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Perspectives of bereaved partners of lung cancer patients on the role of mindfulness in dying and grieving: A qualitative study

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Abstract

Background: Mindfulness-Based Stress Reduction (MBSR) has been shown to reduce psychological distress in cancer patients but not their partners. Whether MBSR can support patients and partners in coping with the dying and grieving process is less well examined.
Aim: We aimed to gain more insight in the role of mindfulness in the dying and grieving process from the perspective of the partner after the patient's death.
Design: As part of a pilot study or subsequent randomized controlled trial, partners had participated together with the patient in MBSR. After the patient's death partners were invited for qualitative in-depth interviews. Data from the interviews was analyzed using the grounded theory approach.
Setting/participants: Interviews were conducted with 11 partners in their homes, on average 11 months after the patient's death (SD = 7.8).
Results: Mindfulness helped couples to allow and regulate difficult thoughts and feelings, which in turn helped them to accept the patient's impending death. It also facilitated them to enjoy things together and communicate more openly. For a few couples, however, participation was physically too burdensome or emotionally too confrontational. During the partners' grieving process, mindfulness helped allowing difficult thoughts and feelings, and taking the time to grieve, which helped them to take good care of themselves, giving them faith in the future.
Conclusion: The present study showed that MBSR can facilitate lung cancer patients and their partners in accepting the forthcoming death and openly communicating about this, which can support a peaceful death and healthy grieving process.

Keywords

Attitudes to death, grief, spouses, lung neoplasms, mindfulness, qualitative research

What is already known about the topic?

- Emotional wellbeing and acceptance of impending death contribute to a peaceful death and healthy grieving.
- Mindfulness-Based Stress Reduction is effective in improving emotional wellbeing and acceptance among cancer patients.

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What this paper adds?

- Mindfulness seems to help patients and partners to regulate their thoughts and emotions, facilitating them to accept the forthcoming death.
- Mindfulness helped patients and partners to enjoy things together and communicate more openly about emotionally charged issues.
- Mindfulness facilitated partners in allowing difficult thoughts and feelings, taking the time to grief, which helped them to let go of the past while being grateful for what has been.

Implications for practice, theory or policy

- Mindfulness-Based Stress Reduction could be offered to help couples cope with a forthcoming death and bereavement.

Introduction

Lung cancer is the leading cause of death by cancer worldwide.[1] The 5-year survival rate is merely 19%, which is considerably lower than that of other major cancer types.[2,3] Besides improving quality of life and survival, more and more attention is being paid to facilitating a peaceful death.[4] A literature review showed that patients and family members indicated that taking account of their preferences about the dying process and being free of pain are important factors of dying peacefully.[4] Moreover, emotional wellbeing and acceptance of the impending death contributed to a peaceful death.[4,5] In the long run, these factors also contribute to a healthier grieving process for partners.[6–9]

Offering patients and partners psychological support in the last phase of the patients' life, can potentially facilitate the dying and grieving process. Among interventions nurturing acceptance and emotional wellbeing are mindfulness-based interventions.[10,11] Mindfulness is defined as intentionally paying attention to present moment experiences, in an accepting, non-judgmental way.[10] Mindfulness-based interventions support participants in dealing more effectively with life's difficulties such as illness, aging and death.

Mindfulness-based interventions have been applied successfully in cancer patients and their partners. A recent meta-analysis of 29 trials showed positive effects of mindfulness-based interventions on psychological distress in cancer patients.[12] Most studies, however, have been conducted in women with breast cancer after curative cancer treatment.[12] In a randomized controlled trial, lung cancer patients reported less psychological distress and increased quality of life after Mindfulness-Based Stress Reduction (MBSR) compared to usual care.[13] In partners, however, no differences were found, even though MBSR appeared to result in a reduction of distress and caregiver burden according to a previous pilot study.[14] Whether mindfulness-based interventions are effective in supporting patients and partners in coping with the dying and grieving process is less well investigated.[15]

The setting of this RCT in couples facing lung cancer provided an unprecedented opportunity to retrospectively interview partners on the possible significance of an MBSR course they had participated in as a couple before the actual passing away of the patient. This allowed us, and this was part of the original study design, to qualitatively explore whether and how mindfulness might have supported patients of lung cancer in the dying process, albeit from their partners' perspectives, and how it might have supported the partners in their own grieving process.

Materials and methods

Study design

We conducted in-depth interviews with partners of deceased lung cancer patients who had participated in the previous pilot study or RCT. The study was approved of by our ethical committee in July 2012, as part of the original RCT (CMO Arnhem-Nijmegen; 2011-519). In cases of emotional distress that could not be managed as part of the study or intervention, the general practitioner could be contacted to refer the patient or partner for further psychological support.

Study population

The study population of both the pilot study and the RCT consisted of adults presenting with cytologically or histologically proven non-small cell or small cell lung cancer and their partners.[13,14] Patients in both curative and palliative stage could be included. Exclusion criteria for patients and partners were: (a) insufficient understanding of Dutch language; (b) former participation in mindfulness-based intervention; (c) current participation in other psychosocial program; (d) weekly treatment by a psychologist or psychiatrist; and (e) physical or cognitive impairments hampering participation. Patients and partners were recruited at the Radboud University Medical Centre Nijmegen and five surrounding general hospitals by their nurse practitioner. Interested couples were invited for a

research interview, in which eligibility criteria were checked, further explanation about the study was provided, and written informed consent was obtained. At the time of the research interview, couples were informed about the fact that partners would be approached for the current part of the study after the patient's death.

When, and if, we received information about the patient's death, partners who had participated in MBSR with the patient in either the pilot study or the RCT were invited for an interview at least 3 months after the patient's death. Partners received an invitation letter explaining the procedure of this part of the study. A week later the researcher contacted them to check whether they were willing to participate. Written informed consent for recording and analyzing the interview was taken prior to the interview. Although we initially aimed for purposive sampling, due to the small number of bereaved partners who met the inclusion criteria, we eventually invited all of them.

Mindfulness-based stress reduction

The aim of MBSR is to cultivate mindfulness skills to help reduce the distress and improve the quality of life associated with the diagnosis of lung cancer. Couples were provided with information material and CDs based on the manual of Kabat-Zinn.[10] The intervention consisted of mindfulness exercises, psycho-education and dialogue and was taught by an applied psychologist, psychiatrist and social worker who fulfilled the advanced criteria for mindfulness teachers of the Center for Mindfulness of the University of Massachusetts Medical School. It was delivered face-to-face in a group format and took place in either the Radboudumc Centre for Mindfulness in Nijmegen or one of the surrounding general hospitals. The intervention consisted of 8 weekly sessions of 2.5 h each and included a day of 6 h silent practice between session 6 and 7. Participants were asked to practice at home for 45 min, 6 days a week, with the help of meditation instructions on the provided CDs. The intervention was adapted to couples facing lung cancer by adding psycho-education about grief and communication exercises and was not modified during the course of the study. Mindfulness teachers were supervised during the course by a psychiatrist and mindfulness teacher (AS). Teacher adherence and competence was assessed by two independent raters using the Mindfulness-Based Interventions Teaching Assessment Criteria (MBI;TAC).[16] One teacher was rated at beginner level and left the trial after two courses. The other two teachers were rated as proficient.

Research team

MS, AS, and DH conducted the interviews. Although the participants might have known the interviewer from previous participation in the pilot study or trial, with the exception of two participants the mindfulness courses had been taught by other teachers. When the dying of the patient had been particularly painful and a partner was feeling vulnerable, participants were sometimes allowed to select an interviewer with whom they felt more familiar to make them feel more at ease. Participants knew the researchers were interested in the effects of mindfulness. All authors (all female) were involved in data analysis. They had different backgrounds and knowledge, which facilitated a broad view due to different perspectives. At the time, MS was a PhD student with an MSc degree in behavioral science. AS was a professor in psychiatry and mindfulness teacher. She was the project leader of the larger trial, taught the mindfulness courses in the pilot study and had qualitative research experience. DH was a nurse specialist in lung oncology and had extensive clinical experience with this patient group. EJ was a psychologist and mindfulness teacher and had prior experience with both teaching cancer patients and conducting qualitative research. MD was a pulmonologist specialized in lung oncology, researcher and mindfulness teacher. ML was a healthcare psychologist and senior researcher in the field of psycho-oncology. JP was a professor in medical psychology and clinical psychologist.

Box 1. Interview guide.

- How did you experience the death of your partner?
- What kind of role has mindfulness played for your partner in the period leading up to his or her death?
- What kind of role has mindfulness played for you in the period leading up to the death of your partner?
- And in the period of grieving thereafter?

Interviews

Interviews took place at the partners' homes and lasted on average 41 min (SD 18.4). Each interview (see Box 1) started with the question how the patient had died. Subsequently the role of mindfulness in the period leading up to the patient's death and thereafter was explored. Continued open questioning was used to deeply understand the provided answers. Throughout the interview, notes were taken and it was repeatedly checked whether partners really attributed their experience to the role of mindfulness. After the audio-taped interview was transcribed verbatim, a summary of the interview was returned to the interviewee for a member-check. All participants indicated their answers had been correctly interpreted.

Qualitative data analysis

Data was analyzed (Atlas.ti software) with the constant comparative method in order to develop a grounded theory on the role of mindfulness in the process of dying and

Table 1. Characteristics of partners and deceased lung cancer patients at time of interview.

	N	(%)
Gender		
Female	8	(72.7)
Male	3	(27.3)
Age, M (SD)	62.4	(8.3)
Education level		
Upper secondary education	8	(72.7)
Higher vocational training, University	3	(27.3)
Work status		
Working	3	(27.3)
Disabled	2	(18.2)
Retired	6	(54.5)
Relationship with patient		
Life partner	10	(90.9)
Close friend	1	(9.1)
Length relationship with patient, M (SD)	33.1	(12.3)
Gender patient		
Female	4	(36.4)
Male	7	(63.6)
Age patient at time of death, M (SD)	62.4	(8.0)
Time since death patient in months, M (SD)	11.4	(7.8)
Time since MBSR in months, M (SD)	28.0	(9.0)
Number of MBSR sessions, M (SD)	8.3	(1.3)

grieving.[17] The grounded theory approach is an excellent tool for analyzing an under-researched area like this, with data forming the only input for the theory. Using a subtle realism paradigm, the language used by participants was seen as directly reflecting their meaning and experience while acknowledging the inevitable effects of interpretation by the researchers during analysis.[18] Given this vulnerability to researcher interpretation, the diversity of the research group was important.

The grounded theory approach uses data coding (labeling and categorizing). Codes derived from the data are used to create categories in a theoretical framework with three phases of coding, namely open coding, axial coding and selective coding. Data analysis begins when the first interview is conducted. Continuous adaptations in the codes and topic guide are an integral part of this method. Familiarization with the data and independent coding was done by two different researchers (MS and EJ). They regularly met up to compare and discuss codes to reach consensus. In this phase, open coding was used, which consists of reading and re-reading the interviews and developing a coding tree. After five interviews, codes were discussed with AS to combine similar codes, add new codes and update the coding scheme. Based on the resulting coding scheme, MS coded the remaining interviews. After 11 interviews, a different group of researchers (MS, AS, DH, EJ, and MD) divided the codes into themes with axial coding, in which a list of categories and (sub)themes is made from the list of codes. Afterwards, MS discussed and refined these themes with ML, to derive categories from the themes and to find the core categories (selective coding). During and after the process of defining themes and categories, we continuously checked with the original data to make sure they fitted. Finally, we selected illustrative quotes for each of the selected themes and translated them into English.

Results

Study sample

From September 2012 until February 2016, 17 partners were invited and 11 participated (see Table 1). Six partners (35%) did not want to participate because they considered it too confronting to discuss the patient's death ($n = 3$) or felt participation was too much effort ($n = 3$). Those not willing to participate did not differ from participants in terms of gender and age. Participants were mostly women ($n = 8$) and on average 62 years old (SD = 8.3). One partner was the patient's best friend while all others were the life partner. On average they had been together for 33 years (SD = 12.3). On average, partners participated 11 months after the patient's death (SD = 7.8) and 28 months after MBSR participation (SD = 9.0).

Process of dying and grieving

The data gave rise to 16 themes, grouped into four categories: (1) process of dying experienced by the patient, as perceived by the partner; (2) process of dying of the patient as experienced by the partner; (3) their mutual process as perceived by the partner; and (4) the process of grieving of the partner (see Table 2). Mindfulness appeared to play a similar role for patients and partners in the period leading up to the patient's death, resulting in overlapping themes.

Process of dying – Experienced by the patient, as perceived by the partner. Partners noticed several aspects of the patients' behavior in the period leading up to their death they thought were affected by mindfulness. The following themes were identified: (1.1) *regulating thoughts and feelings*, (1.2) *accepting illness and forthcoming death*, and (1.3) *wishing partner a good future*. Two partners described how the training was too burdensome for the patient due to fatigue, shortness of breath or constant worrying. As such, patients did not seem to benefit from it.

1.1 Regulating thoughts and feelings. Partners noticed how patients became increasingly aware of anxiety and sadness about the cancer and forthcoming death. This awareness helped to allow and better regulate feelings. They learned what was helpful for them in the face of overwhelming emotions. They used the mindfulness practice when feeling distressed or short of breath.

Table 2. Relevant themes and categories corresponding to the role of mindfulness in the process of dying and grieving.

Categories	Themes
1. Process of dying – as experienced by patient, as perceived by partner	1.1 Regulating thoughts and feelings
	1.2 Accepting illness and forthcoming death
	1.3 Wishing partner a good future
2. Process of dying – as experienced by partner	2.1 Regulating thoughts and feelings
	2.2 Accepting forthcoming loss
	2.3 Taking care of patient
	2.4 Trying to take care of oneself
3. Process of dying – mutual process, as perceived by partner	3.1 Enjoying life together
	3.2 Communicating openly about forthcoming death
4. Process of grieving of the partner	4.1 Allowing thoughts and feelings
	4.2 Letting go of the past
	4.3 Feeling grateful for what has been
	4.4 Taking care of oneself
	4.5 Having faith in the future

> *"Especially because he was short of breath, the lungs you know. So, near the end he was often very short of breath. And during the mindfulness, we learned about the breathing. Focusing on the breath and calmly breathing in, breathing out (. . .) Especially in those last weeks, when he was so out of breath, he really benefitted from it."* [Female, 54 years]

1.2 Accepting illness and forthcoming death. Partners described how this awareness of their illness helped patients to let go of their previous, healthy lives and come to terms with the cancer and forthcoming death. It allowed patients to accept the limits of what they could and could not do anymore, and to accept that other people needed to take care of them. Partners described how the acceptance was associated with a sense of peace in patients.

> *"For her as a patient, she didn't get better all of a sudden, but she became more aware and let go of stuff. That's how she accepted she became ill. It's just the way it is. When you're convinced of that, it's just the way it is. You try to relate differently to it. That's how [MBSR] brought her some relief. She mentioned that a few times."* [Male, 67 years]

1.3 Wishing partner a good future. Partners mentioned that as part of accepting the forthcoming death, patients were able to look beyond their own death. While they would not spend their future together, patients wished their partners to have a happy and full life after their own death.

> *"She told me 'Okay, when it's all set and done, then find yourself a nice girlfriend. As long as you take good care of the children.' While in the year before that she said 'you better not come home with another girl.'"* [Male, 67 years]

Process of dying – Experienced by partner. To a certain extent mindfulness played a similar role for partners as it did for patients, including the following themes: (2.1) *regulating thoughts and feelings*, (2.2) *accepting forthcoming loss*, (2.3) *taking care of patient*, and (2.4) *trying to take care of oneself*.

2.1 Regulating thoughts and feelings. Similar to patients, partners mentioned they became increasingly aware of their feelings and thoughts about the forthcoming loss and a future on their own. Many partners described how mindfulness practice helped them to allow and better regulate their worries, anger, and sadness.

> "I felt very insecure when my wife was ill. What will happen when she's not here anymore? How am I supposed to do it all? (. . .) By becoming more aware of things, by knowing that it was irreversible, her illness, by knowing life will go on, and that I can contribute to that. That's how you get more certainty. You don't feel like your floating around anymore." [Male, 67 years]

Regulating their thoughts and feelings brought them some peace and quiet, and helped them to be present with the things that truly mattered in that moment.

> *"Because sometimes my head would spin. Especially in those last weeks. I was often with her in the hospice. I also did her laundry. And arranged all kind of things. And I also maintained the contact with her friends. Sometimes it was almost too much. But I really tried to be there with her. And not in my head with all the other stuff. Really feeling. Here I am and this is our connection. And not letting myself getting influenced by all the other stuff."* [Female, 46 years]

2.2 Accepting forthcoming loss. The letting go of thoughts and feelings surrounding the cancer and forthcoming loss, and the sense of peace that went with it, allowed partners to accept the patients' illness and forthcoming death. Partners explained that accepting the impending loss was also facilitated by the patients themselves. When patients accepted their own death and felt peaceful, partners were also better able to accept it.

> *"And again, I would have loved to turn hundred with him but that wasn't in the cards for us and I knew that. We are both matter of fact kind of types. But also because of the*

mindfulness. Of course I was sad but you know it's not going to happen. We had bad luck (. . .) And he was very calm and that's why I also could let it all happen." [Female, 54 years]

For some partners, it appeared too difficult to turn towards and pay attention to their thoughts and emotions in such a distressing time. They described to avoid their emotions and thoughts and consequently denied the fact that the patient was dying.

2.3 Taking care of patient. The mindfulness training helped partners to take better care of the patient. Rather than getting automatically drawn into the caregiver role, they took a conscious decision about the extent to which they would take care of the patient. While some partners wanted to remain working as it offered them a good distraction throughout the day, others decided to quit their job in order to spend the remaining time with the patient.

"That you can let everything go of yourself. This process, being able to walk this path together. I think that's beautiful. I really appreciate that, also that he allowed it. It didn't feel like I had to put myself aside because it was my decision." [Female, 56 years]

Partners also mentioned mindfulness helped them to see the situation from the patients' perspective. It helped them to give patients the space they needed. Seeing the patients' strength helped partners to better support them.

"*Letting him be who he is, not wanting to change, not wanting to fix. Because I am the type who can do that. Yes, I also learned that, taking a step back. He has his own process. And I cannot feel what the other is feeling. He can try to explain what he is feeling."* [Female, 56 years]

2.4 Trying to take care of oneself. Although taking care of themselves proved to be difficult when also taking care of the patient, partners described how they, in the little time they had for themselves, tried to take a nap or practice mindfulness in order to regain some peace and calm. After the patients' death, partners had more time to set boundaries and focus on themselves (see process of grieving below).

"Sometimes it was a bit much. I also had to watch him and take action. So I was on high alert. My body and mind were constantly alert. I hardly slept. And there I found that you can worry a lot but it will only take more energy. And when I had maybe an hour, I tried to focus. Letting the outside world be the outside world. And focusing again, it all hurts but okay, take a deep breath." [Female, 61 years]

Process of dying – Mutual process, as perceived by the partner. Partners also dedicated changes in their relationship to the role of mindfulness, including: (3.1) *enjoying life together* and (3.2) *communicating openly about the forthcoming death*.

3.1 Enjoying life together. Partners described how mindfulness helped the couple to be present with what was happening in the moment and enjoy the things they were still able to do together. It allowed them to experience joy despite all the difficulties they were going through.

"We really enjoyed what we had. Not focusing on what's yet to come but on what we have now, what we can do now because at a certain point things will start to fall away. He couldn't walk that well anymore because of the side effects of the chemo but we were still able to cycle together. We really made something out of the things we could still do, rather than remaining stuck in what we couldn't do anymore." [Female, 54 years]

3.2 Communicating openly about the forthcoming death. Partners also mentioned that the communication exercises during the MBSR facilitated the couple to discuss emotionally charged issues at home, such as the decisions to be taken around the patient's death. Rather than trying to shield one another from pain and sadness, they were able to be present with their thoughts and emotions, how difficult or unpleasant they might be, and discuss their needs and wishes with each other. This open communication helped partners to remain calm when the patient died.

"Those aren't pleasant conversations but in some ways they were. Because then we had everything out in the open and you know where you stand. And what needs to happen when the other is unable to speak the words. (. . .) We can wait until the family has arrived. No hurries. But also checking whether he can remain conscious any longer. Things like that. It really took away a lot of my worries and stress. We knew the moment was coming and now it is here. Okay, it's just okay. This is what we talked about, this is what we wanted. This is how it is going to happen." [Female, 61 years]

Process of grieving of the partner. Partners described how mindfulness supported them in coping with their loss. The following themes were identified: (4.1) *regulating thoughts and feelings*, (4.2) *letting go of the past*, (4.3) *feeling grateful for what has been*, (4.4) *taking care of oneself*, and (4.5) *having faith in the future*.

4.1 Regulating thoughts and feelings. Partners mentioned how mindfulness practice helped them to allow their thoughts and feelings after the patients' death. They described how they took time to grieve; to really experience their sadness without getting overwhelmed by it.

"It's not always nice when you lose your partner. Not by a long shot. There are more lows than highs. It can't be any other

way. When you're sad, you're sad. And when you're happy, you're happy. That is okay. Don't go hiding yourself. But you need to try not let the lows get out of control. And you need to try, when there are highs, try and enjoy it." [Male, 67 years]

4.2 Letting go of the past. Taking the time to grieve and facing their loss helped partners to let go of the past. It helped them to deal with the intense longing for their loved one who was no longer there. This took time. One woman described how months after her husband's death, when the intense feelings of loss had softened a bit, she started to appreciate the mindfulness anew, and realized that acceptance was the only way forward.

"Ok Mary, what has been, has been. He won't be coming back and it will never be as it used to be. And I will have to learn to accept that. And that's how I got myself some peace (. . .) Not in the beginning, but later on, I thought, they [mindfulness teachers] were right. I need to go on with what I do have." [Female, 70 years]

4.3 Feeling grateful for what has been. When looking back on their lives together with the patients, partners felt grateful for a life that once was. Some also mentioned they were specifically grateful for the time leading up to the patients' death. The open communication beforehand about the end-of-life decisions helped partners to make the "right" choices. Consequently, partners felt particularly grateful that the patient had died peacefully, which facilitated their grieving process.

"Of course it has been a sad and hard time. It was difficult. But it also gave me an okay feeling. That whole process. I never look back at it badly. I feel that what had to be discussed has been discussed and what had to be done has been done. And that's all okay (. . .) It might sound conceited but I feel like I did a good job." [Female, 61 years]

4.4 Taking care of oneself. Partners also learned it was time to start taking care of themselves, especially after taking care of the patient for so long. Gradually they would choose what felt right or beneficial in that moment. For example, they would set boundaries and say no to others and regularly take a day off work to relax.

"I act more in line with my feelings. And I know, that in the past that was much more difficult because other people would always come first. And I decided, after his death, there is only one person of whom I am going to take really good care of and that is me. And the dog. And I will always be there for others but not at my own expense anymore." [Female, 56 years]

4.5 Having faith in the future. As a result, partners started having faith in the future again. Mindfulness practice provided them with tools to appreciate the present moment. Partners enjoyed visits from their grandchildren and helping out others.

"I really do have faith that my life will be fine. Yes, we would have loved to grow old together but it wasn't meant to be. And I plan to go on and really live. We also did that during his illness, we really lived. And not like, not thinking about it, and living. But really enjoying life." [Female, 56 years]

To summarize the grounded theory developed in the course of the study, the role of mindfulness in the process of dying and grieving experienced by the couple – as perceived by the partner – was that it helped regulating thoughts and feelings. This, in turn, helped accepting the illness and forthcoming death and facilitated an open communication between patient and partner. Regulating thoughts and feelings also facilitated the grieving process; it helped partners to accept their new reality, take care of themself and look back with gratitude.

Discussion

The present qualitative study explored how partners of lung cancer patients experienced the role of mindfulness in the dying and grieving process. Regarding the dying process, mindfulness helped couples to allow and regulate difficult thoughts and feelings, which facilitated accepting the patient's impending death. Patients were able to look beyond their own death and wish their partners a good future. Mindfulness helped partners decide to what extent they could take care of the patient. It also helped couples to enjoy things together and communicate more openly about emotionally charged issues. By contrast, some patients and partners did not seem to benefit from MBSR. They experienced the training as physically too burdensome or emotionally too confrontational. During the grieving process, mindfulness facilitated partners in allowing difficult thoughts and feelings, and taking the time to grieve, which helped them to let go of the past while being grateful for what had been. They were able to set boundaries and take good care of themselves, giving them faith for the future.

Strengths and limitations

While the effects of mindfulness have been extensively studied in cancer patients,[19,20] this is the first study exploring its role in the dying and grieving process. Not all invited partners participated in the interviews, for example because they found it too confronting to discuss the patient's death. This might have resulted in a biased sample. The variety in both the time before the patient died and the time it took before partners were able to be interviewed adds to the heterogeneity of the sample. This could be regarded as a limitation, but might also contribute to the aim of purposive sampling in qualitative research, namely to obtain a diverse

sample reflecting a broad scope of experiences and views. Due to the small and vulnerable sample of potential participants, data saturation was not entirely reached. While we were able to unravel a broad range of experiences facilitated by mindfulness, we cannot rule out the possibility that potential experiences are missing. Moreover, the attribution of experiences to mindfulness was difficult to ascertain. We have chosen to closely follow patients' experiences in this: when they considered a certain process to be facilitated by mindfulness, we coded it as such.

In addition, our findings on patients are based on partners' experiences. Although for scientific reasons it would be good to directly interview the patient for a more comprehensive view on the role of mindfulness in dying, it is obvious that this will be hampered by both practical and ethical restraints. Other potential weaknesses of the study are that the partners might have known the interviewer from previous contact during the study and that the majority of coders were mindfulness teachers, both of which might have resulted in biased results.

The role of mindfulness

Previous studies have shown that preparedness and acceptance of death are important attributes of a peaceful death and healthy grieving.[5–9] The present study shows that MBSR offered to lung cancer patients and their partners can facilitate the regulation of thoughts and emotions, fostering acceptance of the forthcoming death and an open communication between partners about the imminent farewell. In turn, this seemed to result in a peaceful death and healthy grieving.

The themes of the partners' grieving process closely fit the well-known dual process model of bereavement.[21,22] This model posits that one adapts to a loss by oscillating between loss-oriented and restoration-oriented coping.[21] The themes "Taking care of oneself" and "Having faith in the future" are associated with restoration-oriented coping, in which the bereaved individual copes with life changes consequential to the loss that has occurred. "Allowing thoughts and feelings," "Letting go of the past," and "Feeling grateful for what has been" are related to loss-oriented coping, which addresses those stressors related to the loss itself.

Mindfulness seems to offer tools that help relating to loss in a helpful manner. Mindfulness is rooted in Buddhist psychology and one of its fundamental principles is the notion of impermanence.[23] That is, the understanding that every single thing, event or person that comes into being, will eventually pass. As we have the tendency to hold on to what is pleasant and push away the unpleasant, the notion of impermanence causes pain and suffering.[23] By turning toward fear and sadness, and cultivating the willingness to be equally near to the pleasant and unpleasant, one can learn to accept that loss is a part of life and relate to that what is present in the moment.[24]

Implications for clinical practice

As already noted, the pilot study and the trial yielded contrasting findings with regard to the effectiveness of MBSR in reducing distress of partners of cancer patients. The findings of the current qualitative study are not in line with the results of our trial, which showed that partners did not really benefit from the course.[13] Many partners prioritized the needs of the patients during the period they participated in the mindfulness course. Partners might have needed more time before they could allow themselves to use the skills from the program. After the death of the patients, when the initial feelings of grief had softened a bit, they were able to take up the mindfulness practice for themselves and started to experience the benefits. Future research should explore the best ways and timing for advanced cancer patients and their partners to participate in mindfulness-based interventions to support the dying and grieving process. Previous qualitative work emphasizes the importance for patients of being informed early on, allowing them to carefully consider participation and timing with their healthcare professional.[25]

Authors' contributions

M.S., A.S., D.H., M.D., and J.P. conceived the study. M.S. collected and managed data with A.S. and D.H. M.S. analyzed the data with help from all other authors. A.S., M.D., and J.P. provided academic scientific direction for the study (design, analysis, reporting). M.S. drafted the manuscript, which was reviewed by all other authors. All authors agreed with the final analysis and interpretation.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical approval

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