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Prevalence of Depression and Anxiety among Caregivers of Cancer Patients: A Cross-Sectional Study

Kuruva Siva Prasad[1], Jakka Mohan Krishna[2], Ediga Kornapalli Sumanth[3], Chennapragada Sri Krishna Prakash[4]

[1]Department of Medical Oncology, Kurnool Medical College, Kurnool
[2,4]Department of Radiation Oncology, Kurnool Medical College, Kurnool
[3]Department of Psychiatry, Kurnool Medical College, Kurnool

Corresponding Author: Kuruva Siva Prasad

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ABSTRACT

Background: Cancer imposes a profound psychological burden on primary caregivers, who remain largely overlooked within routine oncology care. Systematic data on caregiver psychological morbidity from Indian tertiary centres are limited.

Objective: To determine the prevalence of anxiety, depression, and significant psychological distress among primary caregivers of cancer patients using the Hospital Anxiety and Depression Scale (HADS), and to identify associated clinical and sociodemographic factors.

Methods: A prospective, observational, cross-sectional study was conducted over three months (May–July 2024) at a tertiary care oncology centre (n=120 caregiver–patient dyads). HADS was administered by a psychiatrist with a cutoff score >9 per subscale. Patient clinical data were retrieved from records. Chi-square and Fisher's exact tests with Bonferroni correction were used for analysis.

Results: Anxiety was identified in 33 (27.5%) and depression in 34 (28.3%) caregivers; 45 (37.5%) demonstrated significant psychological distress. Mean HADS-A was 6.16 (SD 4.26) and HADS-D was 6.52 (SD 4.28). Disease stage was significantly associated with significant psychological distress (p=0.004); Stage I caregivers showed 100% prevalence (Bonferroni-corrected p=0.0032). Cancer type was significantly associated with anxiety (p=0.029) and significant psychological distress (p=0.045). Head and Neck cancer caregivers had 0% significant psychological distress (Bonferroni-corrected p=0.00087). Patient gender was associated with significant psychological distress (p=0.031). No caregiver sociodemographic variable reached statistical significance.

Conclusion: Psychological morbidity is prevalent among cancer caregivers. Disease stage, cancer type, and patient gender are significant clinical determinants. Routine HADS-based screening with targeted psychiatric referral is recommended for comprehensive cancer care.

Keywords: *Cancer caregivers, HADS, depression, anxiety, psycho-oncology, India, caregiver distress*

INTRODUCTION

Cancer represents one of the foremost public health challenges globally. In India, approximately 1,400,000 new cancer cases were registered in 2022 with nearly 900,000 deaths, and a projected 12% increase by 2025

[1,2]. While the clinical burden on patients is well established, cancer simultaneously inflicts profound psychosocial distress on primary family caregivers - those who provide unpaid, sustained daily support throughout the treatment continuum.

Cancer caregivers assume wide-ranging responsibilities including treatment coordination, emotional support, symptom management, and financial navigation, often at the expense of their own employment and social functioning. Systematic reviews estimate depression affects approximately 40% of cancer caregivers, with anxiety at comparable rates [3,4]. The coexistence of psychological morbidity impairs the quality of caregiving and adversely influences patient adherence and wellbeing [5]. A comprehensive review of the literature confirms that caring for a cancer patient has measurable negative effects on the physical, psychological, and social health of caregivers themselves [6].

In India, family caregiving is culturally normative with minimal institutional support. Caregiver distress thus remains unrecognised and unaddressed in routine oncology practice. Unique contextual stressors — financial toxicity, rural-to-urban travel for treatment, and mental health stigma — compound psychological vulnerability [7,8].

The Hospital Anxiety and Depression Scale (HADS), developed by Zigmond and Snaith in 1983, is a validated 14-item self-report instrument designed to screen anxiety and depression in medical settings [9]. An updated literature review has confirmed its robust psychometric properties across diverse medical settings [10]. By excluding somatic items, it avoids inflation of psychiatric scores by cancer-related physical symptoms, making it particularly appropriate for oncology caregivers [11].

The present study was designed to determine the prevalence of anxiety, depression, and significant psychological distress among cancer caregivers at a South Indian tertiary care centre, and to identify associated clinical and sociodemographic factors.

MATERIALS AND METHODS

Study Design and Setting: This was a prospective, observational, cross-sectional study conducted at the departments of Medical Oncology, Surgical Oncology, and Radiation Oncology of a tertiary care centre in South India, from May 2024 to July 2024. Institutional Ethics Committee approval was obtained prior to commencement.

Participants: Cancer patients receiving any anticancer therapy or supportive care, and their primary caregivers, were considered for enrolment. One caregiver per patient was enrolled - the primary, direct, and durable individual responsible for daily patient care. Caregivers aged ≥18 years providing written informed consent were included. Exclusion criteria were: personal history of cancer; past or current psychiatric illness; concurrent antipsychotic medication; or hypothyroidism.

Assessment Tool and Definitions: Patient clinical information (cancer site, stage, treatment intent, days from diagnosis) was retrieved from records. Caregiver sociodemographic data were collected via structured interview. The Hospital Anxiety and Depression Scale (HADS) — a 14-item, 4-point Likert scale comprising two 7-item subscales (HADS-A: anxiety; HADS-D: depression), each ranging 0–21 — was administered by a psychiatrist using translated versions from MAPI Research Trust. For the purpose of this study, an HADS-A score >9 denoted a possible clinical case of anxiety, an HADS-D score >9 denoted a possible clinical case of depression, and an HADS-A score >9 or an HADS-D score >9 (either subscale) was defined as significant psychological distress. These operational definitions were applied uniformly across all analyses.

Sample Size: Based on an estimated depression prevalence of 45% [4], with finite population correction (N=150), precision d=5%, and 95% confidence interval, the sample size with 10% attrition was 120.

Statistical Methods: Data were analysed using SPSS Version 22.0 (IBM, Chicago, USA). Continuous data are presented as mean ± SD or median (interquartile range, IQR); categorical data as frequency and percentage. Associations were assessed by Pearson chi-square or Fisher's exact test. Bonferroni correction was applied for post-hoc cell-wise analysis when the omnibus chi-square was significant. Statistical significance was set at $p<0.05$.

RESULTS

A total of 120 caregivers were enrolled. All met eligibility criteria; no caregiver had a history of cancer, psychiatric illness, antipsychotic use, or hypothyroidism. Male caregivers predominated (71; 59.2%), and most were married (104; 86.7%). The largest age group was 18–30 years (35; 29.2%), followed by 41–50 years (34; 28.3%). Educational attainment was low overall: 47 (39.2%) were illiterate. The most common occupation was unskilled daily labour (39; 32.5%), followed by farming (16; 13.3%) and housework (13; 10.8%). Most caregivers (104; 86.7%) had no comorbidities; hypertension was the most common (12; 10.0%).

Table 1 presents caregiver sociodemographic data and their associations with anxiety and depression. No caregiver sociodemographic variable was significantly associated with anxiety, depression, or significant psychological distress (all $p>0.05$).

Table 1: Caregiver Sociodemographic Characteristics and Association with HADS Outcomes (n=120)

Variable	n (%)	Anxiety n (%)	Depression n (%)
Caregiver Gender			
Male	71 (59.2)	19 (26.8)	24 (33.8)
Female	49 (40.8)	14 (28.6)	10 (20.4)
p-value	—	0.827	0.109
Caregiver Age (years)			
18–30	35 (29.2)	10 (28.6)	12 (34.3)
31–40	26 (21.7)	5 (19.2)	5 (19.2)
41–50	34 (28.3)	10 (29.4)	10 (29.4)
51–60	13 (10.8)	5 (38.5)	4 (30.8)
≥61	12 (10.0)	3 (25.0)	3 (25.0)
p-value	—	0.708	0.713
Marital Status			
Married	104 (86.7)	29 (27.9)	30 (28.8)
Unmarried	16 (13.3)	4 (25.0)	4 (25.0)
p-value	—	0.810	0.751
Education Level			
Illiterate	47 (39.2)	13 (27.7)	10 (21.3)
Primary School	12 (10.0)	3 (25.0)	4 (33.3)
High School	37 (30.8)	10 (27.0)	10 (27.0)
Graduate & above	24 (20.0)	7 (29.2)	10 (41.7)
p-value	—	0.995	0.330
Caregiver Comorbidities			
No comorbidities	104 (86.7)	28 (26.9)	28 (26.9)
Hypertension	12 (10.0)	4 (33.3)	5 (41.7)

Variable	n (%)	Anxiety n (%)	Depression n (%)
Diabetes Mellitus	8 (6.7)	2 (25.0)	3 (37.5)
p-value	—	0.718	0.382

HADS: Hospital Anxiety and Depression Scale. p-values from chi-square or Fisher's exact test. All p>0.05 (non-significant).

The median duration from diagnosis to enrolment was 71.0 days (IQR 34.75–192.0; mean 255.9 days, SD 540.6), reflecting wide chronicity variation. Among patients, 76 (63.3%) were female and 44 (36.7%) were male. The most prevalent cancer type was breast (21; 17.5%), followed by Head and Neck (16; 13.3%), Cervix Uteri (12; 10.0%), and Stomach (12; 10.0%). The majority had advanced disease: Stage III in 42 (35.0%) and Stage IV in 55 (45.8%). Treatment was curative in 68 (56.7%), palliative in 43 (35.8%), and best supportive care in 9 (7.5%).

The mean HADS-A score was 6.16 (SD 4.26; median 6.0, IQR 3.0–9.0) and the mean HADS-D score was 6.52 (SD 4.28; median 7.0, IQR 3.0–9.75). Using the cutoff defined above, anxiety was detected in 33 caregivers (27.5%), depression in 34 (28.3%), and significant psychological distress (either subscale >9) in 45 (37.5%). HADS score descriptive statistics, including days from diagnosis, are presented in Table 3.

Table 3: Descriptive Statistics for HADS Scores and Days from Diagnosis (n=120)

Parameter	HADS-A Score	HADS-D Score	Days from Diagnosis
Mean (SD)	6.16 (4.26)	6.52 (4.28)	255.9 (540.6)
Median (IQR)	6.0 (3.0–9.0)	7.0 (3.0–9.75)	71.0 (34.75–192.0)
Range	0–18	0–19	1–3795 days
Score >9 (positive screen)	33 (27.5%)	34 (28.3%)	—
Significant psychological distress (either >9)	45 (37.5%)		

HADS-A: Anxiety subscale; HADS-D: Depression subscale; IQR: interquartile range.

Clinical Correlates of Significant Psychological Distress

Table 2 presents patient clinical variables and their association with HADS outcomes. Cancer type was significantly associated with anxiety (χ^2=33.6, p=0.029) and significant psychological distress (χ^2=31.8, p=0.045), but not with depression alone. On Bonferroni post-hoc analysis (corrected α=0.0012 for 42 cancer-type cells), caregivers of Head and Neck cancer patients had significantly lower significant psychological distress (0%; adjusted residual −3.33; p=0.00087), which remained significant after correction.

Disease stage was significantly associated with significant psychological distress (χ^2=15.5, p=0.004) and anxiety (χ^2=10.8, p=0.029), but not depression (p=0.463). On Bonferroni post-hoc analysis (corrected α=0.005 for 10 stage comparisons), Stage I caregivers demonstrated 100% prevalence of significant psychological distress (all 5 cases; adjusted residual 2.95, p=0.0032), which remained significant after correction. Stage IV caregivers showed the lowest prevalence (25.5%), which was not Bonferroni-significant (p=0.012 > 0.005).

Patient gender was significantly associated with significant psychological distress (p=0.031); caregivers of female cancer patients showed higher rates (34; 44.7%) compared to caregivers of male patients (11; 25.0%). No significant association was found for treatment intent for any HADS outcome.

Table 2: Patient Clinical Characteristics and Association with HADS Outcomes (n=120)

Variable	n (%)	Anxiety n (%)	Depression n (%)	Significant Psychological Distress n (%)
Cancer Primary Site				
Breast	21 (17.5)	9 (42.9)	7 (33.3)	10 (47.6)
Head & Neck	16 (13.3)	0 (0)	0 (0)	0 (0)*
Cervix Uteri	12 (10.0)	4 (33.3)	5 (41.7)	6 (50.0)
Stomach	12 (10.0)	2 (16.7)	3 (25.0)	4 (33.3)
Lung	10 (8.3)	4 (40.0)	4 (40.0)	5 (50.0)
Large Bowel	10 (8.3)	2 (20.0)	3 (30.0)	3 (30.0)
Others	39 (32.5)	12 (30.8)	12 (30.8)	17 (43.6)
p-value	—	0.029	0.368	0.045
Disease Stage				
Stage I	5 (4.2)	3 (60.0)	3 (60.0)	5 (100) *
Stage II	16 (13.3)	3 (18.8)	5 (31.3)	7 (43.8)
Stage III	42 (35.0)	14 (33.3)	12 (28.6)	17 (40.5)
Stage IV	55 (45.8)	11 (20.0)	13 (23.6)	14 (25.5)
CML	2 (1.7)	2 (100)	1 (50.0)	2 (100)
p-value	—	0.029	0.463	0.004
Treatment Intent				
Curative	68 (56.7)	19 (27.9)	19 (27.9)	28 (41.2)
Palliative	43 (35.8)	10 (23.3)	11 (25.6)	12 (27.9)
Best Supportive Care	9 (7.5)	4 (44.4)	4 (44.4)	5 (55.6)
p-value	—	0.429	0.518	0.189
Patient Gender				
Female	76 (63.3)	25 (32.9)	26 (34.2)	34 (44.7)
Male	44 (36.7)	8 (18.2)	8 (18.2)	11 (25.0)
p-value	—	0.082	0.060	0.031

*HADS: Hospital Anxiety and Depression Scale; significant psychological distress defined as HADS-A score >9 or HADS-D score >9. *Bonferroni-corrected post-hoc significant: Head & Neck cancer (p=0.00087, corrected α=0.0012); Stage I (p=0.0032, corrected α=0.005).*

DISCUSSION

This study reports anxiety in 27.5%, depression in 28.3%, and significant psychological distress in 37.5% of cancer caregivers at a tertiary centre in South India. These figures align with comparable Indian studies: Belapurkar et al. found anxiety in 30.8% and depression in 25.8% of oral cancer caregivers using HADS [12], while Samal S et al. reported anxiety in 45.2% and depression in 43.4% at an Odisha centre [8]. Pan and Lin's meta-analysis reported a pooled HADS-specific depression prevalence of 18.79%, noting substantial variability across settings [13]. Radhakrishnan et al. similarly reported high psychological morbidity rates in cancer patients from a South Indian tertiary centre [14]. The conservative HADS cutoff of >9 employed in this study provides a specific, clinically meaningful estimate.

The absence of significant associations between caregiver sociodemographic variables and psychological outcomes merits contextualisation. Unlike international reports that identified gender, income, and education as risk factors [4,5] our cohort demonstrated uniform distress across

demographic strata. This likely reflects homogeneous socioeconomic vulnerability in this predominantly rural, low-income population, where financial strain and support deficits are near-universal rather than differentiating. Park et al. similarly found that caregiver-related factors, rather than patient factors, were stronger determinants of depression in some oncology settings **[15]**. The modest sample size in some subgroups may also have limited the power to detect small demographic effects.

The finding that Stage I caregivers had the highest prevalence of significant psychological distress (100%; Bonferroni p=0.0032) warrants careful interpretation. This likely reflects acute diagnostic shock — the intense psychological trauma of a fresh cancer diagnosis in a curative setting, where prognosis uncertainty, treatment unfamiliarity, and existential fear peak. Stage IV caregivers, who may have psychologically adapted over a longer illness course, showed lower rates (25.5%). The skewed days-from-diagnosis distribution (median 71 days) indicates this cohort was predominantly in the early treatment phase, amplifying acute-phase distress **[16]**. Nijboer et al. demonstrated that the health impact on caregivers intensifies significantly at critical transition points in the cancer trajectory, supporting the need for assessment at diagnosis **[17]**. This finding has direct clinical implications: caregivers of newly diagnosed patients require early psychological assessment regardless of stage.

The significantly lower prevalence of significant psychological distress in Head and Neck cancer caregivers (0%; Bonferroni p=0.00087) is a striking finding. All 16 Head and Neck cases in this cohort received curative-intent treatment, potentially providing a clearer prognosis and recovery trajectory compared to systemic or metastatic cancers. The gender dynamics of the caregiving relationship and treatment type may differentially influence caregiver psychological response **[18]**. Friðriksdóttir et al. found that family members' needs and anxiety levels varied substantially by cancer type and treatment phase **[19]**. Caregivers of CML patients — a chronic haematological malignancy with oral targeted therapy and generally favourable outcomes — paradoxically showed 100% distress rates, though the small sample (n=2) limits interpretation.

Patient gender was significantly associated with significant psychological distress (p=0.031), with higher rates in caregivers of female patients. This may reflect the disproportionate emotional burden associated with gynaecological and breast cancers, and the gender dynamics of caregiving in South Asian families where female family members are culturally expected to provide nurturing care **[20]**. Protective buffering - whereby caregivers conceal their own distress to shield the patient - has been shown to worsen caregiver psychological outcomes and warrants attention in clinical assessment **[21]**. Finally, long-term deficits in quality of life among cancer survivors underscore the enduring nature of caregiver burden beyond the acute treatment phase **[22]**.

This study has several limitations. The single-centre, cross-sectional design limits generalisability and precludes causal inference. As highlighted by Ramirez et al., carers of cancer patients carry a historically underappreciated burden that warrants systematic study **[23]**.

The small sample size in some subgroups (Stage I: 5; CML: 2) constrains subgroup analysis. Patient-level confounders such as symptom burden and performance status were not systematically captured; Vanderwerker et al. documented that psychiatric disorders in caregivers of advanced cancer patients frequently go undetected without formal screening **[24]**. The skewed diagnosis-to-enrolment duration introduces chronicity heterogeneity. Future multicentre, longitudinal studies with standardised caregiver psychological assessments across disease phases are warranted.

CONCLUSION

Anxiety, depression, and significant psychological distress were observed in 27.5%, 28.3%, and 37.5% of cancer caregivers respectively. Disease stage, cancer type, and patient gender were significant clinical determinants. The high burden among Stage I caregivers highlights the importance of early, diagnosis-phase psychological screening. Routine HADS-based screening at initial oncology consultation, with timely psychiatric support for high-risk subgroups, is recommended for comprehensive cancer care.

Declaration by Authors

Ethical Approval: Approved

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Conflict of Interest: None declared.

REFERENCES

1. Cancer Today. International Agency for Research on Cancer, World Health Organization [Internet]. 2024 [cited 2024 May 23]. Available from: https://gco.iarc.who.int/today/en
2. Sathishkumar K, Chaturvedi M, Das P, Stephen S, Mathur P. Cancer incidence estimates for 2022 & projection for 2025: Result from National Cancer Registry Programme, India. Indian J Med Res. 2022; 156(4&5):598-607. doi: 10.4103/ijmr.ijmr_1821_22.
3. Burgess C, Cornelius V, Love S, Graham J, Richards M, Ramirez A. Depression and anxiety in women with early breast cancer: five year observational cohort study. BMJ. 2005; 330(7493):702. doi: 10.1136/bmj.38343. 670868.D3.
4. Bedaso A, Dejenu G, Duko B. Depression among caregivers of cancer patients: Updated systematic review and meta-analysis. Psychooncology. 2022; 31(11):1809-1820. doi: 10.1002/pon.6045.
5. Karimi Moghaddam Z, Rostami M, Zeraatchi A, Mohammadi Bytamar J, Saed O, Zenozian S. Caregiving burden, depression, and anxiety among family caregivers of patients with cancer. Front Psychol. 2023; 14:1059605. doi: 10.3389/fpsyg.2023.1059605.
6. Stenberg U, Ruland CM, Miaskowski C. Review of the literature on the effects of caring for a patient with cancer. Psychooncology. 2010 Oct;19(10):1013-25. doi: 10.1002/pon.1670.
7. Manivannan M, Karunanithi G, Lakshminarayanan S. Correlation between quality of life and burden in caregivers of advanced stage cancer patients on best supportive care. Indian J Palliat Care. 2023 Jan-Mar;29(1):89-93. doi: 10.25259/IJPC_175_2022.
8. Samal S, Panda N, Rath J, Pani SR, Panda B. Mental health status of caregivers of cancer patients attending a tertiary care hospital in Bhubaneswar, Odisha. F1000Res; 2024. DOI: 10.12688/f1000research.157319.1.
9. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatr Scand. 1983 Jun;67(6):361-70. doi: 10.1111/j.1600-0447. 1983.tb09716. x.
10. Bjelland I, Dahl AA, Haug TT, Neckelmann D. The validity of the Hospital Anxiety and Depression Scale: an updated literature review. J Psychosom Res. 2002 Feb;52(2):69-77. doi: 10.1016/s0022-3999(01)00296-3.
11. Gough K, Hudson P. Psychometric properties of the Hospital Anxiety and Depression Scale in family caregivers of palliative care patients. J Pain Symptom Manage. 2009 May;37(5):797-806. doi: 10.1016/j.jpainsymman.2008.04.012.
12. Belapurkar P, Acharya S, Shukla S, Kumar S, Khurana K, Acharya N. Prevalence of anxiety, depression, and perceived stress among family caregivers of patients diagnosed with oral cancer in a tertiary care hospital in central India: A cross-sectional study. Cureus. 2023 Oct 16;15(10):e47100. doi: 10.7759/cureus.47100.
13. Pan YC, Lin YS. Systematic review and meta-analysis of prevalence of depression among caregivers of cancer patients. Front Psychiatry. 2022 May 12:13:817936. doi: 10.3389/fpsyt.2022.817936.
14. Radhakrishnan R, Selvaraj H, Chidambaram K, Kv A, James A, Thangavel S. Prevalence of depression and anxiety disorders among cancer patients: an insight from a single

institute. Cureus. 2023 Aug 1;15(8):e42831. doi: 10.7759/cureus.42831.
15. Park B, Kim SY, Shin JY, Sanson-Fisher RW, Shin DW, Cho J, Park JH. Prevalence and predictors of anxiety and depression among family caregivers of cancer patients: a nationwide survey of patient-family caregiver dyads in Korea. Support Care Cancer. 2013; 21(10):2799-2807. doi: 10.1007/s00520-013-1852-1.
16. Nipp RD, El-Jawahri A, Fishbein JN, Eusebio J, Stagl JM, Gallagher ER, et al. The relationship between coping strategies, quality of life, and mood in patients with incurable cancer. Cancer. 2016 Jul 1;122(13):2110-6. doi: 10.1002/cncr.30025.
17. Nijboer C, Tempelaar R, Sanderman R, Triemstra M, Spruijt RJ, van den Bos GA. Cancer and caregiving: the impact on the caregiver's health. Psychooncology. 1998 Jan-Feb;7(1):3-13. doi: 10.1002/(SICI)1099-1611(199801/02)7:1<3: AID-PON320>3.0.CO;2-5.
18. Fujinami R, Otis-Green S, Klein L, Sidhu R, Ferrell B. Quality of life of family caregivers and challenges faced in caring for patients with lung cancer. Clin J Oncol Nurs. 2012 Dec;16(6): E210-20. doi: 10.1188/12.CJON.E210-E220.
19. Friðriksdóttir N, Sævarsdóttir T, Halfdánardóttir SÍ, Jónsdóttir A, Magnúsdóttir H, Ólafsdóttir KL, et al. Family members of cancer patients: needs, quality of life and symptoms of anxiety and depression. Acta Oncol. 2011 Feb;50(2):252-8. doi: 10.3109/0284186X.2010.529821.
20. Li Q, Lin Y, Xu Y, Zhou H. The impact of depression and anxiety on quality of life in Chinese cancer patient-family caregiver dyads. Health Qual Life Outcomes. 2018 Dec 13;16(1):230. doi: 10.1186/s12955-018-1051-3.
21. Langer S, Brown JD, Syrjala K. Intrapersonal and interpersonal consequences of protective buffering among cancer patients and caregivers. Cancer. 2009 Sep 15;115(18 Suppl):4311-25. doi: 10.1002/cncr.24586.
22. Caravati-Jouvenceaux A, Launoy G, Klein D, Henry-Amar M, Abeilard E, Danzon A, Pozet A, Velten M, Mercier M. Health-related quality of life among long-term survivors of colorectal cancer: a population-based study. Oncologist. 2011;16(11):1626-36. doi: 10.1634/theoncologist.2011-0036.
23. Ramirez AJ, Addington-Hall J, Richards MA. ABC of palliative care: the carers. BMJ. 1998 Jan 17;316(7126):208-11. doi: 10.1136/bmj.316.7126.208.
24. Vanderwerker LC, Laff RE, Kadan-Lottick NS, McColl S, Prigerson HG. Psychiatric disorders and mental health service use among caregivers of advanced cancer patients. J Clin Oncol. 2005 Oct 1;23(28):6899-907. doi: 10.1200/JCO.2005.01.370.

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