light then – I got the idea, thank you very much (N8).
			--
			I felt great difficulty with myself at crossroads in my life, so I can understand why people reach a dead end, where you feel like nothing can help, and you just prefer to evaporate (SW4).
	Rejecting	It is "wrong"	

Table 2 (continued)

Category	Theme	Sub-theme	Quotation
			I do not think it's right. Both in terms of religion it's not right, and it's not right way of life-wise. That is, life is a path one must pass. Every patient must have their own path. It happened to them. One must take the path (O16).
			--
			I am against suicidality. The 'against' is due to religion. In Islam, as in Judaism, there's a prohibition on suicide, because we received our life from god, and god is the one to decide when it will end (SW8).
			--
			I work in saving lives. Suicide completely opposes my worldview. Suicide is something sharp, with which those who are left behind need to live. It's very difficult, violent and aggressive. I got to talk to many people who their parents died by suicide. It's always traumatic. There's always this feeling of where did you fail, what happened (N10).
			--
			Can I tell you I accept someone who decided to end their life, and not to fight over it? No. Because for me, the value of life is paramount. It may even sound unusual, but I do not even think a person has a right to take their own life (SW10).
		Weakness/cowardice	If we'll use drastic words – I think suicide is cowardice, or defeatism, or something like that. It may be really, in quotation marks, 'weakness of character' of a person trying to die by suicide. Just like there's weakness of the body when a person cannot run five kilometers, or lift weights, so too there may be a person who is weak in character, or in the soul or in the spirit or whatever you call it. They cannot lift the weight of the bad news, or of the distress or the difficulty, and other people can (O6).
			--
			Suicidality is running away from reality. It's not a good thing. It's weakness. Suicidal people are too weak. They give up quickly (O20).
			--
			I think suicidality is cowardice. You do not face your difficulties, and you do not try to improve your situation and get out of it (N2).
		A societal/-environmental failure	I think that if a person has reached this condition and succeeded to take their own life – it's a failure. There's something in the system of family or friends that wasn't good. Suicidal people give warning signs. You can tell when someone is depressed. So, if really something like this happens it's a failure of the person's milieu and of whoever identified and did not help (O12).
			--
			Suicide is sad. Sometimes it can be out of a moment of distress that as the person's milieu and as a society we should try to detect, prevent and stop it (N12).
			--
			I think suicide in cancer patients is needless. In my view, it's a failure of medicine and physicians if cancer patients die by suicide. Because it is possible to help them in such a way, that they will not actively suffer. Not to do euthanasia, but to treat (O8).
		Incomprehensible	A person who is reaching this level of distress that they are trying to end their own life? I cannot understand it. It must be way more than I can understand. I probably have not experienced such a distress in my life to cause me suicidality (O6).
			--
			It's very difficult to think about what led the person to do it. It has to be a great distress, because I, personally, without getting into details, have had very difficult times in my life. But to reach a state of suicidality is incomprehensible. It seems inconceivable, to take your own life (N16).
			--
			It seems like something terribly scary to me. You have to be in great despair to get to these suicidal situations. That is, I can understand how you can reach these situations, but still I cannot understand the act (SW5).
	Ambivalence		After a patient's suicide you are remembered of that person, and you think what was preventable, or maybe something had to be done differently. And you have all these thoughts about to which degree this way of ending your own life is repugnant, and to which degree it is not (O9).
			--
			I have not formed my attitude toward suicidality yet. [Silence]. We are raised to think that if my patient died by suicide, then it's a great failure on your end, because you have not succeeded, right? Some message did not get through. But really, this particular disease I treat leads people to such harsh and unreasonable situations. [For example, for one patient there was

Table 2 (continued)

Category	Theme	Sub-theme	Quotation
			nothing good, no insight out of the cancer, just suffering and more suffering that inevitably ended in death. If a woman like that would have taken her own life a month earlier before God had, could we say there is some great failure here? You see, it's a very complicated question. I do not know (O3).
			--
			When someone says something suicidal, it could be that they do not entirely mean it. And it could be that if I'd help them to get out of this condition, I'd act in their favor. In such a situation I need to assume that maybe this person is just in a moment of distress and I should help them out of it. Then, if I do not help them, it's not all right. But it's an open question: when do you identify that this person is in distress and you want to help them, and when you identify that this is a person with definite and formulated opinion, not in distress, not in anxiety, and when you need to give them the right to define themselves and you do not have any right to intervene in this matter (O1).

morally accepting of people's right to take their own lives. As one social worker noted,

> The idea of having suicidal thoughts is not strange to me. Sometimes I don't feel like waking up in the morning. Like, the ultimate escape is to not continue to be here. Everybody has a death wish, I think, when life pressures us (SW15).

Rejecting views of suicidality

"**It's wrong**" In contrast to the HCPs that perceived suicidality as a personal choice and an individual right, some HCPs considered the act of taking one's own life to be morally wrong. Explanations for this view included religious dictates that prohibited suicide and because taking one's own life would mean neglecting ones' family and obligations. Other explanations for this rejection of suicide included thinking about it as a violent, aggressive, and selfish act that individuals did not have the right to engage in. One oncologist explained, It's not good that a person takes control in their own hands. There is higher power, there is a path, a trajectory we must pass. To die by suicide is a very aggressive move, a very unnatural move (O9).

Weakness/cowardice As opposed to viewing suicidality as a sign of strength and courage as in the previous theme, some HCPs felt the opposite was true: that taking one's life was a sign of weakness and cowardice. These HCPs thought that suicide spectrum behaviors were a way to run away from reality or being too weak to deal with life's hardships in a courageous way. As one oncologist explained, "Suicide is running away from reality. It's not a good thing. It's weakness" (O20).

A societal/environmental failure Another subset of HCPs perceived suicidality to be a failure of the patient's family, of society, and of the healthcare team to notice the signs of distress in the patient. These HCPs felt that suicide is preventable and that it was the role of those in the patient's life to notice the signs. As one oncologist remarked:

> I think that if a person has reached this condition and succeeded in taking their own life– it's a failure. There's something in the system of family or friends that wasn't good. [Suicidal] people give warning signs. It's a failure of the person's milieu (O12).

Incomprehensible Finally, in contrast to HCPs who could both empathize and identify with patients who wanted to take their own life, the HCPs in this category considered all suicide spectrum behaviors to be incomprehensible and beyond understanding. One nurse reported: "It's beyond understanding to be in such severe distress in which one can think about doing it. It's very extreme. No one can understand that" (N20).

Ambivalent views about suicidality

In the last theme under this category, HCPs expressed ambivalence about suicidality in their patients. On the one hand, HCPs are committed to prolonging life and hold an ethical obligation to protect patients. On the other hand, these same HCPs were also witnesses to a great deal of suffering, particularly at end of life, and could see the rationale in a patient wanting to end their life. In this sense, HCPs were grappling with the possibility of rethinking what is currently perceived to be suicide in the Israeli context, to what is perceived in other nations to be euthanasia. While the other two subsets of HCPs represented two sides of this argument, the last group oscillated back and forth on their views on this. On this, one oncologist reflected,

> I haven't formed my attitude toward suicidality yet. We are raised to think that if my patient kills themselves, then it's a great failure on your end, because you haven't succeeded, right? But really, this particular disease I treat leads people to such harsh and unreasonable situations. For example, for one patient there was nothing good, no insight out of the cancer, just suffering and more suffering that inevitably ended in death. You see, it's a very complicated question. I don't know (O3).

This ambivalence was also alluded to in other themes where HCPs either expressed a positive or negative moral stance toward suicide. HCPs reflected about dignity and respecting patient's wishes, while also pointing out that suicide is preventable and could leave a trail of devastation in its wake for the family members and healthcare team left behind.

Discussion

To our knowledge, this is the first study to explore how oncologists, nurses, and social workers perceive suicidality in their cancer patients. The open-ended nature of our research methodology and the broad questions asked resulted in three main categories that included perceptions of suicidality, explanatory models of suicidality, and moral views on suicide. As noted in the introduction, aside from research on nurses' attitudes toward suicidality (mostly in emergency rooms or in psychiatric centers) [9–12, 14, 15, 18, 34], there are very few studies looking at oncology personnel's perceptions of suicidality, making it difficult to situate our findings in comparison to other literature.

Clinical and research implications

First, our review of the literature and our study findings point to important gaps in the research about this topic. As documented in this manuscript, we know that cancer patients are at an increased risk of suicidality [35] and we know from other fields in medicine that healthcare workers' attitudes toward patients who attempt to take their own life can affect their care [36, 37] but we do not know what the case is in oncology. Without more research on this topic, it is premature to offer recommendations for clinical interventions.

Second, our study findings point to the complexity of suicidality in the oncology context for healthcare workers, particularly in places like Israel where euthanasia is illegal, and faces significant cultural scrutiny [32]. Unlike in other medical domains where research on this topic has been conducted (i.e., emergency rooms [10], intensive care units [37], psychiatric wards [32] etc.), cancer patients are unique in that they often live with their disease for a long time and may wish to take their lives when their suffering becomes unbearable or untreatable [27]. Our findings suggest that what is considered a suicide in Israel may be considered a rational act [33] in other contexts. This is a tension that may exist in other places as well, with international research documenting cultural differences in attitudes toward suicide among the general population [38]. Euthanasia and physician-assisted suicide is illegal in most places around the globe. HCPs working in these contexts may struggle with their views about suicide spectrum behaviors in their patients feeling on the one hand that patients have the right to make decisions about their own life, feeling empathy for their suffering, and wanting their patients to have dignity and control over their lives, while simultaneously holding moral or philosophical attitudes that are against suicide, against their professional obligations as healers, and against their religious beliefs. Any interventions designed for the oncology context must take all of these issues into account and must also recognize that HCPs have varied philosophies on this issue.

Third, our study findings raise some concerns about suicide myths reported by the HCPs. Some examples of these myths included ideas such as that suicide occurs with little or no warning; that suicide attempts are histrionic gestures, looking for sympathy and/or attention; and that, if someone wants to take their own life, there is nothing that can be done to stop them. Other research has suggested that such suicide myths are common among the general public [39] and that HCPs in other fields may hold similar misconceptions about suicide. For example, in a study among medical and psychology students, 80% of the respondents did not endorse genetic risk factors for suicide [40]. The endorsement of these myths suggests that HCPs may require information about how to identify and respond to suicidality in cancer patients.

Limitations The study included a convenience sample of HCPs limiting the generalizability of the findings. It is likely that those who chose to participate in the study represent those who are more willing to discuss patients' suicidality and are more able to cope with it. In addition, the study only included licensed clinicians who have been socialized into the medical system and are likely to have a fairly developed professional identity. Future studies should include trainees who may face greater professional and moral dilemmas when approaching patient suicidality. Future studies should further explore perceptions toward different suicidal behaviors and examine possible explanatory models in the transition between suicidal ideation and suicidal attempts. For example, the integrated motivational-volitional model of suicide behavior suggests that experience of entrapment underlies suicidal ideation whereas a set of volitional moderators (e.g., access to suicide means, impulsivity, capability for suicide) promote the transition to suicidal attempt [41]. Finally, another limitation is that this study did not probe how HCPs define "end of life." Future research should clarify what HCPs mean when they use this

term, especially as it relates to their perceptions about the acceptability of suicidality among their patients with cancer.

Conclusion HCPs vary greatly in their views on suicide. Some view the act as part of patient's choice and autonomy while others view it negatively. While euthanasia is legal in some countries, preventing patient suicide is strongly adhered to as a guiding principle for medical and mental health professionals. Patients' suicidality and provider's attitudes toward the patient's suicidal intentions and actions should be recognized and openly discussed. HCPs should receive support in handling patient's suicidality.

Funding This work was supported by the American Foundation for Suicide Prevention (Pilot Research Grant to Granek).

Compliance with ethical standards

Approvals were obtained from the Research Ethics Board prior to launching the study (IRB numbers 2105-13 and 2345-15). Participants signed a consent form and agreed to the interview being audio recorded.

Conflict of interest The authors declare that they have no conflict of interest.

References

1. Walker J, Hansen CH, Butcher I, Sharma N, Wall L, Murray G, Sharpe M (2011) Thoughts of death and suicide reported by cancer patients who endorsed the "suicidal thoughts" item of the PHQ-9 during routine screening for depression. Psychosomatics 52(5): 424–427
2. Allebeck P, Bolund C (1991) Suicides and suicide attempts in cancer patients. Psychol Med 21(04):979–984
3. Hem E, Loge JH, Haldorsen T, Ekeberg Ø (2004) Suicide risk in cancer patients from 1960 to 1999. J Clin Oncol 22(20):4209–4216
4. Nakash O, Liphshitz I, Keinan-Boker L, Levav I (2013) The effect of cancer on suicide among elderly holocaust survivors. Suicide Life Threat Behav 43(3):290–295
5. Nasseri K, Mills PK, Mirshahidi HR, Moulton LH (2012) Suicide in cancer patients in California, 1997–2006. Arch Suicide Res 16(4):324–333
6. Tanaka H, Tsukuma H, Masaoka T, Ajiki W, Koyama Y, Kinoshita N, Hasuo S, Oshima A (1999) Suicide risk among cancer patients: experience at one medical center in Japan, 1978–1994. Jpn J Cancer Res 90(8):812–817
7. Björkenstam C, Edberg A, Ayoubi S, Rosén M (2005) Are cancer patients at higher suicide risk than the general population? A nationwide register study in Sweden from 1965 to 1999. Scand J Public Health 33(3):208–214
8. Innos K, Rahu K, Rahu M, Baburin A (2003) Suicides among cancer patients in Estonia: a population-based study. Eur J Cancer 39(15):2223–2228
9. Botega NJ, Reginato DG, Silva SV, Cais CFS, Rapeli CB, Mauro MLF, Cecconi JP, Stefanello S (2005) Nursing personnel attitudes towards suicide: the development of a measure scale. Rev Bras Psiquiatr 27(4):315–318
10. Briggs A (2018) Nurses' attitudes to supporting people who are suicidal in emergency departments. Emerg Nurse 26(1):30–36
11. Flood C, Yilmaz M, Phillips L, Lindsay T, Eskin M, Hiley J, Tasdelen B (2018) Nursing students' attitudes to suicide and suicidal persons: a cross-national and cultural comparison between Turkey and the United Kingdom. J Psychiatr Ment Health Nurs 25(7):369–379
12. Giacchero Vedana KG, Magrini DF, Zanetti ACG, Miasso AI, Borges TL, dos Santos MA (2017) Attitudes towards suicidal behaviour and associated factors among nursing professionals: a quantitative study. J Psychiatr Ment Health Nurs 24(9–10):651–659
13. Yaseen ZS et al (2013) Distinctive emotional responses of clinicians to suicide-attempting patients: a comparative study. BMC Psychiatry 13(230):1–9
14. Anderson M (1997) Nurses' attitudes towards suicidal behaviour: a comparative study of community mental health nurses and nurses working in an accidents and emergency department. J Adv Nurs 25(6):1283–1291
15. Sun FK, Long A, Boore J (2007) The attitudes of casualty nurses in Taiwan to patients who have attempted suicide. J Clin Nurs 16(2): 255–263
16. Carmona-Navarro MC, Pichardo-Martínez MC (2012) Attitudes of nursing professionals towards suicidal behavior: influence of emotional intelligence. Rev Lat Am Enfermagem 20(6):1161–1168
17. Petrik ML, Gutierrez PM, Berlin JS, Saunders SM (2015) Barriers and facilitators of suicide risk assessment in emergency departments: a qualitative study of provider perspectives. Gen Hosp Psychiatry 37(6):581–586
18. Kishi Y, Kurosawa H, Morimura H, Hatta K, Thurber S (2011) Attitudes of Japanese nursing personnel toward patients who have attempted suicide. Gen Hosp Psychiatry 33(4):393–397
19. Hammond LK, Deluty RH (1992) Attitudes of clinical psychologists, psychiatrists, and oncologists toward suicide. Soc Behav Personal Int J 20(4):289–292
20. Grimholt TK et al (2014) Perceived competence and attitudes towards patients with suicidal behaviour: a survey of general practitioners, psychiatrists and internists. BMC Health Serv Res 14(208): 1–8
21. Ouzouni C, Nakakis K (2012) Doctors' attitudes towards attempted suicide. Health Sci J 6(4):663–680
22. Emanuel EJ, Onwuteaka-Philipsen BD, Urwin JW, Cohen J (2016) Attitudes and practices of euthanasia and physician-assisted suicide in the United States, Canada, and Europe. JAMA 316(1):79–90
23. Emanuel EJ, Fairclough D, Clarridge BC, Blum D, Bruera E, Penley WC, Schnipper LE, Mayer RJ (2000) Attitudes and practices of U.S. oncologists regarding euthanasia and physician-assisted suicide. Ann Intern Med 133(7):527–532
24. Willems DL, Daniels ER, van der Wal G, van der Maas PJ, Emanuel EJ (2000) Attitudes and practices concerning the end of life: a comparison between physicians from the United States and from the Netherlands. Arch Intern Med 160(1):63–68
25. Wolfe J, Fairclough DL, Clarridge BR, Daniels ER, Emanuel EJ (1999) Stability of attitudes regarding physician-assisted suicide and euthanasia among oncology patients, physicians, and the general public. J Clin Oncol 17(4):1274–1279
26. Miccinesi G, Fischer S, Paci E, Onwuteaka-Philipsen BD, Cartwright C, van der Heide A, Nilstun T, Norup M, Mortier F, EURELD consortium (2005) Physicians' attitudes towards end-of-life decisions: a comparison between seven countries. Soc Sci Med 60(9):1961–1974
27. Granek L, Nakash O, Ariad S, Chen W, Birenstock-Cohen S, Shapira S, Ben-David M (2017) From will to live to will to die: oncologists, nurses, and social workers identification of suicidality in cancer patients. Support Care Cancer 25(12):3691–3702
28. Granek L, Nakash O, Ben-David M, Shapira S, Ariad S (2018) Oncologists', nurses', and social workers' strategies and barriers to identifying suicide risk in cancer patients. Psychooncology 27(1):148–154

29. Granek L, Nakash O, Ben-David M, Shapira S, Ariad S (2018) Oncologists' treatment responses to mental health distress in their cancer patients. Qual Health Res 28:1735–1745
30. Granek L, Nakash O, Ariad S, Shapira S, Ben-David M (2018) Oncologists' identification of mental health distress in cancer patients: strategies and barriers. Eur J Cancer Care (Engl) 27(3): e12835
31. Charmaz K (2006) Constructing grounded theory: a practical guide through qualitative research. Sage, London
32. Avrami S (2003) "I wish he had died in the war": suicide survivors - the Israeli case. OMEGA-J Death Dying 46:273–286
33. Cheung G, Douwes G, Sundram F (2017) Late-life suicide in terminal cancer: a rational act or underdiagnosed depression? J Pain Symptom Manag 54(6):835–842
34. Valente S, Saunders JM (2004) Barriers to suicide risk management in clinical practice: a national survey of oncology nurses. Issues Ment Health Nurs 25(6):629–648
35. Henry M, Rosberger Z, Bertrand L, Klassen C, Hier M, Zeitouni A, Kost K, Mlynarek A, Richardson K, Black M, MacDonald C, Zhang X, Chartier G, Frenkiel S (2018) Prevalence and risk factors of suicidal ideation among patients with head and neck cancer: longitudinal study. Otolaryngol Head Neck Surg 159:843–852
36. Saunders KE et al (2012) Attitudes and knowledge of clinical staff regarding people who self-harm: a systematic review. J Affect Disord 139(3):205–216
37. Wolk-Wasserman D (1985) The intensive care unit and the suicide attempt patient. Acta Psychiatr Scand 71(6):581–595
38. Eskin M, Kujan O, Voracek M, Shaheen A, Carta MG, Sun JM, Flood C, Poyrazli S, Janghorbani M, Yoshimasu K, Mechri A, Khader Y, Aidoudi K, Bakhshi S, Harlak H, Ahmead M, Moro MF, Nawafleh H, Phillips L, Abuderman A, Tran US, Tsuno K (2016) Cross-national comparisons of attitudes towards suicide and suicidal persons in university students from 12 countries. Scand J Psychol 57(6):554–563
39. Beautrais AL, John Horwood L, Fergusson DM (2004) Knowledge and attitudes about suicide in 25-year-olds. Aust N Z J Psychiatry 38(4):260–265
40. Voracek M, Sonneck G (2006) Medical and psychology students' disbelief in the inheritance of risk factors for suicide. Psychol Rep 99(2):599–602
41. O'Connor RC, Kirtley OJ (2018) The integrated motivational-volitional model of suicidal behaviour. Philos Trans R Soc Lond Ser B Biol Sci 373(1754)