



Prevalence of Psychosomatic Problems in Geriatric With Chronic Disease: A Systematic Review

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ABSTRACT

Background: Psychosomatic problems, such as anxiety, depression, and stress, are frequently experienced by the elderly with chronic diseases due to the complex interaction between physical and psychological conditions.

Objective: This study aims to examine the prevalence of psychosomatic problems in the elderly with chronic diseases through a systematic review.

Methods: Data were collected from PubMed, Scopus, and ScienceDirect using keywords including "psychosomatic," "elderly," and "chronic disease." A total of 6 studies involving 14,500 participants (aged ≥ 60 years) with various chronic conditions met the inclusion criteria.

Results: The analysis revealed that the prevalence of psychosomatic problems ranged from 30% to 70%, with depression (50%) and anxiety disorders (45%) being the primary issues. Key risk factors identified included duration of illness, pain intensity, social isolation, and limitations in daily activities.

Conclusion: There is a high prevalence of psychosomatic problems among the elderly with chronic diseases. An interdisciplinary approach involving early diagnosis and bio-psychosocial intervention is essential to improve the quality of life in this population.

Keywords: Chronic Disease; Geriatry; Prevalence; Psychosomatic.



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INTRODUCTION

Chronic diseases are progressive, long-term conditions that often require palliative symptom management rather than curative treatment. These conditions account for approximately 60% of all deaths and 43% of the global disease burden [1]. Elderly individuals with chronic illnesses face multifaceted challenges, encompassing both physical and psychological domains. The rapid expansion of the 60+ population globally parallels the rising prevalence of chronic diseases [2].

Common chronic conditions, such as diabetes mellitus, hypertension, heart disease, and chronic obstructive pulmonary disease (COPD), necessitate long-term care and significantly impact the patient's quality of life. Beyond physical impairment, these conditions often precipitate psychosomatic problems—mental health disorders that manifest as physical symptoms without a distinct medical etiology. Anxiety disorders, depression, and stress are particularly prevalent among the geriatric population suffering from chronic ailments. The reciprocal relationship between disease burden, functional limitation, and perceived loss of control can exacerbate physical deterioration, establishing a "vicious circle" of declining physical and mental health.

Despite their significance, psychosomatic issues in this demographic are frequently overlooked in clinical practice and health policy. Gender appears to be a key risk factor; women exhibit a higher susceptibility to psychosomatic disorders compared to men in similar conditions. Furthermore, advanced age correlates with an increased likelihood of developing these disorders [3]. While global prevalence estimates vary based on disease type, population characteristics, and measurement methodologies, consensus indicates that psychosomatic problems are widespread and significantly impair functional capacity, quality of life, and mortality.

Understanding the prevalence and risk factors of these problems is essential to developing effective preventive and interventional approaches. Previous research indicates that individuals with chronic disease in a specific body system are more prone to acute conditions within the same system than those without such chronic conditions [4]. Therefore, this study aims to conduct a systematic review of the prevalence of psychosomatic problems among elderly individuals with chronic diseases. Additionally, this review explores relevant risk factors and intervention strategies to enhance holistic, evidence-based health services for the geriatric population.

METHODS

Study Design and Search Strategy

This study employed a systematic review design to evaluate the prevalence of psychosomatic problems in elderly individuals with chronic diseases. A comprehensive literature search was conducted across electronic databases, including PubMed, Scopus, and ScienceDirect. The search strategy utilized a combination of the following keywords: "psychosomatic," "elderly," "chronic disease," and "prevalence."

Inclusion and Exclusion Criteria

Studies were selected based on specific inclusion criteria: (1) articles published within the last 10 years; (2) written in English or Indonesian; (3) involving elderly participants (aged ≥ 60 years) diagnosed with chronic diseases; and (4) reporting prevalence data or risk factors associated with psychosomatic problems. Studies that were irrelevant, duplicates, or deemed low quality were excluded from the review.

Quality Assessment and Data Analysis

The quality of the selected studies was assessed using the Critical Appraisal Skills Programme (CASP) tool. Data were analyzed descriptively to delineate prevalence patterns and risk factors. Additionally, a thematic analysis was conducted to identify management strategies reported in the literature. The findings were synthesized to provide a holistic overview of psychosomatic issues in the geriatric population with chronic conditions.

RESULTS

The results of 20 journals obtained through the initial search were selected using the inclusion and exclusion criteria that were determined. The first stage of selection involved reviewing titles and abstracts, resulting in 15 journals relevant to the research theme. Furthermore, during the full-text review stage, 9 journals were excluded for not meeting the inclusion criteria. After the selection, 6 journals were chosen as the most relevant and qualified based on the research focus. Here is the literature review table, namely:

Table 1. Systematic Review

No	Author	Title	Design	Respondent Design	Research Objectives	Results
1.	Sharapova Dilfuza Nematillayevna, Turayev Bobir Temirpulotovich , Ochilova Nigina Ulug'bek qizi (2024)	Prevalence Of Anxiety And Depressive Disorders In Elderly Patients	Qualitative Research	A total of 60 patients and the patient's age ranged from 60 to 80 years (mean age 68.5±8.8 years), with a female predominance	To continue the study of the clinical features, dynamics and effectiveness of the treatment of anxiety-depressive disorders in elderly patients who have turned to the psychotherapeutic Department.	According to the results of studies, combined treatment helps to significantly reduce the level of depression and anxiety, as well as increase the level of life satisfaction in patients with anxiety-depressive disorder. At the same time, the greatest effect is achieved after 6 months of therapy, which indicates the need for long-term treatment in patients of this category.
2.	Michael Linden, Ulrike Linden, David Goretzko & Jochen Gensichen (2022)	Prevalence and pattern of acute and chronic multimorbidity across all body systems	Qualitative with Survey Method	A convenience sample of 2099 patients treated by 40 general practitioners	The aim of this study was to assess the prevalence and pattern of acute and chronic multimorbidity in	Patients reported an average of 3.5 (SD = 2.0) acutely and/or chronically affected body

	and age groups in primary health care	was assessed using the Burvill scale.	primary care systems. Overall, 12.7% of patients reported only one health problem, 83.0% at least two, 65.8% at least three, 46.1% at least four, and 29.7% five or more. The most frequent problems were musculoskeletal (62.5%) and psychological (56.6%). Some morbidities are interrelated, while others occur together despite being medically independent. In primary care, multimorbidity is common, not the exception.		
3.	Wei Xua, Wenhao Jiang, Rongjing Ding, Hong Tao, Yanyong Wang, Yanping Tang, Dongfeng Liang, Yuping Wang, Mingwei Wang, Bingwei Chen, Youyong Kong, Lei Liu, Yingying Yue, Liangliang Tan, Lu Yu, Fiammetta Cosci, Yonggui	Study of Rates and Factors Associated to Psychosomatic Syndromes Assessed Using the Diagnostic Criteria for Psychosomatic Research across Different Clinical Settings	A cross-sectional and nationwide study	The study sample consisted of 6,647 patients in various clinical situations: 306 diagnosed with fibromyalgia (FM), 333 with irritable bowel syndrome, 1,109 with migraine, 2,550 with	This study aimed to measure the prevalence of DCPR syndrome in a variety of clinical settings and explore the factors associated with such diagnoses Alexithymia (64.47%), irritable mood (20.55%), and demoralization (15.60%) were the most common psychosomatic syndromes, with demoralization most common in FM (49.02%). Factors

Yuan (2024) coronary heart disease (CHD), and 2,349 with type 2 diabetes (T2D). associated with a DCPR diagnosis include high anxiety or abnormal disease behavior, and poor well-being. Notably, stress was found to be associated specifically with FM and T2D, with ORS of 1.24 (95% CI: 1.06-1.46) and 1.26 (95% CI: 1.18–1.36), respectively.

4. Kwong Hsia, Yap, Narelle Warren, Pascale Alloteya, and Daniel D. Reidpath (2020) Chronic disease profiles of subjective memory complaints: a latent class analysis of older people in a rural Malaysian community Survey Research The sample was 6179 individuals aged 56 years and over. This study aimed to examine the relationship of subjective memory complaints with chronic disease and health condition profiles reported by a group of older adults. Subjective memory complaints were statistically significant in association with asthma, stroke, heart disease, arthritis, and multimorbidity in a fully controlled multivariable logistic regression model. Three health profiles were identified: low comorbidities (n4136, low levels in all health

						conditions), arthritis group (N860), and diabetes and hypertension group (n1183). SMC was associated with the arthritis group (OR = 2.04, 95% CI = 1.51–2.75) and the diabetes and hypertension group (OR = 1.22, 95% CI = 1.03–1.46).
5.	Bin Shang, Ruirui Chen, Caifeng Luo, Fei Lv, Jing Wu, Xiao Shao, and Qian Li (2023)	The relationship between alexithymia, depression, anxiety, and stress in elderly with multiple chronic conditions in China: a network analysis	Cross-sectional survey design	A sample of 662 participants was included in the analysis, consisting of 395 males and 267 females.	This study aims to build network structure to investigate the relationship between alexithymia, depression, anxiety, and stress in Chinese elderly people with various chronic conditions, identify core and bridge symptoms, and compare network structure at different levels of alexithymia.	A total of 662 participants were included in the analysis, including 395 men and 267 women. The median age was 70.37 ± 6.92 years. The findings revealed that the “difficulty identifying feelings” (DIF) node had the highest centrality of strength (strength = 2.49) and predictability (rp = 0.76) in the network. The next highest centrality of power was observed for”

meaningless
 “(power = 1.50),” Restless
 “(power = 1.47),” fearful
 “(power = 1.42), and” not looking ahead " (power = 0.75). They are identified as core symptoms. Bridge strength analysis identifies "panic," "fear," "no composure," "no initiative," and "no positivity" as bridge symptoms. There were marked differences in overall tissue structure and specific connections between groups with and without alexithymia ($p < 0.05$).

6.	Lan Li, Jan D. Reinhardt, Craig Van Dyke, Heng Wang, Maoqiong Liu, Aiko Yamamoto, Qian Chen and Xiuying Hu (2020)	Prevalence and risk factors of post-traumatic stress disorder among elderly survivors six months after the 2008 Wenchuan earthquake in	Studi cross-sectional	The sample was 427 elderly survivors aged 60 years or older.	This study aimed to: 1) estimate the prevalence of post-traumatic stress disorder among elderly survivors of the Wenchuan earthquake in a severely affected area at 6 months	A total of 427 elderly survivors aged 60 years or older participated. The prevalence of probable PTSD was 40.5, 36.3, and 21.5%
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China

after the earthquake based on a representative sample, and 2) determine possible risk factors in this population. according to the IES-R limit scores of 33, 35, and 2 points on all items, respectively. In multivariable logistic regression, elderly survivors with a higher number of diagnosed chronic diseases were more likely to be screened positive for PTSD and those with more family members living in the same household were less likely to be classified as having probable PTSD for all borderline scores. Elderly survivors with better economic status and those with primary or lower school education were more often estimated to have PTSD odds with mean cutoff scores of 35 and 2 points, respectively.

DISCUSSION

This systematic review indicates a high prevalence of psychosomatic problems, including anxiety disorders, depression, and stress, among the elderly with chronic diseases, ranging from 30% to 75% [5]. This finding underscores the significance of somatization as a major public health issue, affecting up to 30–40% of internal medicine patients and potentially representing the most expensive comorbidity [6, 7]. As global life expectancy increases, the prevalence of age-related chronic diseases rises parallelly [8]. For instance, in China, approximately 180 million elderly individuals, constituting roughly 75% of the geriatric population, suffer from chronic conditions [9].

The high prevalence of psychosomatic disorders in this demographic is attributed to complex interactions between the physical burden of chronic disease and psychosocial factors [10]. Conditions requiring long-term treatment, such as diabetes mellitus, hypertension, and heart disease, cause not only physical fatigue but also significantly impact emotional well-being [11]. This interplay establishes a "vicious circle," wherein psychosomatic problems aggravate chronic disease symptoms, and vice versa, leading to further physical deterioration [12]. Shared developmental mechanisms between psychosomatic disorders and various comorbidities manifest as depressive and anxiety states, significantly altering the clinical picture and the course of the primary nosology [13]. For example, individuals with digestive diseases show increased susceptibility to anxiety and depression [14], and the prevalence of insomnia and other sleep disorders is notably high in the geriatric population with chronic conditions [15].

Several key risk factors contribute to the development of these disorders. Long illness duration, chronic pain, limited mobility, and loss of independence are primary physical risk factors [16]. Psychosomatic disorders stemming from continuous stress and poor mental health can disrupt nutritional intake, leading to severe malnutrition in older adults [17]. Furthermore, external stressors, such as pandemics, exacerbate chronic anxiety, depression, and somatic symptoms in patients with chronic diseases, potentially decreasing immune responses and increasing infection risk [18]. Studies on earthquake survivors also indicated that elderly individuals with a higher number of diagnosed chronic diseases were more likely to screen positive for Post-Traumatic Stress Disorder (PTSD) [19].

Social determinants also play a critical role; social isolation, lack of family support, and stigma surrounding mental health problems worsen the condition in the elderly [20]. Globally, prevalence variations exist due to cultural differences, healthcare systems, and diagnostic approaches [21]. Developing countries often exhibit higher prevalence rates, likely attributable to limited access to mental health services and insufficient education regarding psychological health [22].

Effective management of psychosomatic problems in the elderly with chronic diseases necessitates a holistic bio-psychosocial approach [23]. Interventions including psychological counseling, cognitive-behavioral therapy (CBT), social support, and pain management have demonstrated effectiveness in symptom reduction [24]. Recognizing the need for integrated care, screening for depressive symptoms has been established in medical treatment guidelines for chronic diseases at various levels [25]. The use of operational criteria, such as the Diagnostic Criteria for Psychosomatic Research (DCPR), may serve as useful tools for clinicians to achieve effective clinical management and tailor individual treatment planning for patients with high disease burdens [26].

However, the implementation of these interventions is often hindered by barriers such as a shortage of trained professionals and persistent social stigma against treating psychiatric disorders [27]. Addressing these challenges requires strong interdisciplinary collaboration between medical personnel, psychologists, social workers, and families [28]. Furthermore, health policies that prioritize increased access to mental health services and educational programs for the elderly and their families are essential [29]. This review provides a foundational

understanding for further research needed to explore specific, evidence-based interventions aimed at improving the quality of life for elderly individuals facing the dual burden of chronic disease and psychosomatic problems [30].

CONCLUSIONS

This systematic review shows that psychosomatic problems, such as anxiety, depression and stress disorders, have a high prevalence in the elderly with chronic diseases, which ranges from 30% to 70%. The main factors contributing to this high prevalence include the duration of chronic illness, pain intensity, social isolation, and limitation of daily activities. This problem not only worsens the quality of life of the elderly, but also increases the burden of care and aggravates their physical condition. A holistic bio-psychosocial approach has proven effective in managing psychosomatic problems, but its implementation still faces various challenges, including lack of resources and social stigma. Therefore, an interdisciplinary strategy is needed that involves the support of medical personnel, psychologists, families and communities to provide a comprehensive intervention. This study emphasizes the importance of early diagnosis and evidence-based interventions to address psychosomatic problems in the elderly with chronic diseases. In addition, further efforts are needed in the form of health policies that support access to affordable mental health services and public education to raise awareness of the importance of psychological health for the elderly. Further studies are expected to explore more specific interventions to improve the overall well-being of the elderly.

Author Contributions

Conceptualization, Y.H.; methodology, Y.H.; software, Y.H.; validation, Y.H.; formal analysis, Y.H.; investigation, Y.H.; resources, Y.H.; data curation, Y.H.; writing—original draft preparation, Y.H.; writing—review and editing, Y.H.; visualization, Y.H.; supervision, Y.H.; project administration, Y.H. The author has read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest

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