

Describing and understanding depression in spouses of cancer patients in palliative phase

Léonor Fasse^{1,2*}, Cécile Flahault^{2,3}, Anne Brédart³, Sylvie Dolbeault³ and Serge Sultan⁴

¹Institut Gustave Roussy, 114 rue E. Vaillant, Villejuif, France

²Université Paris Descartes, LPPS EA 4057, IUPDP, Paris, France

³Institut Curie, 26 rue d'Ulm, Paris, France

⁴Université de Montréal & CHU Sainte-Justine, Montréal, Canada

*Correspondence to:

Institut Gustave Roussy (UPO),
14 rue Édouard-Vaillant, 94805
Villejuif Cedex -France. E-mail:
leonor.fasse@gustaveroussy.fr

Abstract

Background: The cancer patient's relatives and family constitute one of the patient's main sources of support throughout the disease. In recent years, several studies have emphasized the psychological vulnerability of spouses-caregivers with a high proportion suffering from anxiety and depression symptoms. The literature underlines several factors of detrimental outcomes but critical aspects of the spousal relationship as attachment were neglected.

Objectives: This study aims at (1) describing depressive symptoms and depression among spouses who care for palliative cancer patients and (2) highlighting important factors explaining these symptoms.

Methods: We surveyed 60 spouses 1–6 months before the patient's death, (38 men, mean age: 62 years).

Results: We found a high frequency of depression symptoms (25%) in the sample. Higher depression scores were associated to insecure-anxious attachment style, more frequent venting of emotion and disengagement through substance use.

Conclusion: Despite limitations, this description of caregivers' emotional adjustment in the palliative phase is unique. Future support programs could use the present information by focusing on emotional venting and avoidance. It also underlines the benefits for caregivers to develop organizational skills thanks to services that will lessen tasks or care responsibilities.

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Introduction

A large number of empirical studies have emphasized the negative effects on physical and mental health of everyday caregiving to a close relative suffering from cancer. They noted that these effects are exacerbated during the palliative and terminal phases—depression and/or anxiety features, major depressive disorders, sleep difficulties, impaired quality of life, and fatigue—were noted [1,2]. Closely related caregivers are more depressed than their peers who are not entrusted with the care of patients [3–6]. This vulnerability goes beyond deteriorated mental quality of life. One frequently cited study underscores alarming results: caregivers, whatever their position within the family, are reported to be 63% more at risk of dying within 4 years following the period of caregiving than people who have not assumed this role [7].

The rare empirical studies dedicated to this specific topic showed that among close relatives of patients approaching the end of their lives, spouses encounter the greatest psychological difficulties—depression, anxiety-related disorders, impaired self-esteem, somatic complaints, and difficulties experienced within the couple [8–10]. Few

studies have described the specific nature of depression in patients' spouses, in particular during the palliative phase, even when difficulties are amplified during the terminal phase of cancer when patients experience more disease-related factors [11]. The rates of depressive symptoms among spouse-caregivers reported in earlier studies were extremely variable [12,13]. Among spouses, women were found to exhibit a higher level of psychosocial risk than men, as indicated by higher depressive symptoms, more frequent experienced problems relating to their role in the family, difficulties in the professional field, and less satisfaction with their life with their partner, compared with male spouses in the same situation [10–18]. This pattern was not dependent on the severity of the patient's condition. Some results have also indicated that depressive symptoms could even be higher among spouses than among patients (colorectal cancer [18]).

In the context of cancer, recent studies have examined potential factors explaining why some relatives are able to cope with caregiving without any major distress whereas others would report profound suffering. Alongside sociodemographic and clinical characteristics, two important factors have been identified: the coping

strategies of the caregiver and the nature of the pre-existing relations and attachment between the patient and the caregiver. These have been studied relatively independently and only rarely among patients' spouses, in particular in the case of attachment. Studies have revealed associations between a poor level of emotional adjustment in spouse-caregivers and an avoidant style of coping [19]. Emotional venting has also been associated with a higher level of suffering in spouse-caregivers [19]. Other studies in non-clinical samples have suggested associations with the use of alcohol and/or other substances when people face negative life events [20,21].

The literature has found some variability in emotional adjustment to stress as a function of the attachment style of individual [22]. Outside the caregiving literature, secure attachment has been associated with lower levels of depression in stressful contexts, for example, in the case of chronic pain [23], whereas anxious attachment was associated with a lack of marital satisfaction [24] and a higher depression depressive symptoms [25,26]. The attachment style certainly is a foundation of how individuals will relate affectively and how they will take care of someone dear to them [27]. In that sense, everything that relates to caregiving within loving relations between adults is a form of attachment behavior [28,29]. Thus, a secure attachment style (as characterized by a feeling of well-being in a context of emotional closeness and interdependence) allows individuals to respond appropriately to requests for help made by those dear to them [30]. In consequence, the very form of caregiving is liable to vary as a function of each individual's attachment subtype, as McLean showed in the spousal caregiving context [11]. Secure attachment can be characterized by a personal choice or free desire to take care of one's ill spouse ('I have my own reasons; it's me who freely chose to look after my spouse'). In that sense, it would also be associated with the ability to derive more satisfaction from the caregiving experience when compared with people having insecure styles of attachment [11,31].

To summarize, little work has yet been devoted to describing depressive symptoms in the spouses of cancer patients approaching the end of their lives. We are also still largely unaware of the individual factors associated with these symptoms and, in particular, how spouse-caregivers' styles of attachment and coping may characterize their adjustment. No recent study indeed explored the very nature of these two factors among this population.

This study had two aims: (1) to describe depressive symptoms and depression among spouses who care for palliative cancer patients and (2) to identify the most important factors explaining depression among these individuals. In line with theory and the small body of previous research, we expected to find that spouses exhibiting an insecure anxious attachment style would find it more difficult to adapt to the situation of caregiving.

So would the individuals relying primarily on emotion-centered coping and avoidance (e.g., venting of emotions and disengagement through substance use).

Method

Participants and recruitment procedure

Eighty spouses of cancer patients were recruited consecutively on arrival at the Mobile Support and Continuous Care Unit of the Institut Curie (Paris, France) between November 2010 and March 2012. They were recruited when the palliative phase had been identified in accordance with clinical and diagnostic criteria by practicing oncologists or by the hospital's palliative care specialists (grade 4, estimated prognosis less than 6 months). Criteria for non-inclusion were the following: presence of a current major psychiatric disorder that modified the spouse's relationship with reality (delirious or confusional syndrome, psychotic disorder, or dementia); participation impossible due to medical reasons (illness or major fatigue making it difficult to complete the questionnaires) or spouse living too far. The psychologist responsible for the study (LF), who had been trained in working with patients and their close relatives during the palliative phase of the illness as well as in research in this population, presented the research to participants and collected informed consents. Participants were given the questionnaire in hand and had to return it in a closed envelope to the attention of the principal investigator (LF) within 2 weeks. On participants' request, or when the psychologist in charge of the study considered participants needed professional support, a psychological referral was organized with the psychosocial team. Eighty-two spouses were initially approached. Of the 80 spouses who were willing to participate, 60 returned the questionnaires. Overall participation level in this study was therefore 73.17%.

Special ethical and professional care were taken in the light of the high level of vulnerability of this population [32]. The study was approved by the Institut Curie's Clinical Research and Studies Committee and the Consultative Committee for the Processing of Health-related Research Information (CCTIRS) within the same institute.

Measures

Emotional adjustment

- (1) Depressive symptoms (Beck depression index-short form [BDI-SF], [33])

The BDI-SF is a 13-item self-administered questionnaire derived from the 21-item version. Scores of 0–4, 5–7, 8–15, and 16+ indicate respectively absence of, mild, moderate, or severe depression. In our study, the internal consistency of the BDI was appropriate ($\alpha = 0.75$).

Predictors of adjustment

- (1) Sociodemographic factors and clinical information were collected from the caregiver: age, gender, socioeconomic status, education, number of children, time period of caregiving since the initial diagnosis, and current health status of the patient as measured by World Health Organization criteria.
- (2) Attachment styles (experience of close relationships [ECR], [34]). This instrument yields two subscales: insecure–avoidant and insecure–anxious styles and a total insecure score. The scores for each item can vary 1–7, and for each subscale 2–14, with high scores reflecting intense anxious or avoidant attachment. In our study, the internal consistency of the ECR was excellent (ECR total, $\alpha=0.80$; ECR avoidant, $\alpha=0.85$; ECR anxiety $\alpha=0.79$).
- (3) Coping styles were assessed with the COPE [35]. This tool was derived from theoretical research on coping. It adopts a dispositional approach to the measurement of coping strategies and consists of 15 scales of four items each. For each item, subjects have to rate frequencies of behavior between 1 = 'I never act like that' and 4 = 'I very often act like that'. In the analyses next, we shall only refer to the dimensions with an internal consistency greater than 0.70; that is, planning ($\alpha=0.79$), the search for informational support ($\alpha=0.73$), the search for emotional support ($\alpha=0.81$), positive reinterpretation ($\alpha=0.70$), acceptance ($\alpha=0.70$), religious coping ($\alpha=0.97$), venting of emotions ($\alpha=0.83$) and disengagement through drugs/alcohol use ($\alpha=0.93$).

Statistical analyses

To describe the depressive symptoms reported by the participants, we used frequencies and bivariate comparisons. To compare depression levels in male and female participants, we used *t*-tests. To compare levels in coping strategies used by participants, we conducted repeated-measures analysis of variance. To select the independent variables in the subsequent multivariate models, we retained the scores with fair to excellent reliability (internal consistency >0.70) and a link with the dependent variable (depressive symptoms) that was significant at $p=0.05$ [36,37]. Candidate predictors in regression models predicting depressive symptoms were time since diagnosis, spouse's gender, academic level, attachment style, venting of emotions, and disengagement through substance use. Regression models were hierarchical. Block 1 consisted of the sociodemographic and clinical variables and was followed by two alternative test blocks, either attachment scores or coping strategies. Controls in Blocks 1 were chosen on the basis of previous results suggesting the influence of gender and education level on depression symptoms [5,10], coping strategies [16], and

attachment styles [11]. Analyses were performed on standardized measures. All statistical analyses were performed using the SPSS software (SPSS 19.00; SPSS Inc., Chicago, IL, USA).

Results

Description of depression

The 60 caregivers who returned the questionnaires were 38 men and 22 women with mean age of 62.4; $SD=12.9$. They were spouses of cancer patients suffering from breast cancer (36.6%), lung cancer (16.7%), and cervical cancer (10%). There was no significant difference on age, gender, education level, cancer site, health status, time since diagnosis between those who returned questionnaires, and those who did not. A full sample description is available in Table 1.

Table 2 summarizes measures on participants' depressive symptoms. Some findings are particularly worthy of attention. Forty six participants (77%) reported mild depressive symptoms on the BDI-SF (score=5+). Fifteen (25%) reported moderate depression (mean score=6.55; $SD=4.27$). We then tried to gain a more refined insight on depression among this population, by comparing male

Table 1. Sample description of 60 spouses giving care to their partner with palliative treatment

	N	SD	%
Number of spouses	60		
Women	22		
Men	38		
Mean age	62.39	12.99	
Professional status (retired)	36		60
Education			
College	4		6.7
Secondary	32		53.3
University	24		40
Marital status			
Married	54		90
Else	6		10
Children of spouse (at least one)			
Yes	51		85
No	9		15
Psychological support to the spouse			
Yes	17		28.3
No	43		71.7
Patients' cancer site			
Breast	22		36.6
Lung	10		16.7
Cervix	6		10
Other	22		36.6
Time since diagnosis (months)	68.7	77.2	
Health status (World Health Organization performance status of patient)			
1	3		5
2	21		35
3	29		48.3
4	7		11.7

Table 2. Depressive symptoms of 60 spouses giving care to their partner with palliative treatment

	M (SD)	Rates (clinical cut point) ^a (%)
Depression (BDI-SF)	6.55 (4.27)	25
Men	5.29 (3.62)*	10.53
Women	8.73 (4.5)*	50

**t*-tests significant at $p < 0.05$.^aBDI-SF: cutoff at 9.

BDI-SF, Beck depression index-short form.

and female spouse-caregivers. This revealed significant differences between men and women for depression, with the women ($m=8.73$; $SD=4.5$) being more depressed than the men ($m=5.29$; $SD=3.62$) ($t=3.23$; $p=0.002$).

Coping strategies and attachment

The comparison of coping strategies revealed that some strategies were used more frequently than others (Pillai=0.89; $p<.05$): active coping ($m=11.35$; $SD=2.93$), planning ($m=10.6$; $SD=3.14$), and restraint coping ($m=10.08$; $SD=2.85$). As for attachment styles, participants had higher levels in insecure-anxious attachment style ($M=3.6$; $SD=0.9$) than on insecure-avoidant ($M=2.7$; $SD=0.9$) ($t=4.99$; $p=0.00$).

Bivariate associations

The results of bivariate associations indicated that the depression scores at the BDI were significantly positively correlated with insecure-anxious attachment ($r=0.53$; $p < 0.01$), venting of emotions ($r=0.56$; $p < 0.01$), behavioral disengagement ($r=0.39$; $p < 0.01$), seeking for emotional support ($r=0.27$; $p < 0.05$), disengagement through substance use ($r=0.65$; $p < 0.01$), and suppression of competing activities ($r=0.29$; $p < 0.05$). The depression scores were negatively associated with time since diagnosis ($r = -.32$; $p < 0.05$). The correlations between the independent variables and the continuous variable (depressive symptoms) are presented in Table 3. A correlations matrix of all tested variables and depressive symptoms can be obtained on request by the reader.

These correlations allowed us to precisely select the independent variables in the multivariate models, by retaining a link with the dependent variable (depressive symptoms) that was significant at $p=0.05$. As mentioned

earlier, our second selection criterion was reliability (internal consistency >0.70).

Regression analyses

The results of the hierarchical regressions indicated that depressive symptoms were associated with being a woman ($\beta=0.24$; $p=0.06$) and a lower education level ($\beta=0.37$; $p=0.003$). Depressive symptoms were also uniquely associated with the insecure-anxious score ($\beta=0.4$; $p=0.001$), and when considering coping, with emotional venting ($\beta=0.22$; $p=0.03$) and disengagement through substance use ($\beta=0.35$; $p=0.000$). Attachment explained a significant proportion of the intensity of depressive symptoms ($\Delta R^2=0.14$; $p < 0.01$). Concerning the coping strategies, the explained variance is also significant ($\Delta R^2=0.16$; $p < 0.01$) (Table 4).

Discussion

We surveyed 60 spouse-caregivers of palliative phase cancer patients 1–6 months before the patient's death, in order to describe depressive symptoms. We found higher depression symptoms in the sample as compared with normative samples, with frequency of moderate depression being around 25%.¹The score for anxious attachment was slightly higher than the norms observed in the general

Table 4. Hierarchical analysis evaluating the association of independent variables with the depression (Beck depression index), $N=60$

Models	Beta	F	R ²	ΔR^2
Intensity of depressive symptoms (Beck depression index-short form)				
1. Clinical variables		8.45**	0.34	
Gender	−0.24 [†]			
Education	−0.37**			
Time since diagnostic	−0.18			
2. Attachment styles		6.27**	0.47	0.14**
Anxious attachment	0.40**			
Avoidant attachment	0.03			
3. Coping styles		10.13**	0.63	0.16**
Venting of emotions	0.22**			
Alcohol/use disengagement	0.35**			

[†] $p < 0.1$.** $p < 0.05$.*** $p < 0.001$ **Table 3.** Bivariate associations between dependent variables and independent variable (intensity of depression)

	Anxiety (ECR)	Avoidance (ECR)	Positive reframing (COPE)	Mental disengagement (COPE)	Emotional venting (COPE)	SIS (COPE)	Active coping (COPE)	Denial (COPE)	Religious coping (COPE)	Humor (COPE)
Depression	0.53**	0.21	−0.09	0.23	0.56**	0.19	−0.18	0.17	−0.08	0.19

* $p < 0.05$.** $p < 0.001$.

ECR, experience of close relationships; SIS, seeking for informational support.

population as well as for the 60+ age group [38]; 33 participants (55%) scored higher than the age norms. The scores for insecure-avoidant attachment were lower in average than the norms. Twenty two people (36.7%) score higher than the norms for insecure-avoidant attachment.

We also wished to identify possible predictors of depressive symptoms in these individuals and found that insecure-anxious attachment style, venting of emotion, and disengagement through substance use explained depression scores. This result regarding the association between attachment styles and depression of spouse-caregivers of palliative patients is unique in the recent literature.

Interestingly, our results underline the most frequently used coping strategies in this population, namely active coping, planning, and restraint coping. This somewhat differs from earlier data indicating that the coping strategy most frequently used by spouses of cancer patients receiving palliative care is acceptance [20]. One hypothesis to account for this phenomenon would be that the participants of the present study were closer to the death of their spouse and may have had psychological distancing reactions toward the future loss of their spouse. To go farther, this privileged use of active coping could be a kind of avoidance of negative emotions to answer the concrete requirements that the disease imposes in palliative phase (for instance, go shopping or cooking).

Our results also provide support for earlier assumptions suggesting that less fearful-avoidant and less preoccupied individuals (who have a less pronounced insecure-anxious attachment style) may exhibit better emotional adjustment [39]. One way to understand this result is to consider that spouses exhibiting insecure-anxious attachment style tend to experience difficulties in their relationship with others if they have the feeling that it is threatened. When the partner is seriously ill and in a palliative care situation, the situation may exacerbate this feeling of threat, which may thus account for the increase in emotional distress and perhaps the feeling to be overwhelmed. It also seems likely that they find little satisfaction in the experience of caregiving [11]. In fact, finding benefits in caregiving requires some form of confidence in the relationship and the certitude that one can give effective help to the person one loves. It has been proposed that insecure individuals would tend to reassure themselves by

constantly demanding signs of affection from the object of their attachment [27]. They may doubt of the attachment and the true nature of the loving relationship, which in turn would explain their using of emotional venting. As coping authors pointed out, venting of emotions is often associated with poor emotional adjustment because it hinders individuals from stepping back from their painful emotions [40]. Disengagement through substance use would appear to be an attempt to escape from a stressful situation for spouse-caregivers who are confronted with so difficult an experience every day of their lives. The strategies subsumed within the broader category of 'disengagement' are in fact reflective of a feeling of helplessness illustrating again the inability of certain spouses to help their ill partners in a way that is both appropriate for the patient and would provide some satisfaction to the spouses.

Several limitations should be noted to this study. First, it is probable that spouses' distress would be due to other factors not measures here, such as psychopathological antecedents, past losses, and unhappiness at work. Yet, we found that factors of attachment and coping could explain a limited but significant share of variance of depressive symptoms. Future work could focus on other environmental factors not measured here. Second, the sample was consecutive and not randomly selected, which might increase potential selection biases. However, the participants in this study were an extremely homogenous population: spouses of cancer patients (and especially of patients with gynecological cancers), of the same age range (approximately 60 years), and with relatively homogeneous social status. We also found no difference between responders and non-responders. Finally, the design is cross sectional, and therefore, it does not allow for causal interpretation. For example, it is possible that depressed mood is responsible for frequencies in some coping reactions like avoidance or venting. The fact that a professional psychological support was provided to approximately one-third of the participants should also be discussed. Statistical analyses indicated that the spouse-caregivers who had a psychological support scored on depression scale in an equivalent way that those who did not have this kind of support. We can make the hypothesis that either they would go even more badly, or the psychological work is in progress, and differences in emotional

Behavioral disengagement (COPE)	Self restrain (COPE)	SES (COPE)	Substance disengagement (COPE)	Acceptance (COPE)	Suppression of competing activities (COPE)	Planning (COPE)	Emotional process (COPE)	Age of the spouse-caregiver	Time since diagnosis
0.39**	-0.03	0.27*	0.65**	-0.02	0.29*	-0.07	0.22	-0.16	-0.32

adaptation will be captured in later assessment times. And even if it is the second hypothesis that comes true, this psychological support remains not less important there. Longitudinal data would give an insight on this importance of early screening. Although it is particularly difficult to perform in this population, future research should address this problem through follow-up designs or qualitative experiential studies able to shed some light on causal phenomena as they are experienced by caregivers.

Conclusion and clinical outlook

In recent years, attachment styles have constituted one of the key concept guiding interventions and research in the field of grief [41]. Current practice shows that it is possible to help individuals with an insecure attachment style to adapt to a context, which is particularly difficult for them and adopt more secure attachment styles [42]. To our knowledge, no such intervention is at present available for spouse-caregivers. It would consist in helping individuals with an insecure attachment style confront a relationship threatened by cancer. For decades, coping has been a therapeutic focus of a wide array of psychosocial interventions. The results suggest that certain forms of coping (e.g., disengagement through drug/alcohol) could be addressed as they are associated with negative emotional outcomes in order to provide targeted support

during the caregiving period. Recent studies have stressed the strong link between the adjustment of patients' spouses during the caregiving period and their adjustment after bereavement [43]. Given high psychosocial risk met by spouses when they are confronted with the dying of their partner, we hope that this work will trigger further research on the subject. While attachment and coping appear as promising avenues in caregiving research, future work should include designs able to disentangle causes and effects.

Ethical approval

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Conflict of interest

The authors have declared no conflicts of interest.

Note

1. 15% of adults older than age 60 in the United States have experienced depression (Geriatric Mental Health Foundation, 2008 http://www.cdc.gov/aging/pdf/cib_mental_health.pdf, retrieved on 08/11/2014).

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