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Scoping Review on the Quality of Life of the Visually Impaired

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Abstract

This scoping review systematically examined the relationship between visual impairment (VI) and quality of life (OoL), with particular emphasis on the social, psychological, and functional domains most affected. It also aimed to identify existing QoL assessment tools and evaluate their conceptual frameworks, multidimensionality, and contextual relevance. A comprehensive literature search was conducted in March 2025 across six electronic databases: EMBASE, PubMed, CINAHL, MEDLINE, the Cochrane Library, and Airiti Library. Following rigorous screening procedures, 62 peer-reviewed English-language studies were included. The review analyzed both theoretical perspectives and empirical evidence, as well as measurement instruments used to assess QoL among individuals with VI. Findings revealed that VI significantly impacts multiple aspects of QoL, including physical functioning, psychological well-being, social participation, and economic stability. While 29 vision-specific QoL instruments were identified, most focused narrowly on functional limitations and visual ability, with limited attention to environmental, emotional, and social factors. Only a few tools addressed broader contextual elements such as autonomy, dignity, and quality of social engagement. Age, severity of vision loss, socioeconomic status, and access to care were key determinants influencing QoL outcomes. Overall, VI presents far-reaching challenges that extend beyond sight loss, affecting autonomy, mental health, and social inclusion. Existing assessment tools often fail to capture the full lived experience of individuals with VI, particularly in low- and middle-income countries. There is a critical need for more holistic, culturally responsive, and multidimensional approaches to QoL assessment.

Keywords: Disability, Measurement Instruments, Quality of Life, Scoping Review, Social Inclusion, Visual Impairment.

Introduction

Vision is an essential component of human functioning, influencing nearly every aspect of daily life, including communication, mobility, learning, and social interaction. It enables individuals to interpret their environment, engage with others, and participate

meaningfully in personal and professional activities [1]. Beyond its instrumental role, vision also contributes significantly to emotional well-being and an individual's sense of autonomy and dignity [2]. When vision is impaired, these essential life dimensions are compromised, often resulting in wide-ranging

 physical, psychological, and socioeconomic consequences.

Visual impairment (VI) refers to a substantial limitation in visual functioning that cannot be corrected through conventional means such as eyeglasses, medication, or surgery [3]. It includes a spectrum of conditions ranging from moderate visual limitations to complete blindness, resulting from a variety of causes such as congenital disorders, age-related degeneration, infections, trauma, or systemic illnesses like diabetes [4]. According to the WHO, an estimated 2.2 billion people globally live with some form of visual impairment or blindness (VI&B), and at least 1 billion of these cases could have been prevented or remain unaddressed [1] The global burden of VI is not evenly distributed: approximately 90% of individuals with visual impairment reside in low- and middle-income countries, where access to eye care and rehabilitation services is limited [5, 6].

The consequences of visual impairment go far beyond vision loss. Individuals with VI often face significant barriers in education, employment, and social participation, especially in resource-limited settings [7, 8]. In many cases, these barriers are exacerbated by social stigma, lack of inclusive infrastructure, and insufficient public health policy. The effects are particularly profound for vulnerable populations such as older adults, women, and children, who may face multiple layers of marginalization [9]. This marginalization often leads to diminished quality of life (QoL), which is increasingly recognized as a critical outcome in vision-related research [10].

life Quality of is a broad and multidimensional concept that reflects an individual's subjective evaluation of their physical health, psychological state, social relationships, personal beliefs, and interaction with their environment [11, 12]. The World Organization Health Quality Life (WHOQOL) framework emphasizes that QoL shaped by cultural norms, personal

expectations, and individual values [13]. For people living with visual impairment, QoL is often compromised by reduced independence, limited mobility, social isolation, and emotional distress [14, 15]. These limitations frequently lead to secondary health issues, including anxiety, depression, and cognitive decline, particularly among older adults [16, 17].

A growing body of research has highlighted the negative impact of visual impairment on QoL outcomes. Jones and colleagues reported that adults with moderate-to-severe VI were more likely to report reduced well-being, impaired social interaction, and diminished satisfaction with life [14]. Similarly, et al. Lamoureux demonstrated that VI limits physical significantly functioning, emotional well-being, and participation in leisure activities [7]. Other studies have shown that the effects of VI on QoL vary depending on factors such as age, gender, socioeconomic status, and access to assistive technologies and support services [18, 19]. Cultural attitudes toward disability and visual loss also play a key role in shaping individual experiences [20].

International development agendas have increasingly acknowledged the need to address the needs of people with visual impairment. The inclusion of eye health and disability rights United Nations within the Sustainable Development Goals (SDGs) underscores the global recognition of vision as a key determinant of development. human Specifically, SDG 3 (Good Health and Wellbeing) and SDG 10 (Reduced Inequalities) emphasize the importance of equitable access to health services and full participation in society, including for persons with disabilities [21, 22]. Organizations such as the International Agency for the Prevention of Blindness and the WHO have launched global initiatives such as "VISION 2020: The Right to Sight" and "2030 In Sight" to reduce avoidable blindness and improve QoL for those affected by VI [6, 23].

Despite the growing volume of literature on visual impairment and QoL, the existing evidence remains fragmented, with limited synthesis across geographic, socioeconomic, and cultural contexts. Moreover, most studies have focused on specific populations or health outcomes, making it difficult to draw general conclusions or identify gaps in knowledge. This scoping review aims to systematically examine the relationship between visual impairment and quality of life, with particular attention to the social, psychological, and functional domains most affected. It also zero in on contributing to a better understanding of the lived experiences of individuals with visual impairment and inform evidence-based policy, practice, and future research.

Materials and Methods

To identify existing knowledge gaps and fulfill the objectives of this scoping review, a comprehensive search of peer-reviewed literature was conducted. Relevant studies were retrieved from six major electronic databases: EMBASE, PubMed, CINAHL, MEDLINE, the Cochrane Library, and Airiti Library. All database searches were completed in March 2025. The literature search began with the keyword phrase determinants of quality of life of visually impaired, which initially returned 171 English-language scholarly articles. A total of 58 publications were excluded at the initial stage—21 due to duplication and 37 for lacking relevance, particularly those focused on knowledge, attitudes, or health-related QoL, which primarily address medical informational aspects, diverging from the holistic definition of QoL provided by the WHO.

The remaining 113 articles underwent a title and abstract screening, during which additional papers excluded for were concentrating on societal, familial, or occupational aspects of OoL rather than individual perceptions or lived experiences. This reduced the pool to 58 articles. Further screening removed empirical studies solely evaluations conducting psychometric existing QoL instruments (n=27) and studies exploring the impact of clinical services or vision loss on QoL (n=23). After applying these exclusion criteria, 78 articles remained and were further evaluated based on full-text availability. Ultimately, 62 publications with strong contextual relevance to the research objectives were selected for inclusion. These were categorized into two broad sub-topics: theoretical frameworks and perspectives on QoL in visually impaired individuals (n=12), and research on instruments used to assess QoL in this population (n=50). The review process, ensuring comprehensive examination of each paper. The findings from this qualitative synthesis are presented in the following section. The first part focuses on conceptual understandings of QoL among individuals with visual impairment and blindness, while the second part identifies existing gaps in the literature. The overall search and screening process is illustrated in Figure 1.

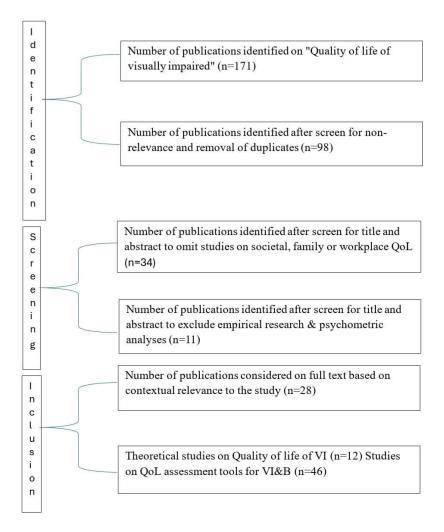


Figure 1. The Overall Search and Screening Process

Results

Visual impairment significantly impacts multiple aspects of individuals' quality of life (QoL), extending beyond physical limitations to include social, emotional, economic, and environmental factors [24, 25]. Understanding these multidimensional effects is crucial to providing holistic care for affected populations. comprehensive approach acknowledges the interplay between clinical status and broader determinants such as social support, mental health, and economic stability [26]. As Post highlights, studies assessing vision-related QoL must clearly define how QoL is conceptualized and measured to ensure meaningful interpretation [26]. Consequently, exploring the extent and methods by which QoL has been evaluated in visually impaired

populations remains a fundamental step in advancing patient-centered eye care.

This construct was evaluated using various models and measurement tools. A total of twenty-nine (29)vision-specific instruments identified through a literature search were examined to provide comprehensive overview of the measures currently available for individuals with visual impairment (VI). The study highlighted that nearly all these instruments multidimensional approach, assessing multiple life domains that collectively contribute to an individual's quality of life. Also, almost all the vision-specific QoL tool found in the literature focused on a multidimensional evaluation of several life domains that constitute a life of quality for an individual. Moreover, the visionspecific QoL instruments were disease-specific and only focused on aspects like visual functionality, independent living, and the effect of visual infirmity, which alone is insufficient for assessing one's QoL [27-35]. Interestingly, only three tools [35-37] intensively consider how environmental variables affect the quality of life of an individual with visual impairment and blindness, but neglected to pay attention to other aspects that affect their well-being. In contrast, other instruments paid little attention to environmental variables [24, 25, 33].

Discussion

This scoping review aimed to map the existing evidence on how visual impairment affects quality of life across different populations and settings. The findings underscore the multifaceted impact of VI on individuals' physical, psychological, and social well-being, highlighting the need for comprehensive interventions and policies to address these challenges.

Physical and Functional Impact

Visual impairment significantly affects various dimensions of health-related quality of life, including mobility, self-care, and daily activities. Studies have consistently shown that individuals with VI report lower scores on generic health-related quality of life measures, such as the EQ-5D and SF-36, compared to the general population [38, 39]. In addition, individuals with severe visual impairment experience greater limitations in mobility and usual activities, which are critical components of daily functioning [38].

Psychological and Emotional Well-being

The psychological impact of visual impairment is profound, with individuals often experiencing increased levels of anxiety, depression, and social isolation. Research indicates that vision loss is associated with lower mental health scores and diminished emotional well-being [8, 14]. The loss of independence and the challenges in performing

routine tasks contribute to these psychological burdens, emphasizing the need for mental health support in the management of visual impairment.

Social Participation and Independence

Social participation is notably reduced among individuals with visual impairment, particularly in low- and middle-income countries where access to assistive technologies and rehabilitation services may be limited. Studies have highlighted that individuals with often face barriers to education, employment, and social engagement, leading to increased dependency and decreased quality of life [5, 8]. The availability of rehabilitation programs and community support services plays a crucial role in mitigating these challenges and enhancing social inclusion.

Age and Severity Considerations

The impact of visual impairment on quality of life varies with age and severity of vision loss. Older adults with VI often experience more pronounced limitations in physical functioning and greater psychological distress compared to younger individuals [39, 40]. Additionally, the severity of visual impairment correlates with the extent of functional limitations and emotional distress, underscoring the importance of early detection and intervention [38].

Global Disparities and Access to Care

There are significant global disparities in the prevalence and impact of visual impairment, with individuals in low- and middle-income countries bearing a disproportionate burden. Factors such as limited access to eye care services, socioeconomic status, and educational opportunities exacerbate the challenges faced by these populations [1]. Addressing these disparities requires a concerted effort to integrate eye care into national health policies and ensure equitable access to services and rehabilitation programs.

Implications for Policy and Practice

The findings of this review have several implications for policy and practice. First, there for the development need implementation of comprehensive rehabilitation programs that address the physical, psychological, and social aspects of visual impairment. Also, policies should focus on increasing access to assistive technologies support services, particularly underserved regions. Furthermore, there is a necessity for the development and/or expansion of public health initiatives aimed at raising awareness about the causes and prevention of visual impairment, as well as promoting early detection and intervention.

Limitations and Future Research

While this scoping review provides valuable insights into the impact of visual impairment on quality of life, it is not without limitations. The heterogeneity of study designs, populations, and outcome measures across included studies may affect the generalizability of the findings. In future research, there is a need for studies that explore the experiences of individuals with dual sensory impairments and the intersectionality of visual impairment with other socioeconomic factors.

Conclusion

This scoping review highlights the broad and complex ways in which visual impairment (VI) affects quality of life (QoL) across physical, psychological, social, and economic dimensions. The evidence consistently shows that individuals with VI face considerable

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challenges in performing daily activities, maintaining emotional well-being, participating in social and professional life, and accessing equitable healthcare and rehabilitation services.

The impact of VI is further shaped by factors such as age, severity of vision loss, socioeconomic status, and geographic location. While individuals in high-income countries benefit from advanced and comprehensive technologies support systems, those in low- and middle-income countries often contend with limited access to care and societal exclusion. These disparities call for a more inclusive and global approach to supporting individuals with vision loss.

Moreover, the current literature reveals a strong need for interdisciplinary and personcentered interventions that address not just the medical but also the psychological and social aspects of vision loss. Rehabilitation, mental health services, assistive technology, and supportive environments play critical roles in promoting independence and improving QoL among individuals with VI.

Conflict of Interest

No conflict of interest was declared by the authors.

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