



Systematic Review of Healthcare Utilization Among Head and Neck Cancer Caregivers

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Introduction

- The incidence of Head and Neck Cancer (HNC) is estimated at 650,000 cases worldwide, accounting for 3% of cancer diagnoses in the United States.¹
- HNC diagnosis may present with significant illness and treatment-related side effects necessitating extensive support from caregivers, which can profoundly impact clinical outcomes including survival.^{2,3}
- Caregivers may experience psychological, social, and economic distress, and forsake their own health for the patient during the treatment and recovery periods.⁴
- This review summarizes the current understanding of HNC caregiver physical and mental health and their utilization of healthcare resources for their own needs.
- We aim to provide strategies to address caregiver health, which could impact clinical outcomes for the HNC patients.

Methods

Search terms: Key synonyms for head and neck cancer, caregiver, psychological stress, depression, anxiety, healthcare, hospitalization, or ambulatory care in the title/abstract.

Data Sources: Independent database searches of PubMed, Cochrane Library, and Web of Science, and manual cross-reference searches were performed. Articles were selected via the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Protocol (Figure 1).

Study Selection Criteria: We identified articles published during any time frame describing health of HNC caregivers and their healthcare utilization. Exclusion criteria included case reports, commentaries, and publications deemed outside the scope of our study aims.

Results

- Several validated clinical measures exist to assess mental and physical health in the context of HNC caregiving.
- There is clinically significant anxiety, depression and PTSD, and physical health decline among HNC caregivers.
- No standard tool exists to examine HNC caregiver access of the healthcare system.

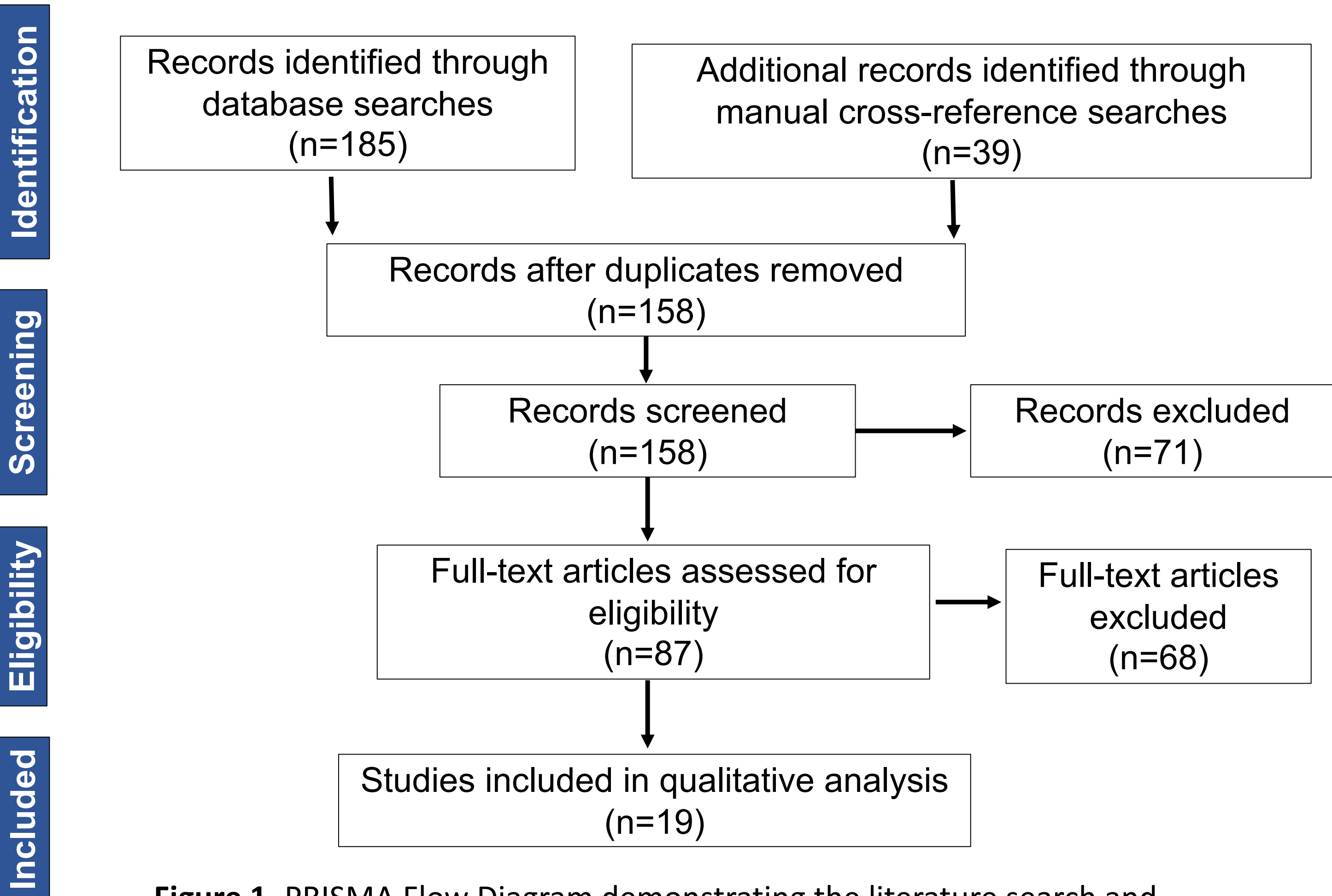


Figure 1. PRISMA Flow Diagram demonstrating the literature search and inclusion and exclusion of articles.

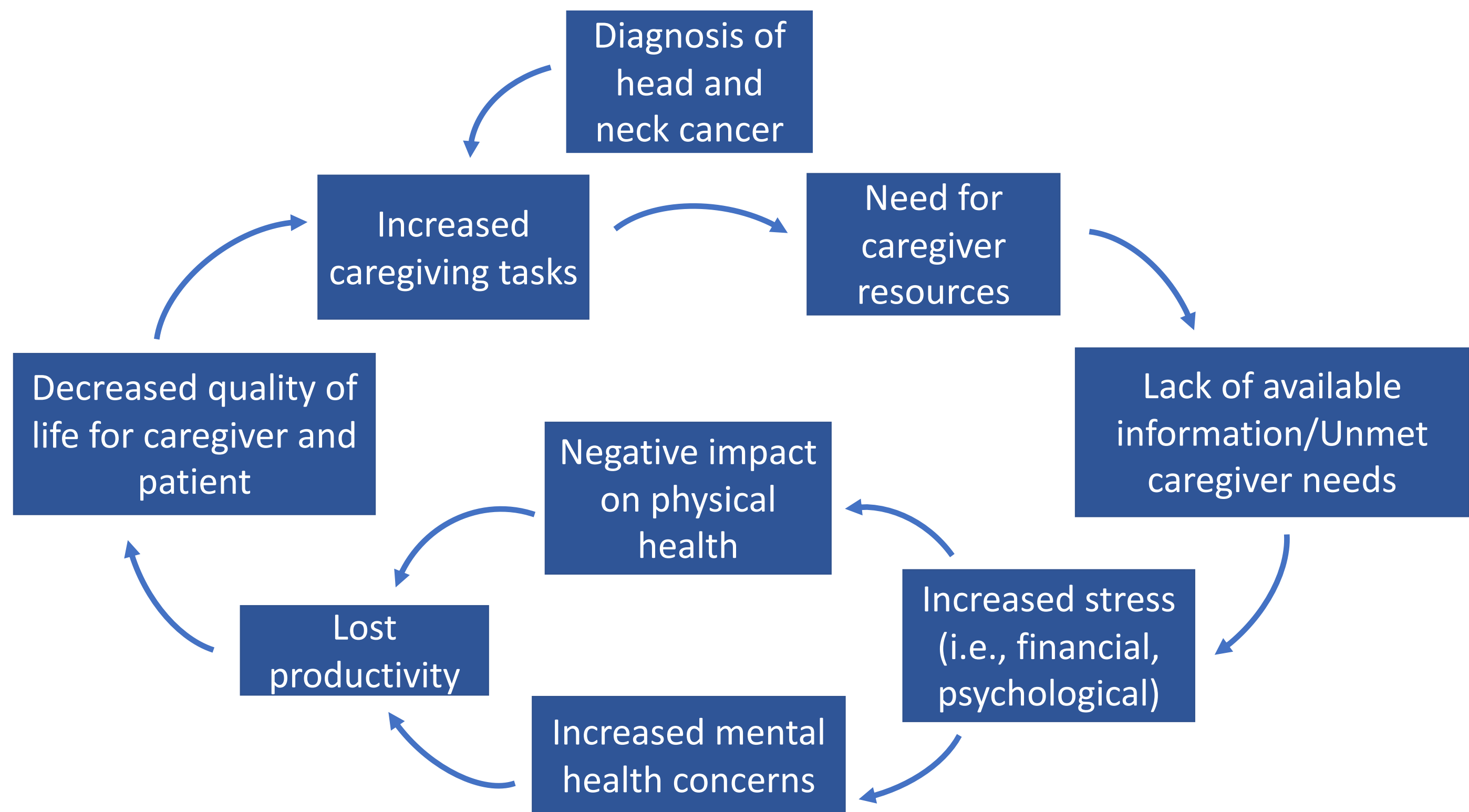


Figure 2. Process map demonstrating the cycle of physical and psychological implications of a HNC diagnosis on caregivers.

Table 1. Main Results by Category

Category	Results
Mental Health Implications	• 20% to 57% with clinically significant anxiety and/or depression.⁵⁻⁷ • 13% to 29 met DSM criteria for PTSD.^{8,9} • Increased anxiety and depression associated with female caregiver, older age, spouse/partner of patient, lower educational level, lower level of social support.
Physical Health Implications	• 43% report “poor” or “fair” health.¹⁰ • 42% report less than 7 hours of sleep per night and 33% report less than 3 days of physical activity/week.¹¹
Engagement with the Healthcare System	• 32% use support services including therapy/counseling.¹⁰ • Only 16% received psychological treatment – no change in use of services over a 3-year period.¹² • Reasons for non-usage of psychological services – lack of information, insufficient motivation, inconvenient location.¹² • Caregivers expressed interest in resources early after diagnosis (i.e., psychological support, education, stress management).¹¹
Unmet Needs	• “Psychological and emotional needs” and “healthcare services” were the two domains with highest level of unmet needs.¹³ • Three most common unmet needs: “Managing fears of cancer recurrence,” (35%) “looking after own health,” (27%) and “reducing stress for the cancer patient” (24%)¹³ • Other unmet needs included communication with healthcare professionals and access to local health services.¹⁴

Table 1. Main results from the review categorized by theme of information presented in the literature.

Conclusions

- Development and use of a standardized assessment tool during diagnosis and pretreatment periods could identify caregivers at high risk of mental health concerns.
- Objective screening tools could be used to assess caregiver physical health and management of chronic conditions.
- The present study could help guide future intervention strategies by multidisciplinary healthcare teams and aid in providing caregiver access to necessary resources early in the treatment period.

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