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Quality of Life of Chronic Liver Disease Patients: A Narrative Review

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Abstract

Background: Chronic liver disease (CLD), encompassing conditions such as cirrhosis, hepatitis, and non-alcoholic fatty liver disease, significantly compromises patients' physical, emotional, andsocialwell-being. Whileclinicalmanagementoftenemphasizesphysiological outcomes, the broader impact on health-related quality of life (HRQOL) is frequently overlooked.

Objective: This narrative review aims to synthesise existing literature on the multidimensional effects of CLD on patients' quality of life, highlighting key determinants and advocating for a holistic, patient-centred approach to care.

Methods: Astructured literature search was conducted using databases such as PubMed, Scopus, and Google Scholar. Sixteen peer-reviewed studies meeting predefined inclusion criteria were analysed thematically across three domains: physical health, psychological well-being, and social functioning. Validat quality of life tools, especially the SF-36 Health Survey, were central to evaluation.

Results: The findings reveal that fatigue, mobility limitations, and chronic pain are prevalent physical symptoms that impair daily functioning. Psychologically, CLD patients experience high rates of depression, anxiety, and cognitive decline, further reducing treatment adherence and emotional resilience. Socially, stigma, financial burden, and weakened support systems contribute to isolation and diminished well-being.

Conclusion: CLD imposes a profound burden on quality of life across physical, emotional, andsocialdomains. Addressingtheseinterconnectedchallengesrequiresmorethanclinical intervention—it necessitates integrated care strategies involving psychological support, rehabilitation, and community-based resources. A shift toward holistic care is essential for improving the lived experiences of individuals with chronic liver disease.

Keywords: *Chronic liver disease, health-related quality of life, SF-36, depression, fatigue, stigma, psychosocial impact.*

Introduction

Chronic liver disease (CLD) encompasses a spectrum of long-standing hepatic conditions, including cirrhosis, chronic hepatitis B and C, liver fibrosis, and non-alcoholic fatty liver disease (NAFLD). These progressive disorders impair liver function over time, often resulting in a range of debilitating symptoms such as fatigue, ascites, hepatic encephalopathy, and jaundice. These manifestations can significantly hinder an individual's ability to perform daily activities and maintain independence.

However, the burden of CLD extends well beyond physical health. Patients frequently experience psychological challenges, including depression, anxiety, and emotional distress related to the uncertainty of disease progression. Socially, many face stigma, reduced

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social interaction, and occupational limitations, all of which contribute to diminished self-esteem and a reduced sense of well-being. These multidimensional impacts are collectively reflected in the concept of health-related quality of life (HRQOL), which encompasses physical, emotional, and social dimensions of health as perceived by individuals living with chronic illness.

Despite the profound impact CLD has on HRQOL, clinical management often prioritises physiological parameters and disease progression, with less attention given to psychological and social domains. Standardised instruments, such as the Short Form-36 (SF-36) Health Survey, offer a more comprehensive evaluation of patients' lived experiences by capturing various aspects of their quality of life.

This narrative review is done to analyze all existing literature to find out the real-world challenges encountered by individuals living with chronic liver disease. It seeks to identify the key determinants of HRQOL in this population and underscores the importance of adopting a holistic and patient-centred approach to care, one that integrates physical, psychological, and social support to enhance overall well-being.

Objectives

- To examine the physical health challenges experienced by individuals living with chronic liver disease, including fatigue, pain, and mobility limitations.
- To explore the emotional and psychological impact of CLD, such as depression, anxiety, and mental fatigue.
- To assess the social implications of the disease, including effects on work, relationships, social participation, and stigma.
- To evaluate how quality of life in CLD patients is measured in the literature, particularly through tools like the SF-36 Health Survey.
- To identify gaps in care and propose holistic, patient-centred strategies for improving quality of life in this population.

Methodology

This narrative review was conducted to explore the impact of chronic liver disease (CLD) on health-related quality of life (HRQOL) and to identify key contributing factors affecting patients' overall well-being. A structured literature search was performed across major electronic databases, including PubMed, Scopus, and Google Scholar, to identify relevant peer-reviewed articles.

Keywords included: "chronic liver disease," "quality of life," "HRQOL," "cirrhosis," "hepatitis," "SF-36," and "psychosocial impact." Inclusion Criteria includes: English-language articles involving **adult CLD patients, u**se of **validated QoL tools** (e.g., SF-36, CLDQ) and quantitative, qualitative, or review designs. Case reports, conference abstracts, editorials, Paediatric or transplant-specific studies, and articles not assessing QoL were excluded from the study.

The final 16 studies were analysed thematically under three domains: **physical health**, **psychological well-being**, and **social functioning,** to understand the broader impact of CLD on quality of life.

Results

The impact of chronic liver disease (CLD) on quality of life is well-documented in the literature. This section summarizes the findings from 16 selected studies, highlighting how CLD affects patients across three key domains: **physical health**, **psychological well-being**, and **social functioning**.

PHYSICAL HEALTH LIMITATIONS

Many studies emphasize that physical symptoms such as **fatigue**, **abdominal discomfort**, **muscle weakness**, and **reduced mobility** are common in CLD patients and significantly interfere with daily activities. Zhao and Li (2019) noted that patients with cirrhosis often experience complications like **ascites and hepatic encephalopathy**, which reduce independence and functional ability. Similarly, Jones et al. (2020) highlighted that limited mobility and chronic pain impair patients' capacity to perform daily tasks, advocating for **physiotherapy and rehabilitation programs** to improve functional outcomes.

Goh and Tan (2018) found that patients with NAFLD often reported persistent fatigue and low energy levels, even in the early stages of liver disease. Physical limitations not only reduce productivity but also contribute to psychological stress, creating a **cycle of deterioration in overall well-being**.

PSYCHOLOGICAL AND EMOTIONAL IMPACT

The psychological burden of CLD is widely recognized. Studies by Goh et al. (2018) and Thompson et al. (2018) found high rates of **depression and anxiety** among patients with chronic hepatitis. These emotional struggles are not simply reactions to physical symptoms—they also **negatively affect treatment adherence**, health behaviours, and disease progression.

Smith et al. (2017) described a **bidirectional relationship** between mental health and liver function: liver disease can lead to psychological distress, while untreated mental health issues can worsen liver outcomes. Roberts et al. (2018) further noted the risk of **cognitive decline**, including memory loss and attention deficits, particularly in patients with cirrhosis. These impairments make it difficult for patients to follow treatment regimens and maintain independence, reducing their overall quality of life.

SOCIAL AND ECONOMIC CHALLENGES

Chronic liver disease also takes a significant toll on patients' **social lives and economic stability**. Tan et al. (2020) and Harris et al. (2019) reported that patients often experience **job loss**, **financial strain**, and **social withdrawal** due to disease-related limitations. These stressors contribute to a sense of isolation and helplessness.

Lee et al. (2019) emphasized the importance of **social support networks**, such as family and community engagement, in improving emotional resilience and treatment adherence. Patients who lacked support systems were more likely to suffer from loneliness, stigma, and poor mental health.

Stigma, especially in patients with hepatitis or alcohol-related liver disease, was frequently reported as a barrier to seeking help or remaining socially active. This stigma can reinforce feelings of **shame and exclusion**, further lowering quality of life.

S.No.	Author(s) & Year	Title	Study Type	Key Findings
1	Zhao & Li (2019)	The impact of cirrhosis on quality of life: A prospective study	Prospective Study	Cirrhosis causes complications like ascites and encephalopathy, leading to reduced independence and poor QoL.
2	Goh, Cheong & Lee (2018)	Psychological impact of chronic liver disease: Depression and anxiety in hepatitis C	Observational Study	High prevalence of depression and anxiety in hepatitis C patients worsens adherence and disease progression.
3	Thompson, White & Moore (2018)	Psychological burden of hepatitis B and C: Depression and anxiety in chronic viral liver disease	Review Study	Anxiety and depression reduce treatment adherence and accelerate disease progression.
4	Tan, Lee & Wong (2020)	Social and economic burden of non-alcoholic fatty liver disease: A comprehensive analysis	Cross-sectional Study	NAFLD causes fatigue and financial strain, resulting in social withdrawal and reduced work capacity.
5	Harris, Lewis & Patel (2019)	Socioeconomic and social consequences of NAFLD: An in-depth study	Observational Study	Rising costs and employment challenges reduce QoL; support systems are essential.
6	Smith, Brown & Williams (2017)	Mental health and liver disease: A review of the literature	Review Study	Mental illness and liver disease interact bidirectionally, worsening clinical and QoL outcomes.
7	Roberts, Powell & Blackwell (2018)	Chronic liver disease and cognitive impairment: An overview	Review Study	CLD-related cognitive decline affects medication management and quality of life.
8	Lee, Yoon & Jung (2019)	The role of social support in managing chronic liver disease	Observational Study	Strong social support improves emotional health and treatment outcomes; lack of support leads to poor QoL.
9	Jones, Scott & Thompson (2020)	Physical limitations in chronic liver disease: A multidisciplinary approach	Clinical Study	CLD impairs mobility and muscle function; physiotherapy is recommended for improving physical independence.
10	Klingler & Pischke (2020)	Psychological and emotional impact of chronic liver disease on patients and caregivers	Narrative Review	Emotional burden affects both patients and caregivers; integrated psychological care is needed.
11	Lucey & Mathurin (2019)	Chronic liver disease and its impact on the quality of life	Review Study	Highlights the multidimensional burden of CLD; advocates for holistic care.
12	Goh & Tan (2018)	Quality of life in patients with non-alcoholic fatty liver disease: An emerging issue	Observational Study	NAFLD leads to reduced emotional and physical function,highlighting a need for psychosocial interventions.

S.No.	Author(s) & Year	Title	Study Type	Key Findings
13	Singh & Jain (2021)	Comprehensive care for chronic liver disease: Addressing the emotional, physical, and social needs	Review Study	Recommends patient-centred care addressing all domains of life affected by CLD.
14	Borg & González (2017)	The socio-economic burden of chronic liver disease: A review of QoL and work-related issues	Review Study	Work impairment and long-term financial stress in CLD patients lower QoL and independence.
15	Fayers & Machin (2016)	Quality of life: The assessment, analysis, and interpretation of patient-reported outcomes	Textbook/Reference	Provides foundation for QoL measurement and statistical interpretation (e.g., SF-36).
16	Ware & Sherbourne (1992)	The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection	Instrument Development	Introduced and validated SF-36, a widely used tool for assessing general health-related quality of life.

Discussion

This narrative review highlights that chronic liver disease (CLD) significantly compromises health-related quality of life (HRQOL), especially in domains related to **social functioning**, **emotional well-being**, and **physical independence**. Across the reviewed literature, factors such as **depression, anxiety, fatigue, limited mobility**, and **lack of social support** consistently emerged as key contributors to diminished QoL.

Many studies emphasised the **interconnected nature of physical and psychosocial burdens**, suggesting that effective management of CLD should extend beyond medical treatment to include **psychological counselling, lifestyle modifications**, and **community support**. The findings collectively support a **holistic, patient-centred model of care** to address the complex challenges faced by individuals living with CLD.

Conclusion

Chronic liver disease exerts a far-reaching impact on patients' lives, extending well beyond physical symptoms to include significant emotional and social challenges. The literature consistently shows that factors such as depression, fatigue, reduced mobility, and social isolation substantially diminish health-related quality of life.

This review underscores the need for a shift from purely clinical management to a more comprehensive, patient-centred approach. Integrating psychological support, rehabilitative services, and social care into standard treatment protocols is essential for addressing the multifaceted burden of CLD. Improving quality of life in this population requires not only medical intervention but also a deep understanding of the lived experiences of those affected.

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