

# Investigation and Correlation Analysis of Self-Care Ability and Fatigue Among Primary Caregivers of Postoperative Patients With Liver Cancer in China

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**BACKGROUND:** In the postoperative period, patients mainly rely on caregivers, who experience their own physical and mental fatigue. Caregiver fatigue may affect patient outcomes.

**OBJECTIVES:** This study explored the fatigue status and influencing factors of primary caregivers of patients after liver cancer surgery.

**METHODS:** A baseline information questionnaire, the Fatigue Scale-14, and the Barthel Index were used to investigate the self-care ability and fatigue status of 191 primary caregivers of patients with hepatic carcinoma who had had surgery.

**FINDINGS:** The postoperative hospitalization time and self-care level of patients, whether the primary caregiver had health insurance, subjective feelings of fatigue, the perception that health was affected, and the patients' desired level of postoperative care were correlated with the occurrence of primary caregiver fatigue.

## KEYWORDS

liver cancer; primary caregiver; fatigue; postoperative

## DIGITAL OBJECT IDENTIFIER

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**LIVER CANCER WAS THE FOURTH MOST COMMONLY DIAGNOSED** malignant tumor worldwide and the second leading cause of cancer death in China in 2022 (Xia et al., 2022). After an early diagnosis of liver cancer, surgery represents a curative option of great benefit to the patient (Meng et al., 2021; Morine et al., 2023; Vitale et al., 2015). Cancer surgery leads to adverse complications, such as severe pain, nausea, anxiety, and fatigue. Much clinical attention is given to the care of postoperative patients (Zhang et al., 2020), but there has been less research on the physical and mental conditions of primary caregivers. Patients with liver cancer face adverse complications after surgery, including fever, bleeding, urinary retention, gastrointestinal disturbance, and hepatic and renal impairments. In addition, post-traumatic stress and fear related to cancer impaired the mental health of patients with liver cancer (Verma et al., 2021). The stress and burden associated with providing care to patients with advanced cancer can lead to fatigue and negatively affect family caregivers' quality of life and health (Morgan et al., 2022; Park et al., 2022). *Cancer-related fatigue* (CRF) is defined as a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent physical activity and that interferes with usual functioning (Berger, Mooney, et al., 2015). Nearly half of patients with cancer were affected by CRF during the course of treatment (Poort et al., 2020). More than two-thirds of patients with cancer experienced severe CRF for at least six months, and one-third reported persistent fatigue for years after treatment (Fabi et al., 2020; Poort et al., 2020). Despite CRF being a widespread symptom and causing significant disruption in postsurgical recovery and quality of life for patients with cancer, it still tends to be underestimated, and assessment of CRF is not performed routinely in oncology nursing practice.

Patient self-care ability changes before, during, and after the postoperative period. Studies show that the depressive symptoms and decreased quality of life of caregivers were significantly related to the patients' self-care ability, measured by the Barthel Index (BI), the duration and complexity of daily care, and insufficient finances (Hareendran et al., 2020; Mao