Received: 17 November 2020 | Revised: 27 January 2021 | Accepted: 14 February 2021

DOI: 10.1002/pon.5658

WILEY

ORIGINAL ARTICLE

Psychological symptoms in widowed parents with minor children, 2–4 years after the loss of a partner to cancer

Megan W. Falk[1] | Charlotte Angelhoff[1,2] | Anette Alvariza[1,3] | Ulrika Kreicbergs[1,4] | Josefin Sveen[1,5]

[1]Department of Health Care Sciences, Ersta Sköndal Bräcke University College, Stockholm, Sweden

[2]Department of Biomedical and Clinical Sciences, Crown Princess Victoria's Child and Youth Hospital, Linköping University, Linköping, Sweden

[3]Capio Palliative Care Unit, Dalen Hospital, Stockholm, Sweden

[4]Department of Women's and Children's Health, Childhood Cancer Research Unit, Karolinska Institute, Stockholm, Sweden

[5]Department of Neuroscience, National Center for Disaster Psychiatry, Uppsala University, Uppsala, Sweden

Correspondence
Josefin Sveen, Palliative Research Centre, Department of Health Care Sciences, Ersta Sköndal Bräcke University College, Box 11189, SE-100 61 Stockholm, Sweden.
Email: Josefin.Sveen@neuro.uu.se

Funding information
Familjen Kamprads Stiftelse; Gålö Foundation

Abstract

Objectives: This study aimed to explore psychological symptoms in widowed parents with minor children, 2–4 years after the death of their partner. A second aim was to examine the associations between psychological symptoms and nonmodifiable and modifiable illness and healthcare-related factors.

Methods: A cross-sectional survey study on widowed parents with minor children after the loss of a partner to cancer. In total, 42 parents completed an online questionnaire including instruments for assessing symptoms of anxiety, depression, grief rumination, prolonged grief, and posttraumatic stress. Descriptive statistics, Spearman's correlation coefficients, Mann–Whitney *U* tests and Kruskal–Wallis tests were used to analyze differences in symptomology based on modifiable and nonmodifiable factors.

Results: Parents reported moderate–severe symptoms of anxiety, posttraumatic stress, and depression. Reporting having received more information during the partner's illness regarding how the illness could affect the partner's somatic and psychological health and where to turn for support were associated with fewer psychological symptoms.

Conclusions: A substantial proportion of widowed parents with minor children reported a moderate–severe symptom burden regarding depression, anxiety, and posttraumatic stress, and less so with prolonged grief symptoms. This study also highlighted the value of receiving information from healthcare personnel regarding the somatic and psychological effects of a partner's illness and where widowed parents can turn for support.

KEYWORDS
anxiety, depression, posttraumatic stress, prolonged grief, psycho-oncology, rumination

1 | BACKGROUND

When a parent of minor children dies, family life is disrupted and family members are at increased risk of developing psychological symptoms.[1] Widowed parents often struggle to take on new roles which their partner was previously responsible for, while dealing with their own grief, attempting to promote family functioning and meeting the needs of their children.[2,3] The literature on spousal bereavement shows that widowed people have an elevated risk of psychological symptoms such as depression and anxiety.[4–6]

Even though ample research has been conducted on spousal bereavement, only a few studies have focused on widowed parents with minor children living at home. These studies found that young widows and widowers with dependent children are likely to report higher levels of grief and depression than older counterparts.[7] They also seem to feel isolated from their peers while coping with life changes central to widowhood, including grieving the death of their partner while transitioning to single parenthood.[8] Yopp et al.[1] found elevated levels of grief and depression in widowed fathers, with an increased risk of psychological symptoms associated with higher levels of parental stress. The widowed parent's psychological health, coping skills, ability to communicate with their children, and ability to emotionally meet their children's needs have all been found to affect the development of psychological symptoms in children.[8–13] Moreover, parents coping with posttraumatic stress symptoms had an increased risk of parenting stress, lower parenting satisfaction, less optimal parent–child relationships, and more frequent use of negative parenting practices.[14]

This study focused on widow(er)s who had lost their partner to cancer. The results from the project regarding children have been published previously (see Angelhoff et al.[15] Weber et al.[13] and Falk et al.[16]). Cancer is among the leading causes of death for adults aged 25–54 years.[17] One advantage of examining a cancer-specific population was that most of the deaths were anticipated, allowing the authors to identify and examine potentially modifiable illness- and healthcare-related factors and explore their relationships with widowed parents' psychological symptoms. Earlier research has shown that modifiable factors may be associated with psychological symptoms in bereaved individuals such as length of awareness time, being able to take in information that the illness could not be cured, and preparedness.[1,18]

The current study aimed to explore the psychological symptom burden of prolonged grief, grief rumination, posttraumatic stress, depression, and anxiety, in widowed parents with minor children, 2–4 years after the death of their partner. A second aim was to examine associations between these psychological symptoms and nonmodifiable factors and modifiable healthcare factors. Nonmodifiable factors included gender, age, number of dependent children, type of cancer, length of time between diagnosis and death, and time since loss. Modifiable factors were the amount of information received from healthcare personnel, the widowed parent's perception of their partner's care, where the partner died, and if the widowed parent could say goodbye to their partner in a meaningful way.

2 | METHODS

2.1 | Design

This study used a cross-sectional survey design and was conducted in accordance with the Declaration of Helsinki.[19] Ethical approval was received by the Regional Ethical Review Board in Stockholm, Sweden (No: 2016/1192-31/1).

2.2 | Participants and procedure

Individuals aged 25–65 years who had died of malignancy between 2013 and 2015 in Stockholm County were identified from the Swedish National Causes of Death Register. The Multi-Generational Register at Statistics Sweden was used to identify any partner of the deceased. Families were considered eligible if the deceased parent and the widowed parent lived together at the time of death and had children ages 1–18 years at the time of death who were still registered at the same address as the widowed parent at the time of the study. Inclusion criteria included being able to read and write in Swedish and residing in Stockholm County. In total, 214 eligible families were identified and the widowed parents in these families were sent an information letter by Statistics Sweden. The researchers were unable to contact potential participants unless they signed up for the study. Two reminder letters were sent out, 1 month apart. The information letters included the address to a website, where the widowed parent could sign up to participate by providing their contact information. Participants provided informed consent by signing up for the study and completing the online questionnaire. All participants had lost their partner 2–4 years prior to completing the questionnaire.

2.3 | Measurements

2.3.1 | Study-specific questionnaire

A study-specific questionnaire with questions about the care provided to the deceased parent and the widowed parent's perception of the care given, along with instruments measuring the widowed parent's symptoms of prolonged grief, anxiety, depression, posttraumatic stress, and grief rumination was developed based on interviews conducted with four parents whose partners had died. Three of these parents also participated in face-to-face validation of the questionnaire using a think aloud methodology or by reading the questionnaire and writing comments concerning each of the questions ensuring the questions had been understood as intended and were able to be responded to by the potential participants.[20]

Nonmodifiable factors

Questions regarding non-modifiable factors included the widowed parent's age and gender, how many dependent children they had

living at home, what type of cancer their partner had, the length of time from their partner's diagnosis to death, and the month and year their partner died, which was used to determine time since loss.

Modifiable factors

Specific questions regarding modifiable healthcare factors included: how much information did you receive from healthcare personnel during your partner's illness regarding (a) your partner's illness, (b) how the illness could affect your partner's somatic and psychological health, and (c) where you could turn for support. Each of these three questions had the response options: No information, Too little information, and Enough information.

Widowed parents were also asked to rate their perception of the care their partner received during their last month of life regarding three statements: I had a reasonable amount of responsibility for my partner's care; I felt sure that my partner would receive the care needed; I had the opportunity to discuss my partner's illness with healthcare personnel. These questions had the response options: Not true, Somewhat true, Very true and Completely true.

A question asking if the widowed parent had been able to say goodbye to their partner in a meaningful way could be answered yes or no. Widowed parents were also asked to report where their partner had died.

2.3.2 | The Prolonged Grief Disorder-13

The Swedish version of the Prolonged Grief Disorder-13 (PG-13) measures symptom levels of prolonged grief.[21] The PG-13 contains 11 items which assess cognitive, behavioral, and emotional symptoms. These symptom items are rated on a 5-point scale (1 = not at all, 5 = several times a day/overwhelmingly, range 11–55). There are also two items (3 and 13) assessing duration of symptoms and impairment, which are answered yes or no. A higher score indicates more symptoms of prolonged grief. A score of ≥35 indicates possible PGD.[22] The internal consistency of the PG-13 in this sample was good (Cronbach's $\alpha = 0.94$).

2.3.3 | Generalized Anxiety Disorder 7-item scale

Symptoms of anxiety were measured with the Generalized Anxiety Disorder 7 (GAD-7), which consists of seven items, rated on a 4-point scale (0 = not at all, 3 = nearly every day) with a maximum score of 21. Scores 5–9 indicate mild anxiety, 10–14 moderate anxiety, and ≥15 severe anxiety.[23] The internal consistency of the GAD-7 in this sample was good (Cronbach's $\alpha = 0.93$).

2.3.4 | The Montgomery–Åsberg Depression Rating Scale

To measure symptoms of depression, the self-rating version of The Montgomery–Åsberg Depression Rating Scale (MADRS) was used. MADRS consists of nine items on a 7-point scale (0–6 points), rating sadness, inner tension, reduced sleep, reduced appetite, concentration difficulties, fatigue, inability to feel, pessimistic thoughts, and suicidal thoughts. A higher score indicates greater risk of depression.[24] A score between 13 and 19 points indicates mild depression, 20–34 points moderate depression, and ≥35 points severe depression.[25] The internal consistency of the MADRS-S in this sample was good (Cronbach's $\alpha = 0.88$).

2.3.5 | Posttraumatic Stress Disorder Checklist for DSM-5

The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5) was used to measure symptoms of posttraumatic stress. The instrument includes 20 questions on a 5-point scale (0 = not at all, 4 = extremely) with a possible rating score of 0–80 points. A higher score indicates more symptoms of posttraumatic stress.[26,27] A score of ≥33 is suggested as a clinical cut-off for a probable posttraumatic stress disorder (PTSD).[27] The internal consistency for reliability of the PCL-5 in this sample was good (Cronbach's $\alpha = 0.94$).

2.3.6 | The Utrecht Grief Rumination Scale

The Utrecht Grief Rumination Scale (UGRS) was used to measure various aspects of grief rumination, defined as thinking repetitively and recurrently about causes and consequences of a loss and loss-related emotions.[28] The UGRS consists of 15 items rated on a 5-point scale (1 = never, 5 = very often), with higher scores indicating more rumination (range: 15–75). The Swedish version of the UGRS has been validated and reliability-tested with good results.[29] The internal consistency of the UGRS in this sample was good (Cronbach's $\alpha = 0.93$).

2.4 | Analysis

Descriptive statistics were used to describe the widowed parents' characteristics and psychological symptoms. Spearman's correlation coefficients assessed correlation between each instrument and the modifiable and nonmodifiable factors with continuous response alternatives. Mann Whitney *U*-tests analyzed differences in symptomology based on modifiable and nonmodifiable factors with two

TABLE 1 Participant characteristics

Demographic data	
Sex	*n* (%)
Female	24 (57.1)
Male	18 (42.9)
Highest education	
Primary school	1 (2.4)
Upper secondary school	11 (26.2)
University	30 (71.4)
Working status	
Working	39 (92.9)
Studying	2 (4.8)
Sick leave	1 (2.4)
Marital status	
Cohabitant	6 (14.3)
In a relationship	9 (21.4)
Single	27 (64.3)
Health status	
Experiences … often/almost always	
Abdominal pain	10 (23.8)
Chest tightness	19 (45.3)
Throat tightness	15 (35.7)
Noise sensitivity	13 (31.0)
Respiratory distress	10 (23.8)
Muscle weakness	13 (31.0)
Energy loss	35 (83.3)
Dry mouth	9 (21.4)
Sought care after the loss of the partner due to…	
Anxiety	16 (38.1)
Depression	9 (21.4)
Sickness leave after the loss of the partner due to…	
Psychological ill-health, e.g., anxiety, depression, stress, exhaustion	19 (45.2)
The partner's illness or death	25 (59.5)
Parental sickness leave to care for the child after the loss of the partner	21 (50.0)

TABLE 2 Parent's reported psychological symptoms

Prolonged grief[a]	Total sample (*n* = 42)
Mean (SD)	23.4 (10.0)
Prolonged grief disorder (>35), *n* (%)	5 (12)
Anxiety[b]	
Mean (SD)	10.7 (4.6)
Mild (5–9), *n* (%)	23 (55)
Moderate (10–14), *n* (%)	13 (31)
Severe (>15)	6 (14)
Depression[c]	
Mean (SD)	17.4 (7.0)
Mild (13–19), *n* (%)	17 (41)
Moderate (20–34), *n* (%)	13 (31)
Severe (>35), *n* (%)	1 (2)
Posttraumatic stress[d]	
Total mean scores (SD)	34.8 (13.7)
PTSD symptoms (>33), *n* (%)	17 (40)
Grief rumination[e]	
Total mean score (SD)	35.5 (12.6)

[a]Prolonged Grief Disorder-13 (PG-13), score range 11–55.
[b]Generalized Anxiety Disorder 7-item Scale (GAD-7), score range 0–21.
[c]Montgomery–Åsberg Depression Rating Scale (MADRS-S), score range 0–54.
[d]Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5), score range 0–80.
[e]Utrecht Grief Rumination Scale (UGRS), score range 15–75.

response options. Kruskal–Wallis tests analyzed differences in symptomology based on modifiable and nonmodifiable factors with more than two response options. Significance levels were set at $p < 0.05$ for all analyses. SPSS version 25 was used for statistical analysis.

3 | RESULTS

3.1 | Characteristics

In all, 42 widowed parents (24 mothers and 18 fathers), average age 48.1 years (SD = 5.9) with a mean time since loss of 3.5 years (SD = 0.9) participated in this study. While 93% of parents were working at the time of the study, approximately 50% of parents reported taking parental leave and/or sick leave following their partner's death. The most frequently reported physical symptoms were chest tightness (45%) and energy loss (83%). The parents' demographic data and self-reported health status after the loss of their partner are presented in Table 1. Widowed parents had between one and three dependent children ages 4–20 years living at home, with a mean age of 12.78 years (SD = 4.42). All of the deceased partners had cancer including: breast cancer (*n* = 4), skin cancer (*n* = 4), stomach or colon cancer (*n* = 13), pancreatic cancer (*n* = 1), brain cancer (*n* = 2), lung cancer (*n* = 3), leukemia (*n* = 3), kidney cancer (*n* = 1) lymphoma (*n* = 2), nose and throat cancer (*n* = 3), sarcoma (*n* = 2), liver cancer (*n* = 1), ventricular cancer (*n* = 1), bile duct cancer (*n* = 1), and myeloma (*n* = 1).

TABLE 3 Spearman's *rho* correlations between psychological symptoms and (non)modifiable factors

	UGRS	PG-13	GAD-7	MADRS	PCL
Age	−0.17	0.00	−0.05	0.07	−0.01
Number of children	0.07	−0.08	0.03	0.04	−0.13
Time from diagnosis to death	0.18	0.15	−0.12	−0.00	0.01
Time since loss	−0.031	−0.10	0.01	−0.01	−0.13
Information regarding partner's illness	−0.24	−0.14	−0.16	−13	−18
Information regarding how the illness could affect partner's health	−0.45**	−0.26	−0.30*	−0.34*	−0.39**
Information regarding where you could turn for support	−0.48**	−0.39**	−0.36*	−0.40**	−0.56**
I had a reasonable amount of responsibility for my partner's care	0.02	0.15	0.11	0.11	−0.03
I felt sure that my partner would receive the care needed	0.14	0.12	0.03	−0.01	−0.11
I had the opportunity to discuss my partner's illness with health care personnel	−0.04	−0.02	−0.21	−0.12	−0.18

Abbreviations: GAD-7, Generalized Anxiety Disorder 7-item Scale; MADRS, Montgomery–Åsberg Depression Rating Scale; PG-13, Prolonged Grief Disorder-13; PCL, Posttraumatic Stress Disorder Checklist for DSM-5; UGRS, Utrecht Grief Rumination Scale.

*$p < 0.05$.

**$p < 0.01$.

3.2 | Psychological symptoms

Mean scores and frequencies of the widowed parents' reports of prolonged grief, anxiety, depression, posttraumatic stress, and grief rumination are shown in Table 2. As a group, the parents reported moderate-severe symptoms of anxiety (45%), depression (33%), and posttraumatic stress (40%). At the individual level, four mothers and one father reported scores above the cut-off for possible PGD. Nine mothers and four fathers reported symptoms of moderate depression and one mother reported symptoms of severe depression. Five mothers and one father reported severe symptoms of anxiety and 11 mothers and 6 fathers reported above cut-off score for possible PTSD. There were no statistically significant differences between mothers and fathers for any of the measures of psychological symptoms (Table 4).

3.3 | Psychological symptoms and nonmodifiable factors

There were no significant associations between psychological symptoms and the widowed parent's age, number of dependent children, length of illness from diagnosis to death, time since loss, or type of cancer (Table 3).

3.4 | Psychological symptoms and modifiable factors

Responses to the question "How much information did you receive from healthcare personnel during your partner's illness regarding how the illness could affect your partner's somatic and psychological health?" were significantly correlated with symptoms of grief rumination ($r_s = -0.45$, $p = 0.00$), anxiety ($r_s = -0.30$, $p = 0.048$), depression ($r_s = -0.34$, $p = 0.02$), and posttraumatic stress ($r_s = -0.39$, $p = 0.00$). Reporting having received more information regarding how the illness could affect the partner's somatic and psychological health was associated with fewer psychological symptoms in the widowed parent.

The question "How much information did you receive from healthcare personnel during your partner's illness regarding where you could turn for support?" was significantly correlated with grief rumination ($r_s = -0.48$, $p = 0.00$), prolonged grief ($r_s = -0.39$, $p = 0.00$), anxiety ($r_s = -0.36$, $p = 0.01$), depression ($r_s = -0.40$, $p = 0.00$), and posttraumatic stress ($r_s = -0.56$, $p = 0.00$). Reporting having received less information on where one could turn for support was associated with higher ratings of grief rumination, prolonged grief, anxiety, depression, and posttraumatic stress.

Responses to the statements "I had a reasonable amount of responsibility for my partner's care," "I felt sure that my partner would receive the care needed," and "I had the opportunity to discuss my partner's illness with healthcare personnel" were not significantly associated with any psychological symptoms.

Neither the responses to the question regarding whether the widowed parent said goodbye to their partner in a meaningful way nor those regarding the place of the partner's death (at home $n = 6$, at the hospital $n = 16$, in hospice or palliative care ward $n = 16$) showed significant differences in psychological symptoms (Table 4).

4 | DISCUSSION

The results of this study indicated that psychological symptoms are prevalent and persistent in widowed parents up to four years after the death of their partner, regardless of gender or time since loss. Reporting having received more information during the partner's

TABLE 4 Differences for psychological symptoms between gender, having said goodbye in a meaningful way, type of cancer, and place of death

	Gender of participant *U*	Said goodbye in a meaningful way (yes = 25; no = 17) *U*	Type of cancer (*df* = 6) X^2	Place of death (*df* = 2) X^2
Prolonged grief[a]	221.5	167.0	3.28	0.57
Anxiety[b]	157.0	205.5	7.11	0.32
Depression[c]	150.5	208.0	5.58	0.82
Posttraumatic stress[d]	20.83	190.5	5.56	0.3
Grief rumination[e]	216.0	186.0	5.96	1.24

Abbreviations: *U* , Mann–Whitney *U* test; X^2, Kruskal–Wallis *H* test.

*$p < 0.05$.

[a]The Prolonged Grief Disorder-13.

[b]Generalized Anxiety Disorder 7-item Scale.

[c]The Montgomery–Åsberg Depression Rating Scale.

[d]Posttraumatic Stress Disorder Checklist for DSM-5.

[e]The Utrecht Grief Rumination Scale.

illness regarding how the illness could affect the partner's somatic and psychological health, and where one could turn for support were associated with fewer psychological symptoms in widowed parents.

Most of the widowed parents scored below the suggested cut-off for possible PGD, while as many as 40% reported posttraumatic stress levels above the suggested cut-off for possible PTSD. This prevalence of posttraumatic stress is in line with a previous study on bereaved relatives of cancer patients, which found that 40% had probable PTSD.[30] Similarly, when conducting interviews with bereaved cancer caregivers 6 months postloss, all 32 participants described their experience of the patient's death using language indicating traumatization and several participants described symptoms of PTSD such as intrusive memories related to the patient's death.[6] It is important to acknowledge persisting psychological symptoms in widowed parents, as they may not only affect a parent's health and well-being, but also their ability to raise child(ren) and, by extension, the child(ren)'s psychological health.[8–13]

It is noteworthy that the amount of information a parent reported receiving regarding how the illness could affect their partner's somatic and psychological health as well as where they could turn for support were associated with psychological symptoms. The information provided to patients' families is something that healthcare personnel can improve. Barry[31] found that 25% of bereaved individuals reported that lack of information concerning the prognosis and impending death hindered them from being able to prepare for the loss. Henriksson and Andershed[32] examined a support group for family members—most of them partners or spouses of patients—in specialized palliative care and found that receiving information from healthcare personnel led to increased understanding of the gravity of the illness as well as to increased understanding that the patient would die. This in turn led the participating family members to feel more prepared for what would happen. Being prepared has also been associated with stronger feelings of reward and hope, better health, a sense of having control over the situation, and long-term well-being.[18,32–34]

A lack of preparedness, on the other hand, has been associated with increased psychological morbidity in bereaved family members.[35] For younger widowers, low preparedness has been associated with an increased risk for anxiety, sleep disorders, emotional numbness, lower quality of life, and unresolved grief.[36] Why preparedness is extra protective for younger widow(ers) is not clear. It may be that older people are more prepared for death in general or that the death of an older person is more expected than the death of a younger person.[36] At the same time, younger widow(s) likely have full time jobs and children to care for at home which may limit their time spent with their dying spouse.[36] Men with low preparedness reported a sense of missing out on spending time with their wife and were twice as likely to report feelings of guilt and regret which may cause psychological symptoms to develop.[36] At the same time, feelings of grief may promote the development of new coping skills which are especially important for widowed parents as their ability to cope with the loss, be parents, and communicate with their children has been shown to mediate their children's reaction to the death.[37,38] death.[37,38] The lack of significant results for most of the modifiable and non-modifiable factors may indicate that individual- or family-related factors, such as coping style, cohesiveness, quality of relationships or family communication, may be more relevant to the development of psychological symptoms in widowed parents, which is in line with Yopp et al.[1]

5 | CLINICAL IMPLICATIONS

This study increases the understanding of widowed parents' high psychological symptom burden and may aid clinicians in providing effective communication throughout the illness trajectory. Information to the parents regarding how their partner's illness may affect somatic and psychological health and where to turn for support were associated with fewer psychological symptoms which highlights the importance of receiving information from healthcare personnel. Therefore, increasing the amount and improving the quality of information provided to patients' partners should be prioritized in oncology and palliative care settings.

6 | STUDY LIMITATIONS

Although this study provides knowledge of psychological symptoms in widowed parents of minor children, some limitations need to be considered. First, the small sample size limits the statistical power and hence study conclusions, which could be a reason for the lack of gender differences in psychological symptoms. Second, the sample is rather homogenous; most of the parents were employed and educated at university level, which limits the conclusions and the full understanding of psychological symptoms in widowed parents at different socioeconomic levels. The low response rate may indicate a selection bias that participants with worse health status did not respond. Nevertheless, our results showed that widowed parents were at risk of developing psychological symptoms including grief rumination, anxiety, depression, prolonged grief, and posttraumatic stress. The cross-sectional design makes it difficult to draw conclusions about the parents' psychological symptoms over time and the temporal influence of the modifiable factors on those symptoms. There may also be a recall bias. As the authors did not know how many families would be eligible for the study, a power analysis was not conducted.

7 | CONCLUSIONS

A tentative conclusion was that a substantial proportion of widowed parents with minor children had a high symptom burden. This study also highlighted the value of providing parents with information regarding the somatic and psychological effects of their partner's illness and where the parent can turn for support.

ACKNOWLEDGMENTS

The authors want to thank all the participating families for their willingness to share their experiences with us. Financial support was received from Ingvar Kamprad Family Foundation (54502) and Gålö Foundation (54505).

CONFLICT OF INTEREST

None.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Charlotte Angelhoff https://orcid.org/0000-0002-0174-8630
Josefin Sveen https://orcid.org/0000-0002-5523-8126

REFERENCES

1. Yopp JM, Deal AM, Nakamura ZM, et al. Psychological and parental functioning of widowed fathers: the first two years. *J Fam Psychol*. 2019;33(5):565.
2. Weber M, Alvariza A, Kreicbergs U, Sveen J. Communication in families with minor children following the loss of a parent to cancer. *Eur J Oncol Nurs*. 2019;39:41-46.
3. Silverman PR, Thomson S. When men grieve: widowers' stories of coping with their wives' deaths. *Omega (Westport)*. 2018;77(2):133-153.
4. Blanner Kristiansen C, Kjaer JN, Hjorth P, Andersen K, Prina AM. Prevalence of common mental disorders in widowhood: a systematic review and meta-analysis. *J Affect Disord*. 2019;245:1016-1023.
5. Sandler Tein J-Y, Cham H, Wolchik S, Ayers T. Long-term effects of the Family Bereavement Program on spousally bereaved parents: grief, mental health problems, alcohol problems, and coping efficacy. *Dev Psychopathol*. 2016;28(3):801-818.
6. Sanderson C, Lobb EA, Mowll J, Butow PN, McGowan N, Price MA. Signs of post-traumatic stress disorder in caregivers following an expected death: a qualitative study. *Palliat Med*. 2013;27(7):625-631.
7. Zisook S, Shuchter SR, Sledge P, Mulvihill M. Aging and bereavement. *J Geriatr Psychiatr Neurol*. 1993;6(3):137-143.
8. Yopp JM, Rosenstein DL. Single fatherhood due to cancer. *Psycho Oncol*. 2012;21(12):1362-1366.
9. Cipriano DJ, Cipriano MR. Factors underlying the relationship between parent and child grief. *Omega (Westport)*. 2019;80(1):120-136.
10. Hagan MJ, Tein J-Y, Sandler IN, Wolchik SA, Ayers TS, Luecken LJ. Strengthening effective parenting practices over the long term: effects of a preventive intervention for parentally bereaved families. *J Clin Child Adolesc Psychol*. 2012;41(2):177-188.
11. Haine RA, Wolchik SA, Sandler IN, Millsap RE, Ayers TS. Positive parenting as a protective resource for parentally bereaved children. *Death Stud*. 2006;30(1):1-28.
12. Kwok OM, Haine RA, Sandler IN, Ayers TS, Wolchik SA, Tein JY. Positive parenting as a mediator of the relations between parental psychological distress and mental health problems of parentally bereaved children. *J Clin Child Adolesc Psychol*. 2005;34(2):260-271.
13. Weber M, Alvariza A, Kreicbergs U, Sveen J. Family communication and psychological health in children and adolescents following a parent's death from cancer. *Omega (Westport)*. 2019. https://doi.org/10.1177/0030222819859965.
14. Christie H, Hamilton-Giachritsis C, Alves-Costa F, Tomlinson M, Halligan SL. The impact of parental posttraumatic stress disorder on parenting: a systematic review. *Eur J Psychotraumatol*. 2019;10(1):1550345.
15. Angelhoff C, Sveen J, Alvariza A, Weber-Falk M, Kreicbergs U. Communication, self-esteem and prolonged grief in parent-adolescent dyads, 1–4 years following the death of a parent to cancer. *Eur J Oncol Nurs*. 2020;50.101883.
16. Falk WM, Alvariza A, Kreicbergs U, Sveen J. End-of-life-related factors associated with posttraumatic stress and prolonged grief in parentally bereaved adolescents. *Omega (Westport)*. 2020. https://doi.org/10.1177/0030222820963768.

17. National Board of Health and Welfare. *National Causes of Death Register*. Dödsorsaksstatistik. Socialstyrelsen; 2016; 2019.
18. Hauksdottir A, Valdimarsdottir U, Fürst C, Onelöv E, Steineck G. Health care-related predictors of husbands' preparedness for the death of a wife to cancer—a population-based follow-up. *Ann Oncol*. 2010;21(2):354-361.
19. World Medical Association. *Declaration of Helsinki*. 2014;22:2014.
20. Charlton R. Is an 'ideal' questionnaire possible? *Int J Clin Pract*. 2000;54(6):356-359.
21. Prigerson HG, Horowitz MJ, Jacobs SC, et al. Prolonged grief disorder: psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Med*. 2009;6(8):e1000121.
22. Pohlkamp L, Kreicbergs U, Prigerson HG, Sveen J. Psychometric properties of the prolonged grief disorder-13 (PG-13) in bereaved Swedish parents. *Psychiatr Res*. 2018;267:560-565.
23. Spitzer RL, Kroenke K, Williams JB, Lowe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006;166(10):1092-1097.
24. Montgomery SA, Åsberg M. A new depression scale designed to be sensitive to change. *Br J Psychiatry*. 1979;134:382-389.
25. Svanborg P, Asberg M. A comparison between the Beck Depression Inventory (BDI) and the self-rating version of the Montgomery Asberg Depression Rating Scale (MADRS). *J Affect Disord*. 2001;64(2-3):203-216.
26. Sveen J, Bondjers K, Willebrand M. Psychometric properties of the PTSD Checklist for DSM-5: a pilot study. *Eur J Psychotraumatol*. 2016;7:30165.
27. Weathers FW, Litz BT, Keane TM, Palmieri PA, Marx BP, Schnurr PP. *The PTSD Checklist for DSM-5 (PCL-5)*. The National Center for PTSD; 2013. www.ptsd.va.govhttps://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp.
28. Eisma MC, Stroebe M, Schut HAW, van den Bout J, Boelen PA, Stroebe W. Development and psychometric evaluation of the Utrecht Grief Rumination Scale. *J Psychopathol Behav*. 2014;36(1):165-176.
29. Sveen J, Pohlkamp L, Kreicbergs U, Eisma MC. Rumination in bereaved parents: psychometric evaluation of the Swedish version of the Utrecht Grief Rumination Scale (UGRS). *PLoS One*. 2019;14(3):e0213152.
30. Elklit A, Reinholt N, Nielsen LH, Blum A, Lasgaard M. Posttraumatic stress disorder among bereaved relatives of cancer patients. *J Psychosoc Oncol*. 2010;28(4):399-412.
31. Barry LC, Prigerson HG. Perspectives on preparedness for a death among bereaved persons. *Conn Med*. 2002;66(11):691-696.
32. Henriksson A, Andershed B. A support group programme for relatives during the late palliative phase. *Int J Palliat Nurs*. 2007;13(4):175-183.
33. Henriksson A, Arestedt K. Exploring factors and caregiver outcomes associated with feelings of preparedness for caregiving in family caregivers in palliative care: a correlational, cross-sectional study. *Palliat Med*. 2013;27(7):639-646.
34. Schumacher KL, Stewart BJ, Archbold PG. Mutuality and preparedness moderate the effects of caregiving demand on cancer family caregiver outcomes. *Nurs Res*. 2007;56(6):425-433.
35. Funk L, Stajduhar K, Toye C, Aoun S, Grande G, Todd C. Part 2: home-based family caregiving at the end of life: a comprehensive review of published qualitative research (1998-2008). *Palliat Med*. 2010;24(6):594-607.
36. Hauksdóttir A, Steineck G, Fürst CJ, Valdimarsdóttir U. Long-term harm of low preparedness for a wife's death from cancer—a population-based study of widowers 4–5 years after the loss. *Am J Epidemiol*. 2010;172(4):389-396.
37. Green EJ, Connolly ME. Jungian family sandplay with bereaved children: Implications for play therapists. *Int J Play Therapy*. 2009;18(2):84-98.
38. Shapiro DN, Howell KH, Kaplow JB. Associations among mother–child communication quality, childhood maladaptive grief, and depressive symptoms. *Death Stud*. 2014;38(3):172-178.

How to cite this article: Falk MW, Angelhoff C, Alvariza A, Kreicbergs U, Sveen J. Psychological symptoms in widowed parents with minor children, 2–4 years after the loss of a partner to cancer. *Psycho-Oncology*. 2021;30:1112–1119. https://doi.org/10.1002/pon.5658