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QUALITY OF LIFE AND THE IMPACT OF MULTIMORBIDITY IN PATIENTS WITH CHRONIC DISEASE: LITERATURE REVIEW

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Abstract

Introduction. Diseases with high prevalence, such as high blood pressure, dementia, depression, and diabetes, can lead to multimorbidity, which is defined as the presence of more than one health condition in the same individual and is today considered a global challenge. Multimorbidity has consequences both in quality of life and in the use of healthcare services.

Objective. Review of the literature regarding the identification of quality of life and the impact caused by multimorbidity in patients with chronic diseases.

Materials and methods. The search included electronic databases: Ovid PubMed, Cochrane Library, and NLM Tools. Inclusion criteria included published studies on the topic of identifying the impact of multimorbidity on quality of life in patients. More than sixty potential articles were identified, but the review included the original results of nine studies that had a direct connection to the topic of interest.

Results. According to the conducted review, it was evident that mainly third-age individuals, with an average age around 60 years, presented for medical treatment for two or more diseases. In some studies, patients with low educational levels were more likely to present with multimorbidity, also showing a low quality of life as a result of the diseases. These patients exhibited difficulties even in accessing healthcare services. The most frequently identified diseases were arterial hypertension, dyslipidemia, diabetes, obstructive sleep syndrome (apnea-hypopnea), anxiety, heart failure, depression, and ischemic heart diseases.

Conclusions. Difficulties in accessing healthcare services and the coexistence of cardiometabolic and psychiatric diseases worsen the quality of life and treatment outcomes, emphasizing the need for integrated and multidisciplinary approaches in managing multimorbidity in patients with chronic diseases.

Keywords: *patient, quality of life, chronic disease, multimorbidity, impact.*

1. Introduction

Population aging, along with multimorbidity, or the presence of more than one chronic disease in the body, has shown an increasing trend in recent years. People with chronic diseases usually belong to ages over 60 years and, often during their lifetime, have need for care (WHO, 2016).

This increasing trend of third-age individuals constitutes an alarm bell for healthcare systems as it represents a noticeable demographic change that requires a review of the care system (EU, 2015). According to the literature, the presence of more than one chronic disease leads to a negative impact on quality of life, directly affecting health, as well as the use of healthcare services that these individuals may need.

Maintaining autonomy, functioning in daily life, such as physical activity or routine, as well as the satisfaction that individuals wish to preserve, require that these elements remain as unchanged as possible compared to their previous life, even though chronic diseases are incurable (Brijoux, T., Woopen, C., & Zank, S., 2021).

However, the overlap of more than one chronic disease, or multimorbidity, is considered the main factor that directly affects patients and caregivers, as well as society and surrounding individuals. Nevertheless, not all effects of the interconnection between quality of life and chronic diseases are yet known, even though there are studies on the presence of more than one chronic disease. (Wilder, L., Devleeschauwer, B., Clays, E., De Buyser, S., Van der Heyden, V., 2022)

According to the literature, the most frequent chronic diseases encountered in third-age individuals, which affect quality of life, are: Hypertension, Diabetes mellitus, Cerebrovascular diseases, Ischemic heart diseases, which are followed by other forms of cardiac diseases (Wu, D., Xu, J., Zhang, H., & Zhu, Y., 2025).

2. Objective

Review of the literature regarding the identification of quality of life and the impact caused by multimorbidity in patients with chronic diseases.

2. Materials and Methods

2.1 Search Procedure

The search included electronic databases: Ovid, PubMed, Cochrane Library, Google Scholar, and WHO. The keywords used referred to the topic, such as “quality of life”, “chronic disease”, “multimorbidity”, “impact”. Regarding the language, articles in English were included in the study. The search was conducted in accordance with the guidelines for systematic literature review (Page, M. J. (2021).

2.2 Inclusion and Exclusion Criteria; Categorization

From the search, dissertations and book chapters were excluded. The inclusion criteria were published studies that addressed the topic of identifying quality of life and the impact of multimorbidity on patients with chronic diseases, as well as systematic literature reviews.

The search process resulted in the identification of more than sixty potential articles, but the analysis included the original results of five studies that had a direct connection to the topic of interest. The categorization of articles was done according to the first author and year of publication, the method used, and the main results.

3. Results and Discussion

The results include the analysis of five studies. The analysis highlighted that the presence of more than

one chronic disease negatively affects the quality of life, (Table 1).

Table 1. Overview of data analysis

The first author and the year of publication	Method	Main results
<i>Makovski et al., 2019</i>	Systematic review of the literature	The interesting result was the linear relationship between the increase in the number of diseases and quality of life (QoL).
<i>Makovski et al., 2020</i>	Analizë ndër-seksionale në valën 6 të Anketës së Bazuar në Popullatë për Shëndetin, Plakjen dhe Pensionimin në Evropë, midis pjesëmarrësve të moshës 50+ (n = 67,179). Instrumenti i përdorur: Pyetësi i Kontrollit, Autonomisë, Vetë-realizimit dhe Kënaqësisë (CASP-12v1) për matjen e QoL.	The association between the number of diseases and QoL was tested using a linear regression model with mixed effects. The base model was adjusted for socio-economic characteristics. The factors of interest (symptoms, polypharmacy, unmet care needs, care use, social network, personal and financial assistance, loneliness, and activities of daily living (ADL) and instrumental activities (IADL)) were added one by one to the base model.
<i>Brijoux, T., 2021</i>	Interview. Participants: individuals over 80 years old (n=80+), who were interviewed about the management of health issues.	Individuals over 80 years of age were treated on average for 3.62 diseases, and 31.4% received treatment for five or more diseases. No association was found between multimorbidity and age group. Autonomy, functioning, and life satisfaction were reduced in relation to multimorbidity.
<i>Almagro, P., 2024</i>	Observational study in Spain, sample: 4,801 patients	This study presents a detailed overview of multimorbidity and chronic diseases. The most frequent diseases are arterial hypertension (51%), dyslipidemia (36.1%), and diabetes (25%), accompanied by other syndromes such as sleep apnea-hypopnea, anxiety, heart failure, and depression (on average 12.5%). Other pathologies mentioned include atrial fibrillation, peripheral vascular diseases, and ischemic heart disease.
<i>Ahamad et al., 2025</i>	Longitudinal study, sample: 30,716 people over 60 years old	This study evidenced that 23.8% of elderly adults had multimorbidity, with higher prevalence in females and older age groups. The most common conditions: hypertension (32.7%), bone/joint diseases (19.6%), diabetes (14.3%), stroke (2.5%). The results show the negative impact of multimorbidity on the physical and psychological well-being of the elderly.

The reviewed studies consistently show that multimorbidity has a negative impact on quality of life (QoL)

in patients with chronic diseases, confirming the purpose of this review. For example, Makovski et al. (2019, 2020) emphasized a linear relationship between the number of chronic diseases and the decrease in QoL, with further analyses showing that social support, care needs, and functional limitations (ADL/IADL) influence this connection. Similarly, Brijoux (2021) found that adults over 80 years old with multiple chronic diseases experienced a reduction in autonomy, functioning, and life satisfaction, although age was not a specific determining factor.

Observational studies with large samples support these results. Almagro (2024) reported high prevalence of common chronic diseases, such as hypertension, diabetes, and dyslipidemia, often accompanied by other conditions like depression and heart failure, which together affect QoL. Ahamad et al. (2025) also confirmed that multimorbidity was more common in the elderly, especially in women, and was associated with weakening of physical and psychological well-being.

Together, these results show that the burden of multiple chronic diseases extends beyond clinical complexity and significantly affects daily functioning, autonomy, and psychosocial health. This consistent pattern across all studies underscores the importance of integrated and patient-focused care, which addresses not only disease management but also functional independence, mental health, and social support to improve QoL in patients with chronic diseases.

Conclusion

The prevalence of the presence of more than one chronic disease is observed in all socio-economic strata, but the highest levels and the most severe health consequences are found in individuals with lower incomes. Different types of multimorbidity affect in different ways the quality of life, while patients often face difficulties in accessing and using healthcare services, feeling a decrease in productivity and their well-being. The coexistence of cardiometabolic and psychiatric diseases further worsens the quality of life and treatment outcomes, highlighting the need for integrated, multidisciplinary, and personalized approaches in managing multimorbidity and improving the healthcare system for patients with complex chronic conditions.

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