



OPTIMISM'S IMPACT ON QUALITY OF LIFE IN CHRONIC DISEASE PATIENTS: A SYSTEMATIC REVIEW

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ABSTRACT

Chronic diseases have a significant impact on patients' quality of life, physically, psychologically and socially. Optimism, as part of positive psychology, plays an important role in helping patients face health challenges and improve their well-being. Objective: To identify the relationship between optimism and quality of life in patients with chronic diseases through a systematic review. Method: Following PRISMA 2020 guidelines, a comprehensive search across databases such as PubMed, Scopus, Sage, and Nature identified 7,340 articles, with six studies meeting the inclusion criteria. The review included only full-text, English-language quantitative studies—specifically case-control, cross-sectional, cohort, randomised controlled trials (RCTs), or quasi-experimental designs—that examined the relationship between optimism and quality of life in patients with chronic illnesses. There were no restrictions on publication year. Exclusion criteria comprised review articles, meta-analyses, and book or book chapter publications. Each included study was critically appraised using the CASP tool, which assessed research objectives, study design, sampling methods, measurement validity, bias control, and data analysis to ensure methodological rigour. Results: The analysis showed that optimism was positively associated with improved quality of life, especially in physical aspects such as reduced fatigue and improved mobility, as well as psychological aspects such as emotional and spiritual well-being. Social support also strengthened the impact of optimism on quality of life. Community-based interventions, occupational therapy, and multimodal approaches proved effective in increasing patient engagement in meaningful activities. Conclusions: Optimism is an important factor in improving the quality of life of chronic patients, and optimism-based interventions can be an effective strategy to support holistic patient well-being.

Keywords: chronic disease; optimism; quality of life

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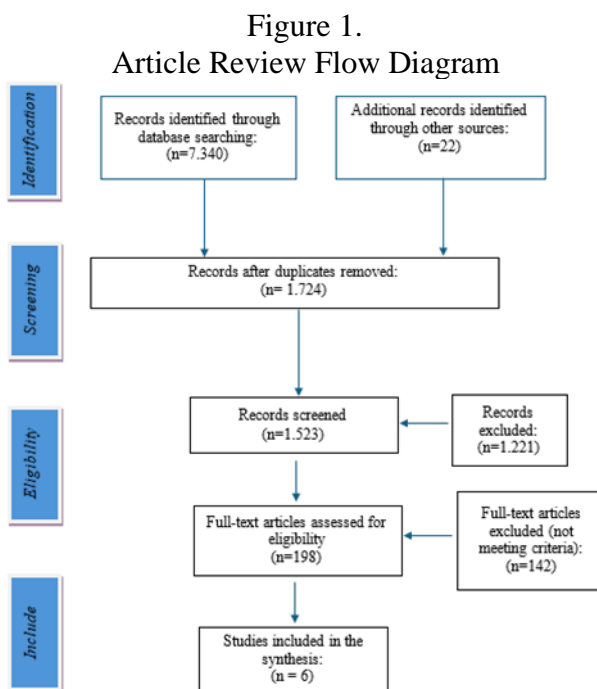
INTRODUCTION

Chronic illnesses present major challenges to global healthcare, significantly affecting patients' quality of life. The World Health Organization (WHO) defines health-related quality of life (HRQoL) as comprising physical, mental, and social aspects influenced by health status (Akan & Kartal, 2023). Demographic changes and the rising prevalence of chronic diseases contribute to declining quality of life, emphasizing the need for strategies to enhance patient wellbeing (Hacker, 2024; Siboni et al., 2019). Optimism plays a crucial role in improving quality of life, as studies link it to better stress management and psychological wellbeing. Research has shown a positive relationship between optimism and emotional and spiritual wellbeing in chronic illness patients (Lestari et al., 2023; Schiavon et al., 2017). Additionally, the effects of therapy and treatment side effects on quality of life have been explored (Dąbrowska-Bender et al., 2017; Llamas-Ramos et al., 2023; Nguyen et al., 2023).

Research by Suhertini et al., 2023 found that psychosocial interventions promoting optimism can help patients and families navigate chronic illness challenges. However, there is still

limited understanding of how to effectively implement optimism-based interventions in clinical settings, with much research focusing primarily on the correlation between optimism and quality of life (Scherz et al., 2017). Few systematic reviews have examined the effects of optimism on various dimensions of quality of life in chronically ill patients. This study aims to systematically review the relationship between optimism and quality of life in this population, highlighting the effectiveness of optimism-based interventions.

METHOD



This systematic review followed the PRISMA 2020 guidelines to investigate the relationship between optimism and quality of life in individuals with chronic diseases. No year limitations were applied during the screening process to ensure comprehensive coverage of relevant literature. Articles were retrieved from major scientific databases, including Scopus, ProQuest, ScienceDirect, Elsevier, Nature, SpringerLink, and PubMed, using the following keywords: “Chronic Disease” OR “Chronic Illness” AND “Optimism” OR “Positive Attitude” AND “Quality of Life” OR “Health-Related Quality of Life”. A total of 7,340 studies were identified across six databases. After removing duplicates, 1,724 articles were screened based on their titles and abstracts. Of these, 1,523 articles were excluded, mainly due to lack of full-text availability. Subsequently, 198 full-text articles were reviewed for eligibility, and finally, six studies met the inclusion criteria for this review. The entire article selection process is illustrated in the PRISMA flow diagram.

Inclusion Criteria:

- Full-text articles
- Quantitative studies using case-control, cross-sectional, cohort, randomized controlled trial (RCT), or quasi-experimental designs
- Articles written in English
- Studies investigating the relationship between optimism and quality of life in patients with chronic diseases

Exclusion Criteria:

- Review articles
- Meta-analyses
- Books or book chapters

The methodological quality of the selected studies was assessed using the Critical Appraisal Skills Programme (CASP) instrument. This evaluation focused on internal validity, study design, sample adequacy, and statistical analysis. The study selection process included initial screening of titles and abstracts, followed by full-text reviews based on eligibility criteria. A narrative synthesis approach was used to compare and analyse the findings, identify themes, and explore the link between optimism and quality of life in chronically ill populations.

RESULT

Table 1.
Article Analysis Results

No	Authors, year of published, country of origin	Article title	Aim	Design	Sample	Result (can be expanded)
1	(Ciria-Suarez et al., 2021)	Optimism and social support as contributing factors to spirituality in Cancer patients	This study aimed to analyze the relationship between optimism and social support on the spiritual well-being of cancer patients starting adjuvant chemotherapy.	Cross section al study	There are 912 cancer patients who have undergone curative surgery for stage I - III cancers and will receive adjuvant chemotherapy. The sample included patients from various hospitals in Spain recruited between July 2015 and July 2018.	Notable variations in spirituality scores were observed across different age groups, genders, marital statuses, occupations, and types of cancer treatment. The results of the multivariate analysis indicated that both optimism and social support were significantly and positively associated with the two subdimensions of spirituality. These two factors accounted for the majority of the variance observed in spirituality scores.
2	(van der Doelen et al., 2023)	Health-related quality of life, psychological distress, and fatigue in metastatic castration-resistant prostate cancer patients treated with radium-223 therapy	This study aimed to evaluate health-related quality of life (HR-QoL), psychological distress, and fatigue in metastatic castration-resistant prostate cancer (mCRPC) patients treated with radium-223 in daily practice. The study also aimed to identify variables associated with reduced HR-QoL during therapy.	Cohort Study	A total of 122 mCRPC patients with symptomatic bone metastases without visceral metastases were treated using radium-223. Patients had to give informed consent and fulfill the inclusion criteria.	Patients who did not complete radium-223 therapy reported poorer health-related quality of life (HR-QoL), greater pain intensity, heightened psychological distress, and increased fatigue compared to those who completed the treatment. Throughout the course of therapy, notable differences emerged: patients who completed the treatment experienced stabilisation in HR-QoL, psychological distress, and fatigue levels, whereas those who discontinued treatment showed significant declines across all three domains. A reduction in HR-QoL was more commonly observed among patients who had used opioids at baseline, had lower haemoglobin levels, and exhibited elevated alkaline phosphatase (ALP) levels.

No	Authors, year of published, country of origin	Article title	Aim	Design	Sample	Result (can be expanded)
3	(Witt et al., 2023)	Effects of a Pretend Play Intervention on Health-Related Quality of Life in Children With Cancer: A Swedish-German Study	This study aimed to explore whether a pretend play intervention can improve health-related quality of life (HrQoL) and self-efficacy (SE) for communication in care settings for children with cancer.	Experimental design	The 19 families included 14 self-reports from children (aged 3-10 years) and 19 reports from parents. Children included were cancer patients from two countries who met the inclusion criteria.	The children demonstrated notable enhancements in communication, emotional health, and psychosocial wellbeing, as assessed by both general and cancer-specific HrQoL instruments. Their self-efficacy in clinical situations showed significant progress, particularly in seeking assistance, voicing refusal, and coping with undesirable procedures. A modest improvement was also observed in the physical aspect of HrQoL, along with increased independence as reported by parents. The children expressed high levels of enjoyment during the play sessions, with an average satisfaction rating of 4.55 out of 5. Additionally, no adverse effects were reported throughout the intervention.
4	(Poier et al., 2019)	Influence Of A Multimodal And Multimodal – Aerobic Therapy Concept On Health – Related Quality Of Life In Breast Cancer Survivors	The aim of this study was to prove the effect of multimodal therapy (MT) and combination therapy (CT) that includes aerobic exercise (AT) on HRQOL in breast cancer survivors with chronic CRF, and compare it with AT therapy alone.	Cohort Study	The sample consisted of 126 breast cancer survivors who experienced CRF. They were divided into three groups: Multimodal Therapy (44 participants), Combination Therapy/CT (54 participants), and Aerobic Therapy (28 participants). Inclusion criteria included women aged 18-75 years who had completed cancer treatment within the previous 36 months and had moderately high fatigue scores.	After ten weeks of intervention, combination therapy proved to be significantly more effective than aerobic therapy (AT) in enhancing physical functioning. Multimodal therapy demonstrated clear benefits over AT across various domains, including physical and emotional functioning, sleep disturbances such as insomnia, and financial difficulties, at both assessment points (T1 and T2). Additionally, participants in the multimodal therapy group experienced notable improvements in cognitive and social functioning, along with reduced fatigue levels. Overall, the findings suggest that a multimodal therapeutic approach is more effective than aerobic therapy alone in enhancing health-related quality of life (HRQoL) among breast cancer survivors experiencing chronic cancer-related fatigue (CRF).

No	Authors, year of published, country of origin	Article title	Aim	Design	Sample	Result (can be expanded)
5	(Rha et al., 2022)	Self-Efficacy For Coping With Cancer And Quality Of Life In Advanced Gastric Cancer Patients	The aim of this study was to describe self-efficacy in coping with cancer and evaluate its relationship with quality of life (QoL) in patients with advanced gastric cancer.	Descriptive correlation	The study sample consisted of 202 patients with advanced gastric cancer who were undergoing palliative chemotherapy. Patient characteristics showed that the majority had an average age of 57.2 years and most were male.	Findings indicated that the highest-scoring self-efficacy subscale was related to seeking and understanding medical information, while the lowest was the use of spiritual coping strategies. Self-efficacy in sustaining daily activities and independence, as well as in accepting the illness, maintaining a positive outlook, and making informed decisions, showed a significant contribution to quality of life as measured by the FACT-Ga and FACIT-Sp instruments. These results suggest a strong positive association between cancer-related self-efficacy and quality of life, highlighting that enhancing self-efficacy may play a key role in improving patient wellbeing.
6	(Petrušević et al., 2018)	Effect of Community-Based Occupational Therapy on Health-Related Quality of Life and Engagement in Meaningful Activities of Women with Breast Cancer	This study aims to evaluate the short-term effects of community-based occupational therapy on health-related quality of life and engagement in meaningful activities in women with breast cancer.	Randomized controlled trial	The study involved a total of 22 women with breast cancer who were members of a breast cancer community organization. Of these, 21 successfully completed the study. The experimental group participants consisted of 10 women, while the control group consisted of 11 women. Inclusion criteria included a diagnosis of breast cancer, ability to follow simple instructions, and functional status according to the ECOG scale ≤ 2 .	Following a six-week intervention, the experimental group demonstrated significant enhancements in multiple dimensions of quality of life when compared to the control group. These improvements encompassed physical, emotional, cognitive, and social functioning, along with reductions in fatigue, sleep disturbances, and symptoms associated with breast cancer. A positive correlation was identified between greater involvement in meaningful activities and improvements in emotional wellbeing, as well as reduced insomnia. Community-based occupational therapy programmes offer clear benefits for women with breast cancer, particularly in enhancing health-related quality of life and encouraging participation in purposeful activities.

DISCUSSION

The review's results align with positive psychology principles, indicating that social support interventions can significantly enhance emotional wellbeing (Acoba, 2024; Peterson et al., 1982; Zhao et al., 2022). Occupational therapy not only provides physical assistance but also promotes social engagement, fostering optimism and aiding stress regulation. Research conducted by Schiavon et al., (2017) and Treaster, (2021), highlights a strong connection between optimism and quality of life in individuals with chronic health conditions. This study supports these findings, demonstrating that occupational therapy can effectively boost optimism, positively impacting overall quality of life. These conclusions are consistent with literature showing that psychological interventions can improve various aspects of quality of life for cancer patients (Bognár et al., 2024; Peng et al., 2023; Witt et al., 2023). Further analysis identified diverse intervention strategies aimed at enhancing quality of life in cancer patients, addressing psychological, social, and physical dimensions. Across the studies reviewed, optimism consistently emerged as a key factor in improving the wellbeing of individuals with chronic illnesses.

Optimism and Social Support

The reviewed studies reveal a positive association between optimism and spiritual wellbeing in cancer patients. Together, optimism and social support significantly influence spirituality scores, a key component of overall quality of life (Ciria-Suarez et al., 2021; Goudarjian et al., 2025).

Psychological Relationships and Quality of Life

Literature indicates that psychological interventions enhancing communication and emotional wellbeing can significantly improve various quality of life dimensions in children with cancer (Gabriel et al., 2020; Lin et al., 2024; Witt et al., 2023). Additionally, self-efficacy, often influenced by optimism, plays a critical role in enhancing quality of life for individuals with advanced gastric cancer (Applebaum et al., 2014; Rha et al., 2022; Yin et al., 2022).

Therapeutic Interventions and Optimism

Comprehensive interventions combining physical and psychological support have been shown to significantly improve emotional and social functioning among cancer patients (Avancini et al., 2023; Poier et al., 2019). Community-based occupational therapy promotes patient engagement in meaningful activities, enhancing emotional health and reducing insomnia, both closely linked to optimism (Newman et al., 2024; Petruseviciene et al., 2018; Rider & Tay, 2022). In metastatic cases, patients with higher optimism levels tend to maintain a more stable quality of life during rigorous treatments (de Moor et al., 2006; Petersen et al., 2008; van der Doelen et al., 2023). The article "Optimism and social support as contributing factors to spirituality in cancer patients" emphasizes optimism's significant role in the spiritual wellbeing of cancer patients. This research explores the interplay between optimism, social support, and spirituality in patients beginning chemotherapy, recognizing spirituality as a vital coping resource for finding meaning in life-threatening situations (Albaugh, 2003; Ciria-Suarez et al., 2021; Heuschkel et al., 2024; Stelcer et al., 2023).

CONCLUSION

Optimism has been found to exert a notably positive influence on the quality of life among individuals with chronic illnesses, both as a direct factor and through its role in enhancing self-efficacy and involvement in meaningful activities. It operates in conjunction with other supportive elements—such as social support networks, community-based therapeutic interventions, and multimodal treatment strategies—to improve patients' physical, emotional, and social wellbeing. The findings of this review underscore the vital role of optimism as a

psychological resource that can complement medical care in promoting the overall wellbeing of those living with chronic conditions.

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