



# Exposure to suicidality in professionals working with oncology patients: An online survey

Bianca Senf | Paula Maiwurm | Jens Fettel

Department of Psycho-Oncology, University Cancer Center (UCT), Johann Wolfgang Goethe University, Frankfurt/Main, Germany

## Correspondence

Bianca Senf, Department of Psycho-Oncology, University Cancer Center (UCT), Johann Wolfgang Goethe University, Theodor-Stern-Kai 7, 60590 Frankfurt/Main, Germany.  
Email: studien.psychoonkologie@kgu.de

## Funding information

H.W. & J. Hector Stiftung, Grant/Award Number: Medizinprojekt M64

## Abstract

**Objective:** To explore and describe exposure to suicidality in healthcare providers (HCP) working with oncological patients. Special emphasis was put on five central aspects from the HCPs perspective: Exposure, Confidence, Expertise, Distress, and Education.

**Methods:** A 48-item online questionnaire was developed and distributed to HCPs working with cancer patients. Three hundred fifty-four answered questionnaires were analyzed.

**Results:** Overall 83.3% of HCPs reported to have encountered at least one suicidal patient in the last year. Feeling confident in talking about suicidality was reported by 72.1% of HCPs, with 71.2% of nurses reporting feeling insecure compared with only 5.1% of psychotherapists. Similarly, 22.3% of HCPs felt overwhelmed when confronted with a patient who substantiated his suicidality during consultation. A lack of personal knowledge concerning suicidality in general and in oncological patients in particular, was reported by 39.6% and 49.8%, respectively. In total, 88.1% of HCPs reported feeling distressed when confronted with suicidality, while 81.1% of participants wanted further education regarding suicidality in cancer patients despite that 73.2% had already received some sort of psycho-oncology education.

**Conclusions:** Despite the well-documented fact of elevated suicide rates in cancer patients, there remain deficits in knowledge, which induce feelings of insecurity and helplessness in HCPs. There is a demand for further education concerning the treatment of suicidal cancer patients. Therefore, special curricula addressing this topic should be devised. A general debate about suicidality in cancer patients could help raise awareness of this problem and generate means of prevention.

## KEYWORDS

cancer, confidence, distress, expertise, exposure, further education, oncology, online survey, psycho-oncology, suicidality

## 1 | INTRODUCTION

Numerous studies document an increased suicide risk among cancer patients.<sup>1-6</sup> The estimated number of unrecorded cases is probably significantly higher than the known number of cases.<sup>7,8</sup> Suicide risk is particularly high in patients with prognostically unfavorable tumors and during the first 6 months after the cancer diagnosis.<sup>3</sup> Many of these studies examine general but also cancer-specific risk factors.<sup>5,9-11</sup> The connections between suicidal thoughts, desire to die, and committed suicides have also been the subject of research,<sup>10,12,13</sup> as have been barriers to identifying patients at risk for suicide.<sup>14</sup> A lack of training, especially concerning the identification of emotional symptoms of distress constitutes a major barrier.<sup>15,16</sup> Nevertheless, it has been shown, particularly in everyday clinical practice, that suicidal tendencies in cancer patients are often not fully recognized, especially in older patients.<sup>17-19</sup>

A cancer diagnosis often comes as a surprise. It can plunge patients, and their families, into deep despair. Studies show that oncological diseases can lead to suicidal crises at any time during the treatment, but also years afterwards.<sup>4,20-25</sup> Existing studies<sup>1,13,25,26</sup> point to the need for psychological support for suicidal patients. Treating these patients requires the sensitization of everyone involved. Throughout their clinical experience the authors were repeatedly exposed to suicidality and suicide in oncological patients. Yet, the published literature on the perspective of healthcare providers (HCP) seemed to be limited. To generate a basis for further investigation, a series of discussions in clinical quality circles were held, which laid the groundwork for a pilot study among persons working in psycho-oncology. A short questionnaire-based survey was conducted among the members of the Working Group of Psycho-oncologists Hesse (Arbeitskreis Psychoonkologen Hessen, APH). The results showed, that many HCPs felt challenged, insecure, or distressed by the suicidal utterances and actions of their oncological patients and felt insufficiently prepared to address these patients' suicidal thoughts and/or acute suicidal tendencies.<sup>27</sup> A subsequent literature review revealed, with a few exceptions<sup>15-19,28</sup>, a lack of practice-relevant work on the topic.

Therefore, the aim of the present study was to explicitly explore on a large scale the ways HCPs working with oncological patients deal with suicidal patients. The focus was placed on five aspects that are central from a practitioner's perspective in dealing with suicidal oncological patients:

1. How often are HCPs working with oncological patients exposed to suicidal patients?
2. How confident do HCPs feel in talking about suicidal tendencies?
3. How do HCPs regard their expertise on the topic?
4. What is particularly stressful for HCPs when dealing with suicidal patients?
5. Is there a need for further training on the subject for HCPs? Which topics should be focused on within a training course?

## 2 | METHODS

### 2.1 | Study design

We conducted an online survey over a period of 3 months (December 2017-February 2018). HCPs with patient contact in Germany were invited to answer our questionnaire. This explorative survey study employed a cross-sectional, descriptive design.

### 2.2 | Questionnaire

A questionnaire consisting of 48 items was designed on the basis of the results of a pre-test among members of the APH.<sup>27</sup> It contained six sections (see Appendix S1). This article focuses on the questions from two complexes: "Suicidal tendencies in patients" and "Experience and knowledge on suicidal tendencies." The questionnaire included demographic questions, and questions in closed and open format.

### 2.3 | Data collection

The link to the questionnaire was sent via the e-mail distribution list "Medical Staff" of the University Clinic Frankfurt and to physicians in clinics specializing in oncological treatment with the request to forward it to colleagues working in oncology. Furthermore, members of the APH, the German Working Group for Psychosocial Oncology (Deutsche Arbeitsgemeinschaft Psychosoziale Onkologie, Dapo), and the Working Group for Psychosocial Oncology (Arbeitsgemeinschaft Psychosoziale Onkologie, PSO) were asked to participate in the anonymous survey. The aim was to include 150 HCPs. The link to the survey page was accessed 1166 times. Overall, 354 completely filled questionnaires were evaluated. The remaining 812 site accesses were not eligible for evaluation because they were not filled in completely or had other internal inconsistencies.

### 2.4 | Data analysis

The quantitative data evaluation was performed with the analysis software SPSS Version 23.0 (IBM Inc., Armonk, New York). The data were descriptively analyzed. Differences between occupational groups were investigated using the Kruskal-Wallis test with subsequent Dunn-Bonferroni correction. Effect strengths were reported according to Cohen's conventions.<sup>29</sup> Qualitative data were evaluated content-analytically using the software QCMap according to Mayring's method.<sup>30</sup>

### 2.5 | Ethics

The study was carried out in accordance with the ethical standards of the Declaration of Helsinki and received approval from the ethics

TABLE 1 Demographic variables

	Total n = 354 (100%)		Physicians n = 87 (24.7%)		Psychologists n = 82 (23.2%)		Psychiatric Psychotherapists n = 59 (16.7%)		Nurses n = 59 (16.7%)		Other n = 65 (18.5%)	
	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]
<b>Sex</b>	352 (99.4)		87 (100)		82 (100)		59 (100)		59 (100)		65 (100)	
Female	273 (77.1)		45 (51.7)		69 (84.1)		51 (86.4)		51 (86.4)		56 (86.2)	
Male	81 (22.9)		42 (48.3)		13 (15.9)		8 (13.6)		8 (13.6)		9 (13.8)	
<b>Age (years)</b>	354 (100)	47.8 (11.5) [23-76]	87 (100)	49.5 (10.6) [27-76]	82 (100)	45.5 (11.5) [26-73]	59 (100)	51.1 (9.9) [29-66]	59 (100)	41 (10.9) [23-61]	65 (100)	51.0 (11.4) [25-75]
<b>Work with oncological patients (years)</b>	354 (100)	13.6 (9.3) [1-40]	87 (100)	17.6 (9.8) [1-40]	82 (100)	10.5 (8.5) [1-35]	59 (100)	14.6 (9.3) [1-38]	59 (100)	12.8 (8.4) [1-35]	65 (100)	12.1 (8.9) [1-37]
<b>Institution<sup>a</sup></b>												
Primary care hospital	129 (36.4)		27 (31.0)		35 (42.7)		23 (39.0)		15 (25.4)		29 (44.6)	
Maximum care hospital	121 (34.2)		33 (37.9)		18 (22.0)		9 (15.3)		46 (78.0)		15 (23.1)	
Rehabilitation clinic	29 (8.2)		3 (3.4)		15 (18.3)		7 (11.9)		0 (0.0)		4 (6.2)	
Established panel practice	53 (15.0)		36 (41.4)		2 (2.4)		12 (20.3)		1 (1.7)		2 (3.1)	
Established private practice	38 (10.7)		8 (9.2)		8 (9.8)		13 (22.0)		0 (0.0)		9 (13.8)	
Cancer counseling center	36 (10.2)		1 (1.1)		14 (17.1)		8 (13.6)		0 (0.0)		13 (20.0)	
Outpatient palliative service	7 (2.0)		3 (3.4)		1 (1.2)		0 (0.0)		1 (1.7)		2 (3.1)	
Other	29 (8.2)		0 (0.0)		5 (6.1)		8 (13.6)		2 (3.4)		12 (18.5)	
<b>Further education</b>												
Yes, certified by DKG <sup>b</sup> (120 E.)	158 (44.6)		23 (26.4)		56 (68.3)		31 (52.5)		3 (5.1)		45 (69.2)	
Yes, certified by DKG <sup>c</sup> (100 E.)	31 (8.8)		9 (10.3)		6 (7.3)		14 (23.7)		0 (0.0)		1 (1.5)	
Yes, certified by another Institution	17 (4.8)		4 (4.6)		3 (3.7)		4 (6.8)		4 (6.8)		2 (3.1)	
Yes, noncertified curriculum	31 (8.8)		9 (10.3)		7 (8.5)		5 (8.5)		4 (6.8)		6 (9.2)	

**TABLE 1** (Continued)

	Total n = 354 (100%)		Physicians n = 87 (24.7%)		Psychologists n = 82 (23.2%)		Psychologic Psychotherapists n = 59 (16.7%)		Nurses n = 59 (16.7%)		Other n = 65 (18.5%)	
	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]	n (%)	M (SD) [Min-Max]
Yes, seminar or lecture	19 (5.4)		5 (5.7)		1 (1.2)		0 (0.0)		12 (20.3)		1 (1.5)	
None	98 (27.7)		37 (42.5)		9 (11.0)		5 (8.5)		36 (61.0)		10 (15.4)	

<sup>a</sup>Multiple answers were possible; the percentage values refer to the number of answers.

<sup>b</sup>DKG = Deutsche Krebsgesellschaft e.V. (German Cancer Society).

committee of the University Hospital Frankfurt (ethical approval #20-625). Informed consent was electronically obtained from participants after reading data protection and personal privacy guidelines. All data were collected and stored anonymously.

### 3 | RESULTS

#### 3.1 | Sample

The data of 354 HCPs working with oncological patients were included (Table 1).

Absolute and relative frequencies of single items in confrontation, confidence, expertise, and further education, as well as the results of the omnibus group comparisons are presented in Table 2. Table S3 shows the results of subgroup comparisons.

#### 3.2 | Exposure

Overall, 59.0% of HCPs reported that they encounter suicidal patients once to three times per year. Being confronted with suicidal patients more than three times per year was reported by 24.3% of HCPs, while 16.7% had never had to deal with such a psychic crisis. The exposure was high in all occupational groups.

Almost half of the HCPs (47.5%) reported being aware of an actual suicide by one of their patients during their professional career. In total, 20.3% reported one, 13.3% reported two, 6.5% reported three, and 7.3% reported knowing of more than three patients who committed suicide. There was a correlation of medium size between the known number of patients who committed suicide and the number of years working with oncological patients ( $\rho = .39, P < .001$ ).

Within the last year, 82.2% of HCPs had a conversation about suicidal tendencies with their patients. Compared to nurses (45.8%), physicians (79.3%), psychologists (93.9%), and PPTs (94.9%) were significantly more frequently engaged in conversations on the subject.

A total of 78.1% of HCPs stated that they actively approach the subject of suicidal thoughts in their patients. Reasons for doing so were: intuitive suspicion, wishes by the patient to be “dead,” depressive development, routinely within the anamnesis, previous mental illnesses, suggestion of relatives, high distress, poor prognosis, and advanced or pre-terminal stage.

#### 3.3 | Confidence

Feeling insecure when talking about suicidal thoughts with their patients was reported by 27.9% of HCPs. Overall, 71.2% of the nurses felt insecure and differed significantly from physicians (27.6%), psychologists (15.8%), and PPTs (5.1%). About a quarter of physicians felt insecure, the difference to PPTs being statistically significant.

Overall, 22.3% of HCPs stated feeling overwhelmed, should a patient substantiate suicidal desires during a conversation. Most of



TABLE 2 (Continued)

	Total n = 354	Physicians n = 87	Psychologists n = 82	Psychologic Psychotherapists n = 59	Nurses n = 59	Other n = 65	H	P
Rather good	165 (46.6)	36 (41.4)	49 (59.8)	37 (62.7)	13 (22.0)	29 (44.6)		
Very good	13 (3.7)	5 (5.7)	2 (2.4)	5 (8.5)	1 (1.7)	0 (0.0)		
<b>Further education</b>								
"Would you like further training regarding suicidality in oncology patients?"								
Yes	287 (81.1)	65 (74.7)	67 (81.7)	42 (71.2)	54 (91.5)	57 (87.7)	12.04	.017
No	67 (18.9)	22 (25.3)	15 (18.3)	17 (28.8)	5 (8.5)	8 (12.3)		

the nurses felt overwhelmed (44.1%) and differed significantly from psychologists (18.3%), PPTs, (10.2%), and physicians (17.2%).

### 3.4 | Expertise

When asked about their general knowledge of suicidality 39.6% of HCPs considered it to be insufficient. Most nurses (72.8%) considered their knowledge to be insufficient and differed significantly from psychologists (21.9%), PPTs (11.9%), and physicians (48.2%). Simultaneously, almost half of the physicians regarded their knowledge as insufficient and differed significantly from psychologists and PPTs.

Almost half of the HCPs (49.8%) considered their knowledge of suicidality in cancer patients to be insufficient. More than three quarters of nurses regarded their knowledge regarding this topic as insufficient (76.2%) and differed significantly from psychologists (37.8%), PPTs (28.8%), and physicians. Also 52.9% of physicians considered their knowledge as insufficient and differed significantly from PPTs.

In total, 72.3% of HCPs had some form of further education and training. As many as 58.2% had been trained by a DKG certified curriculum (Weiterbildung Psychosoziale Onkologie, WPO).<sup>31</sup>

On average, the HCPs had been working with oncological patients for 13.6 years (*SD* = 9.3). Longer professional experience with oncological patients was associated with more confidence in talking about suicidal thoughts ( $\rho = .16, P = .003$ ) and less intense feelings of being overwhelmed by a substantiated suicide wish ( $\rho = -.27, P < .001$ ).

### 3.5 | Distress

Regarding subjective distress, 343 HCPs provided answers (nine did not provide any information on this). Of these, 88.1% stated that they felt distressed when dealing with suicidal patients.

When asked what HCPs found particularly stressful when dealing with suicidal patients, uncertainty and anxiety were cited by 34.6% as the most frequent stress factors. This applies both to the correct assessment of a patient's current situation (16.1%), as well as to the assessment of one's own abilities in dealing with suicidal patients (12.0%) and the fear of an actual suicide (6.5%). Additionally, scarcity of resources (19.0%), in particular organizational and structural aspects (15.1%) and lack of time (3.8%), were mentioned as particularly stressful. Uncertainty and fear emerged as the greatest burden for all occupational groups (Table S4).

### 3.6 | Further Education

Overall, 81.1% of HCPs reported that they would like to receive further training on suicidality in oncological patients. A large proportion of HCPs (72.3%) reported already having received some form of psycho-oncological education. Nevertheless, of these, 73.2% would like further training. Specific further training is desired mostly by

nurses (91.5%), followed by psychologists (81.7%), physicians (74.7%), and PPTs (71.2%).

A total of 1033 requests for further training were expressed. Further training was particularly desired in dealing with suicidal tendencies (74.6%), legal regulations (73.2%) letting people die (52.3%), therapies at the end of life (47.0%), assisted suicide (37.3%), terminal care (36.9%), and termination of life on request (32.1%). Dealing with suicidal tendencies was the top priority of nurses (90.7%) and physicians (78.5%). For psychologists (62.7%) and PPTs (57.1%) it ranged at second place. Psychologists (80.6%) and PPTs (69.0%) reported wanting to see the topic of legal regulations in first place, which, in turn, ranked second for nurses (83.3%) and physicians (67.7%).

Further education should be designed and carried out multi-professionally. Psycho-oncologists (81.2%) and physicians (52.3%) psychologists (47.4%), pastors (35.2%), and lawyers (15.0%) were requested. There were hardly any differences between the different occupational groups.

## 4 | DISCUSSION

The aim of this study was to create a comprehensive "first impression" to gain a better overview of the current state in this field and, on this basis, lay the groundwork for future research. Our findings show that exposure to suicidal patients is not uncommon in oncology. Most HCPs feel confident to address suicidality in their patients, yet a certain amount of insecurity remains. Many HCPs consider their knowledge of suicidality, especially in oncological patients, as deficient and consequently express a wish for further education in this area, even though many have already received some form of psycho-oncological education. Our study also highlighted the existing differences between various occupational subgroups.

An important finding of this study was the differences between the occupational groups. In general, only a few of the HCPs had never been confronted with suicidality in their practice. Almost half knew about the suicide of at least one of their patients. These results are comparable with those reported by Granek et al.<sup>16</sup> However, the study presented here covers a wider range of professional groups and institutions (from acute hospitals to private practices), which has to be accounted for when drawing comparisons. Psychologists are most frequently concerned with suicidal behavior in working with oncological patients. In this respect they differ significantly from physicians and nurses. One possible explanation may be that psychologists and psychotherapists, who are specifically trained to recognize and treat this condition, implement psychotherapeutic interventions in dealing with suicidality, and they are therefore more involved. In fact, it was mainly nurses and physicians who stated that they had never been confronted with suicidality. There might also be a certain selection bias in that physicians and nurses necessarily have contact with all the patients, whereas psychologists usually see patients experiencing some form of psychic distress and may therefore have a higher likelihood of being suicidal.

Overall, a high proportion of HCPs actively addressed suicidality with their patients. This alone is a promising finding and speaks to the initiative taken by HCPs to broach a difficult topic with their patients. As Granek et al.<sup>16</sup> have shown, there are certain characteristics of patients and/or their diseases that facilitate direct inquiries like concrete actions of the patient, exhibiting psychic distress, or certain cancer types. However, noticeably here, too, physicians and, especially, nurses took considerably less initiative in addressing suicidality. Thus, both occupational groups differ significantly from psychologists and PPTs. It can be argued that lack of expertise and experience in dealing with this issue are the main obstacles.

This argument is supported by the results on expertise, especially knowledge about suicide (in general and in oncological patients). More than one third of the HCPs considered their knowledge of suicidality in general to be insufficient, and almost half believed that this is the case with oncological patients. Nurses and physicians estimated their personal knowledge regarding suicidality to be the lowest and differed significantly from psychologists. It seems reasonable to assume that the emphasis put on suicidality in the respective vocational trainings of the different occupational groups is a decisive influencing factor here. Psychologists and especially psychotherapists deal with this topic more intensively due to their training and therefore have more expertise. A similar point is also raised by Granek et al.<sup>16</sup>, who identify lack of knowledge and awareness as important HCP-related barriers to address suicidality in their patients. Additionally, in the study by Valente et al.<sup>17</sup> most nurses rated themselves as having only little to some skill and knowledge of suicide evaluation.

It is however remarkable, that the majority of HCPs had received further education in psycho-oncology, more than half within the framework of a DKG-certified curriculum, but almost half of the HCPs considered their personal knowledge to be insufficient. One reason for this could be that the relevant curricula do not deal with the topic of suicidality or do not deal with it comprehensively enough. Therefore, the participants felt insufficiently prepared. Another important aspect in terms of expertise is practical experience, which in this exploratory study was operationalized in very general terms as professional experience (years working) with oncological patients. Here it was shown that longer professional experience was associated with more confidence in talking about suicidality and less intense feelings of being overwhelmed when a concrete suicide desire was expressed. Although only small to medium effect sizes were observed, this can be best attributed to the fact that the authors asked about work with oncological patients in general and not specifically about oncological patients with suicidal thoughts. In the latter case, a significantly stronger correlation could be assumed to emerge. Granek et al.<sup>16</sup> also point to a lack of knowledge and emphasize above all deficits in recognizing suicidality and distinguishing this form of psychic crisis from "normative" distress. Further, the lack of awareness of an increased risk for suicidality in cancer patients emerged as a barrier to identifying suicidal patients. Thus, another reason for not addressing suicidal tendencies could be the fear of being incapacitated due to lack of expertise when a patient reports suicidal tendencies during a consultation.

The situations mentioned in which health professionals further explore suicidal tendencies reflect some of the risk factors (both general, for example, pre-existing psychiatric illness, especially depression, and cancer-specific, for example, poor prognosis, advanced disease) that have also been identified in other studies.<sup>5,13,19</sup> This suggests that knowledge about risk factors is available, at least to a proportion of the HCPs, and that they also use this knowledge in their clinical work for in-depth exploration.

The distress described by the HCPs in dealing with oncological patients stemmed primarily from uncertainty and fear (especially with regard to the assessment of the situation and one's own abilities), that is, rather internal factors, and on the other hand from scarcity of resources (structural problems and lack of time), that is, rather external factors. Responsibility and pressure to act take an intermediate position. Even the descriptive presentation of the various stress factors makes it clear that it is a complex network of interdependent factors. Thus, a connection between lack of resources and responsibility/pressure to act seems to be obvious if, for example, time pressure arises due to lack of personnel, but simultaneously far-reaching decisions have to be made for which one can then be held responsible. Pressure to act and scarcity of resources can, in turn, affect how confident HCPs feel in assessing a situation or their own abilities.

The desire for further education was most pronounced among the nurses. Here, nearly all would like further education on suicidality. This seems to reflect the insecurity and feelings of being overwhelmed as well as the feeling of lacking sufficient expertise, as reported by this occupational group.<sup>17</sup> Another study by Valente et al<sup>32</sup> showed that with nurses their difficulties in responding to suicidal patients emerged from various factors (eg, uncomfortable feelings, inadequate knowledge, and weight of professional responsibility).

The desired topics of a possible further education curriculum may hint at one's own feelings of helplessness. Particularly, nurses and physicians expressed the desire to be able to deal better with suicidality. The excessive demands often described by those professional groups would thus be even better understandable when factoring in feelings of helplessness and being overwhelmed. Concurrently, there is also the desire to fill specific gaps in knowledge, for example, when topics like legal regulations, assisted suicide, and termination of life on request are explicitly demanded. These are also highly sensitive topics which, if a practitioner is confronted with and does not have the necessary pertinent knowledge, can cause great uncertainty and distress.

#### 4.1 | Clinical Implications

The results clearly show that in the context of an oncological disease and its treatment, suicidality is not only a phenomenon that affects patients but HCPs as well. Many feel insecure and sometimes overwhelmed. The lack of expertise plays a decisive role here. This is especially reflected in the desire for further education. Accordingly, in the near future, targeted further education on the subject of suicidality should be offered or existing curricula in this area should be expanded.

Communication training for HCPs working in oncology can bring about positive changes in both communication behavior and attitudes, as Barth and Lannen<sup>33</sup> showed in their meta-analysis. Similarly, the results of Riedl and Schüßler<sup>34</sup> point to the positive effect of improved doctor-patient communication. The evaluation of the KoMPASS-program showed that role-playing, video feedback, and the joint discussion of specific cases were rated to be particularly helpful. The theoretical parts of the program were also positively evaluated, which emphasizes the importance of integrating theoretical and practical elements.<sup>35</sup> Ultimately, the expansion of expertise (theoretical and practical elements) is essential for the development of a sense of safety and positive self-efficacy expectations. This is a prerequisite to prepare HCPs to confront difficult issues such as suicidality. While communication trainings ease access to patients, they are not necessarily targeted at suicidality. Therefore, it is important to have trainings, specifically designed to address suicidality and methods of prevention. A first step is to educate HCPs about suicidality and raise awareness of this topic with a broader audience. It has been repeatedly stressed that the identification of risk factors is key to the identification of at-risk patients and therefore a prerequisite for prevention.<sup>36-39</sup> This could help reduce barriers when addressing difficult topics with patients and enhance confidence in everyday clinical work. According to a review by Kawashima et al<sup>39</sup> there is little evidence concerning the effects of different prevention measures. Also, the use of risk assessment models is still wanting, and the requirements for a widespread clinical implementation have not yet been met.<sup>40</sup>

Finally, it also seems necessary to initiate an open discourse about suicidality in oncological patients among those treating them. This is the only way to reduce prejudices and misapprehensions and thus avoid insecurity. However, patients could also benefit from an open discourse, as clinical practice shows that many patients have suicidal thoughts but do not dare to express them. This may be out of shame and/or fear of stigmatization.

#### 4.2 | Limitations

This study also has limitations. Due to the study design, it was not possible to obtain a representative sample. A certain element of selection bias exists due to the voluntary nature of participation, which limits the generalizability of the results beyond the study population. Due to the method of recruiting it was not possible to calculate an exact response rate. As suicidality can be perceived as a very delicate topic depending on the individuals' cultural background, there might have been a tendency toward social desirability. Also, the overall sample size was over 350 participants, and the average size of the occupational subgroups was only about 70. Nevertheless, there were no significant outliers in subgroup size. Due to the exploratory character of the study, the testing of specific hypotheses was limited. However, the intention of the study was precisely to be explorative and thus hypothesis-generating to lay the foundations for more specific investigations. The measurement of expertise could be improved, since the explorative study design relied on the respondents' self-reports and



personal assessments. Hence, the application of stricter criteria would be useful for follow-up research.

## 5 | CONCLUSIONS

Suicidality in oncological patients is a problem that almost every HCP is confronted with during his/her professional life. Concurrently, HCPs feel insufficiently informed about it, which leads to uncertainty and avoidance behavior. Particularly, there is a need for additional information and application-related further education, especially for nurses and physicians. Special training courses on this topic should be developed and implemented to meet the existing demand. This could be an effective contribution to suicide prevention.

## ACKNOWLEDGEMENTS

We would like to thank the H.W. & J. Hector Foundation, which made the financing of this study project possible. Open access funding enabled and organized by Projekt DEAL.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## ORCID

Bianca Senf  <https://orcid.org/0000-0002-3307-3420>

## REFERENCES

- Björkenstam C, Edberg A, Ayoubi S, Rosén M. Are cancer patients at higher suicide risk than the general population? *Scand J Public Health*. 2005;33(3):208-214. <https://doi.org/10.1080/140349404100192226>.
- Fang F, Fall K, Mittleman MA, et al. Suicide and cardiovascular death after a cancer diagnosis. *N Engl J Med*. 2012;366(14):1310-1318. <https://doi.org/10.1056/NEJMoa1110307>.
- Henson KE, Brock R, Charnock J, Wickramasinghe B, Will O, Pitman A. Risk of suicide after cancer diagnosis in England. *JAMA Psychiatry*. 2019;76(1):51-60. <https://doi.org/10.1001/jamapsychiatry.2018.3181>.
- Misono S, Weiss NS, Fann JR, Redman M, Yueh B. Incidence of suicide in persons with cancer. *J Clin Oncol*. 2008;26(29):4731-4738. <https://doi.org/10.1200/JCO.2007.13.8941>.
- Robson A, Scrutton F, Wilkinson L, MacLeod F. The risk of suicide in cancer patients. A review of the literature. *Psychooncology*. 2010;19(12):1250-1258. <https://doi.org/10.1002/pon.1717>.
- Zaorsky NG, Zhang Y, Tuanquin L, Bluethmann SM, Park HS, Chinchilli VM. Suicide among cancer patients. *Nat Commun*. 2019;10(1):207. <https://doi.org/10.1038/s41467-018-08170-1>.
- Tøllefsen IM, Hem E, Ekeberg Ø. The reliability of suicide statistics. A systematic review. *BMC Psychiatry*. 2012;12(1):368. <https://doi.org/10.1186/1471-244X-12-9>.
- Rockett I, Kapusta N, Ruchi B. Suicide misclassification in an international context. Revisitation and update. *Suicidology Online*. 2011;2:48-61.
- Anguiano L, Mayer DK, Piven ML, Rosenstein D. A literature review of suicide in cancer patients. *Cancer Nurs*. 2012;35(4):E14-E26. <https://doi.org/10.1097/NCC.0b013e31822fc76c>.
- Kolva E, Hoffecker L, Cox-Martin E. Suicidal ideation in patients with cancer. A systematic review of prevalence, risk factors, intervention and assessment. *Palliat Support Care*. 2020;18(2):206-219. <https://doi.org/10.1017/S1478951519000610>.
- McFarland DC, Walsh L, Napolitano S, Morita J, Jaiswal R. Suicide in patients with cancer. Identifying the risk factors. *Oncology (Williston Park, NY)*. 2019;33(6):221-226.
- Recklitis CJ, Lockwood RA, Rothwell MA, Diller LR. Suicidal ideation and attempts in adult survivors of childhood cancer. *J Clin Oncol*. 2006;24(24):3852-3857. <https://doi.org/10.1200/JCO.2006.06.5409>.
- Henry M, Rosberger Z, Bertrand L, et al. Prevalence and risk factors of suicidal ideation among patients with head and neck cancer. Longitudinal study. *Otolaryngology—Head and Neck Surgery: Official Journal of American Academy of Otolaryngology-Head and Neck Surgery*. 2018;159(5):843-852. <https://doi.org/10.1177/0194599818776873>.
- Valente S, Saunders JM. Barriers to suicide risk management in clinical practice. A national survey of oncology nurses. *Issues Ment Health Nurs*. 2004;25(6):629-648. <https://doi.org/10.1080/01612840490472147>.
- Granek L, Nakash O, Ariad S, Shapira S, Ben-David M. Oncologists' identification of mental health distress in cancer patients. Strategies and barriers. *Eur J Cancer Care*. 2018;27(3):e12835. <https://doi.org/10.1111/ecc.12835>.
- Granek L, Nakash O, Ben-David M, Shapira S, Ariad S. Oncologists', nurses', and social workers' strategies and barriers to identifying suicide risk in cancer patients. *Psychooncology*. 2018;27(1):148-154. <https://doi.org/10.1002/pon.4481>.
- Valente SM. Oncology nurses' knowledge of suicide evaluation and prevention. *Cancer Nurs*. 2010;33(4):290-295. <https://doi.org/10.1097/NCC.0b013e3181cc4f33>.
- Labisi O. Assessing for suicide risk in depressed geriatric cancer patients. *J Psychosoc Oncol*. 2006;24(1):43-50. [https://doi.org/10.1300/J077v24n01\\_04](https://doi.org/10.1300/J077v24n01_04).
- Labisi O. Suicide risk assessment in the depressed elderly patient with cancer. *J Gerontol Soc Work*. 2006;47(1-2):17-25. [https://doi.org/10.1300/J083v47n01\\_03](https://doi.org/10.1300/J083v47n01_03).
- Osazuwa-Peters N, Simpson MC, Zhao L, et al. Suicide risk among cancer survivors. Head and neck versus other cancers. *Cancer*. 2018;124(20):4072-4079. <https://doi.org/10.1002/cncr.31675>.
- Choi Y-N, Kim Y-A, Yun YH, et al. Suicide ideation in stomach cancer survivors and possible risk factors. *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*. 2014;22(2):331-337. <https://doi.org/10.1007/s00520-013-1975-4>.
- Choi J, Lee M, Ki M, et al. Risk factors for feelings of sadness and suicide attempts among cancer survivors in South Korea. Findings from nationwide cross-sectional study (KNHANES IV-VI). *BMJ Open*. 2017;7(12):e016130. <https://doi.org/10.1136/bmjopen-2017-016130>.
- Gunnes MW, Lie RT, Børge T, et al. Suicide and violent deaths in survivors of cancer in childhood, adolescence and young adulthood—a national cohort study. *Int J Cancer*. 2017;140(3):575-580. <https://doi.org/10.1002/ijc.30474>.
- Rahouma M, Kamel M, Abouarab A, et al. Lung cancer patients have the highest malignancy-associated suicide rate in USA. A population-based analysis. *Ecancermedicalscience*. 2018;12:859. <https://doi.org/10.3332/ecancer.2018.859>.
- Brinkman TM, Zhang N, Recklitis CJ, et al. Suicide ideation and associated mortality in adult survivors of childhood cancer. *Cancer*. 2014;120(2):271-277. <https://doi.org/10.1002/cncr.28385>.
- Costantini A, Pompili M, Innamorati M, et al. Psychiatric pathology and suicide risk in patients with cancer. *J Psychosoc Oncol*. 2014;32(4):383-395. <https://doi.org/10.1080/07347332.2014.917136>.

27. Senf B, Maiwurm P. Suizidalität in der Onkologie aus der Perspektive von Psychoonkologinnen: Ergebnisse einer anonymisierten Online-Befragung im Arbeitskreis, Psychoonkologen Hessen. *Andreas Werner und Tanja Vollmer: Psychoonkologie—Sterben und Tod zwischen Müssen und Wollen. Bericht der Dapo-Jahrestagung 2018. [1. Auflage]. Hg. v. Thomas Schopperth und Christian Franzkoch. Lengerich: Pabst Science Publishers (Dapo-Jahrbuch, 2018); 2019.*
28. Granek L, Nakash O, Ariad S, et al. From will to live to will to die. Oncologists, nurses, and social workers identification of suicidality in cancer patients. *Supportive Care in Cancer: Official Journal of the International Association of Supportive Care in Cancer.* 2017;25(12):3691-3702. <https://doi.org/10.1007/s00520-017-3795-4>.
29. Cohen J. Statistical power analysis. *Curr Dir Psychol Sci.* 1992;1(3):98-101. <https://doi.org/10.1111/1467-8721.ep10768783>.
30. Mayring P. Qualitative Inhaltsanalyse. *Grundlagen und Techniken. 12., überarb. Aufl.* Weinheim: Beltz (Beltz Pädagogik); 2015 Online available [http://content-select.com/index.php?id=bib\\_view&ean=9783407293930](http://content-select.com/index.php?id=bib_view&ean=9783407293930).
31. Deutsche Krebsgesellschaft, Deutsche Krebshilfe, AWMF (Leitlinienprogramm Onkologie) (2014): Psychoonkologische Diagnostik, Beratung und Behandlung von erwachsenen Krebspatienten. Langversion 1.1. Hg. v. Deutsche Krebsgesellschaft, Deutsche Krebshilfe, AWMF (Leitlinienprogramm Onkologie) (AWMF-Registernummer: 032/051OL). Online verfügbar unter [https://www.leitlinienprogramm-onkologie.de/fileadmin/user\\_upload/Downloads/Leitlinien/Psychoonkologieleitlinie\\_1.1/LL\\_PSO\\_Langversion\\_1.1.pdf](https://www.leitlinienprogramm-onkologie.de/fileadmin/user_upload/Downloads/Leitlinien/Psychoonkologieleitlinie_1.1/LL_PSO_Langversion_1.1.pdf), zuletzt geprüft am 22.05.2020.
32. Valente SM. Oncology nurses' teaching and support for suicidal patients. *J Psychosoc Oncol.* 2007;25(1):121-137. [https://doi.org/10.1300/J077v25n01\\_07](https://doi.org/10.1300/J077v25n01_07).
33. Barth J, Lannen P. Efficacy of communication skills training courses in oncology. A systematic review and meta-analysis. *Annals of Oncology: Official Journal of the European Society for Medical Oncology.* 2011;22(5):1030-1040. <https://doi.org/10.1093/annonc/mdq441>.
34. Riedl D, Schüßler G. The influence of doctor-patient communication on health outcomes. A systematic review. *Z Psychosom Med Psychother.* 2017;63(2):131-150. <https://doi.org/10.13109/zptm.2017.63.2.131>.
35. Vitinius F, Sonntag B, Barthel Y, et al. KoMPASS—Konzeption, Implementierung und Erfahrungen mit einem strukturierten Kommunikationstraining für onkologisch tätige Ärzte. *Psychother Psychosom Med Psychol.* 2013;63(12):482-488. <https://doi.org/10.1055/s-0033-1341468>.
36. Janes T. How can a suicide screening and prevention procedure be implemented in a cancer center? *Clin J Oncol Nurs.* 2018;22(2):232. <https://doi.org/10.1188/18.CJON.232>.
37. Akechi T. Suicide prevention among patients with cancer. *Gen Hosp Psychiatry.* 2020;64:119-120. <https://doi.org/10.1016/j.genhosppsych.2019.09.004>.
38. Kawashima Y, Yonemoto N, Inagaki M, Inoue K, Kawanishi C, Yamada M. Interventions to prevent suicidal behavior and ideation for patients with cancer. A systematic review. *Gen Hosp Psychiatry.* 2019;60:98-110. <https://doi.org/10.1016/j.genhosppsych.2019.07.003>.
39. Kawashima Y, Yonemoto N, Inagaki M, Inoue K, Kawanishi C, Yamada M. Response to "suicide prevention among patients with cancer". *Gen Hosp Psychiatry.* 2020;64:123. <https://doi.org/10.1016/j.genhosppsych.2019.10.010>.
40. Whiting D, Fazel S. How accurate are suicide risk prediction models? Asking the right questions for clinical practice. *Evid Based Ment Health.* 2019;22(3):125-128. <https://doi.org/10.1136/ebmental-2019-300102>.

#### SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Senf B, Maiwurm P, Fettel J. Exposure to suicidality in professionals working with oncology patients: An online survey. *Psycho-Oncology.* 2020;29:1620–1629. <https://doi.org/10.1002/pon.5479>