

## Review Article

# Challenges and Advancements in the Health-Related Quality of Life of Older People

Moustaq Karim Khan Rony <sup>1</sup>, Mst. Rina Parvin <sup>2</sup>, Md. Wahiduzzaman <sup>3</sup>,  
Khadiza Akter <sup>4</sup> and Mohammad Ullah <sup>5</sup>

<sup>1</sup>Bangladesh Open University, Dhaka, Bangladesh

<sup>2</sup>Combined Military Hospital, Dhaka, Bangladesh

<sup>3</sup>Shahjalal University of Science and Technology, Sylhet, Bangladesh

<sup>4</sup>Daffodil International University, Dhaka, Bangladesh

<sup>5</sup>College of Nursing, International University of Business Agriculture and Technology (IUBAT), Dhaka, Bangladesh

Correspondence should be addressed to Moustaq Karim Khan Rony; [mkkrony@yahoo.com](mailto:mkkrony@yahoo.com)

Received 1 September 2023; Revised 17 December 2023; Accepted 20 January 2024; Published 1 February 2024

Academic Editor: Jianrong Zhang

Copyright © 2024 Moustaq Karim Khan Rony et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Background.** With the global trend of increasing life expectancy, the health-related quality of life of older people has personalized become an area of significant interest. It is crucial to comprehend the advancements and identify the ongoing challenges in this domain for better health management and policy formation. **Objectives.** This scoping review aimed to comprehensively investigate the existing challenges and recent advancements associated with the quality of health among older people. **Methods.** We utilized Arksey and O'Malley's scoping review framework for this study. A systematic literature search was performed across multiple databases, namely, PubMed, Scopus, and Google Scholar, targeting publications from 2018 to 2023. Selected studies were then rigorously examined based on predefined inclusion and exclusion criteria, followed by an in-depth thematic analysis. **Results.** Of the initial 406 identified studies, 72 were included in the final review. The analysis underscored enduring challenges in physical and medical issues, psychological difficulties, socioeconomic obstacles, and policy-related challenges. Meanwhile, significant advancements were noted in several areas, including technology, medicine, social and societal facets, and policy. **Conclusions.** Despite noteworthy improvements in the health-related quality of life of older individuals, the continued presence of substantial challenges emphasizes the need for more targeted initiatives. These results suggest an immediate requirement for revising policies and implementing interventions that specifically address identified challenges, with a particular emphasis on ensuring equitable health care access, effectively managing chronic conditions, and enhancing the training of geriatric health care professionals. This comprehensive review serves as a roadmap for guiding future research and shaping policy directions in the health care of older people.

## 1. Introduction

Understanding the well-being of older people is a crucial aspect of public health that holds considerable importance for health care practitioners, researchers, and policymakers [1]. The World Health Organization defines health broadly as a state encompassing not only the absence of disease or frailty but also complete physical, mental, and social well-being [2]. The concept of health-related quality of life for older people encompasses various dimensions, including

physical health, mental state, levels of independence, social interactions, personal beliefs, and environmental context [3].

Over time, the understanding of health-related quality of life for older people has undergone significant development [4]. Previously, it was primarily viewed through a biomedical lens, focusing on the treatment and management of illnesses, with indicators such as survival rates, disease absence, and fundamental functional abilities serving as benchmarks [5]. However, there has been a notable shift toward a holistic perspective in recent years [6]. This approach recognizes

the intricate interplay between the physical, psychological, and social well-being of older individuals, acknowledging that a disease-free state does not always correlate with good health or an enhanced quality of life [7].

The implications of health-related quality of life for older people extend to both individual and societal levels [8]. For older people, an improved health-related quality of life often translates to increased independence, self-sufficiency in daily activities, and enhanced well-being [9]. At the societal level, it reflects the community's respect and care for its aging population and carries economic implications by potentially reducing health care costs for families and public resources [10]. Consequently, enhancing health-related quality of life among older persons is not just personally significant; it also holds societal and economic relevance [11].

The global demographic shift toward an aging population emphasizes the importance of studying developments and challenges in the health-related quality of life for older people [12]. This trend underscores the need to extend the duration of healthy living, known as health span, by leveraging progress in technology, medical science, social services, and policies [13]. However, it is essential to recognize and address barriers to achieving good health-related quality of life in the older population, including age-related illnesses, access to care, socioeconomic disparities, mental health issues, and social isolation [14]. Acknowledging these challenges enables the development of strategies to improve the health-related quality of life for the aging demographic [15]. Consequently, this review aimed to explore both challenges and advancements in the health-related quality of life for older people.

## 2. Method

*2.1. Study Design.* We employed the five-step Arksey O'Malley scoping review framework [16] to guide this scoping review on the advancements and challenges in the health-related quality of life for older people. The five-step process includes (i) identifying the research question; (ii) identifying relevant studies; (iii) study selection; (iv) charting the data; and (v) collating, summarizing, and reporting the results.

*2.2. Identifying the Research Question.* Our study focused on the pivotal research question: "What are the advancements and challenges in health-related quality of life for older people?" This inquiry was formulated after careful deliberations among the research team, aiming to cast a broad net over the extensive research available on the chosen subject. Our goal was to critically explore the progress and difficulties encountered in the health-related quality of life for older people. The formulation of this research question marked a significant step in our review process, setting the tone for our systematic investigation and enabling us to uncover essential themes and reveal any existing research gaps in the field of health-related quality of life for older people.

*2.3. Identifying Relevant Studies.* To ensure a comprehensive and precise search for applicable literature, we meticulously designed our search strategy, incorporating Boolean operators

(AND/OR/NOT) in conjunction with keywords, Medical Subject Headings (MeSH) terms, and database parameters. For instance, we utilized Boolean operators such as ("elderly" OR "older adults" OR "older people" OR "older person") AND ("health quality" OR "quality of life" OR "advancements" OR "challenges") to ensure a nuanced and targeted approach in capturing the most relevant literature related to the research question. The search encompassed three primary academic databases: PubMed, Scopus, and Google Scholar, chosen for their extensive coverage of health and medical literature. Additionally, to enhance clarity and specify relationships between terms, we defined the search space by indicating whether the terms were applied to the title and abstract. This refined approach aids in better understanding the context in which the keywords were sought within the literature. Furthermore, our search was restricted to articles published in English, contributing to the feasibility and clarity of the review process. The searches were conducted within a specified timeframe, and the dates of these searches were recorded to provide transparency regarding the temporal scope of our investigation. This detailed and refined search strategy, incorporating Boolean operators, elevates the rigor and transparency of our scoping review process.

*2.4. Study Selection.* The study selection process was designed to ensure the inclusion of the most relevant research articles focused on challenges and advancements in the quality of health among older individuals. Our inclusion criteria specified that the articles should be original research pieces, published in English from 2018 to 2023, and fully accessible in text. This timeframe was chosen to ensure the incorporation of the most recent challenges and advancements in the health-related quality of life of older individuals. By focusing on the last 5 years of research, this review aimed to capture the most up-to-date findings and trends in the field, providing a comprehensive overview of the current state of knowledge. Second, limiting this timeline helps address the dynamic nature of research, particularly in rapidly evolving fields such as health care. Including older articles might result in outdated information that does not accurately reflect the current landscape of health-related quality of life among older individuals. However, to maintain our review's focus and quality, we set exclusion criteria that omitted non-English articles, conference abstracts, editorials, book chapters, and commentaries. The process was initiated by removing duplicate articles to streamline the pool of literature. Three reviewers independently screened titles and abstracts, employing our predetermined inclusion and exclusion criteria. This approach was instrumental in ensuring the reliability and comprehensiveness of our study selection process. When there was a discrepancy between the three reviewers, we resorted to constructive discussion to resolve the differences. When a consensus was difficult to reach, the other reviewers were brought into the discussion to make a final decision. This systematic approach to study selection reinforced the integrity and rigor of our scoping review.

*2.5. Charting the Data.* Data extraction from the selected studies was carried out using a preformatted data collection form. This form was carefully designed to capture the

essential details from each study, such as author(s), year of publication, study location, study design, sample, study objectives, and significant findings (Tables 1 and 2). The form also included specific fields to record critical findings related to challenges and advancements in the health-related quality of life for older people and any notable implications for future research. Using this standardized form ensured consistency and thoroughness in the data extraction process, facilitating an efficient, organized, and reliable synthesis and interpretation of the study findings in the subsequent stages of our scoping review.

**2.6. Collating, Summarizing, and Reporting the Results.** The extracted data were assembled and methodically synthesized in the critical phase of collating, summarizing, and reporting the results. We aimed to discern recurring themes and patterns across the selected studies, providing valuable insights into the state of the field concerning challenges and advancements in the health-related quality of life for older people. This synthesis was then meticulously transformed into a narrative summary, serving as a clear, concise, and comprehensive account of the current literature landscape on our chosen topic. This summary provides a snapshot of the existing knowledge and highlights gaps where future research could be most valuable. To report our findings, we strictly adhered to the PRISMA extension for Scoping Reviews (PRISMA-ScR) guidelines (Figure 1). This ensured that our scoping review met the best practice standards regarding transparency, completeness, and replicability.

### 3. Results

#### 3.1. Challenges in Health-Related Quality of Life for Older People

**3.1.1. Physical and Medical Challenges.** The aging process brings various physical and medical challenges that can significantly impact the health-related quality of life for older individuals. One of the primary obstacles is the increased susceptibility to various diseases and conditions that typically accompany advancing age.

(1) *Age-Related Diseases and Conditions.* Older individuals are notably more susceptible to developing chronic or life-threatening diseases. This vulnerability encompasses cardiovascular diseases, such as heart disease, hypertension, and strokes [18]. Diabetes, a common ailment among older individuals, can lead to complications like kidney disease and vision loss if not managed appropriately [20]. While not exclusively age-related, the statistical likelihood of cancer increases with age, escalating the risk for several types of cancer [21]. Degenerative diseases like arthritis and osteoporosis pose significant challenges, affecting mobility, causing chronic pain, and often resulting in decreased independence and life quality [22]. Dementia and other neurodegenerative conditions profoundly impact cognitive abilities and daily functioning [24]. Many older persons simultaneously grapple with multiple chronic conditions, leading to polypharmacy—a complex management of multiple conditions that complicates medical treatment, requiring vigilant monitoring,

extensive medication regimes, and enhanced coordination of health care services [25].

(2) *Accessibility to Treatments.* Beyond the intrinsic biological challenges of aging, external factors present significant impediments to health-related quality of life for older people [26]. Foremost among these is the challenge of accessing appropriate and timely health care. Many older individuals find navigating the health care system challenging for various reasons. Logistic barriers, such as a lack of readily available transportation or physical immobility due to arthritis or frailty, significantly hinder access to necessary health services [27]. Compounding this issue is the need for health care providers specializing in senior care. Despite a growing need for professionals with expertise in handling the unique health concerns of older patients, there is a noticeable scarcity of such specialized professionals in many areas, leaving many older individuals underserved [28]. These combined barriers make it increasingly difficult for older people to receive the treatments they require, inevitably impacting the overall quality of their health.

**3.1.2. Psychological Challenges.** Alongside the physical and medical trials of aging, there are significant psychological challenges that many older people grapple with. Older people face complex problems that can seriously affect their health and quality of life.

(1) *Mental Health Issues.* A concerning issue, exacerbated by the COVID-19 situation, is the heightened vulnerability of older people to mental health issues, with conditions like depression and anxiety disorders often mistakenly regarded as “normal” aspects of aging [29]. In reality, these conditions are prevalent in this demographic. Neurodegenerative disorders like dementia, including Alzheimer’s disease, further contribute to the spectrum of mental health challenges in older individuals, causing memory loss, confusion, and significant personality changes [30]. Unfortunately, these conditions frequently go undiagnosed or untreated in older persons, presenting a complex mental health landscape. Several factors contribute to this problem. First, a lack of awareness about mental health in older persons may lead individuals and caregivers to misinterpret signs as typical aging processes [31]. Second, there is a persistent stigma surrounding mental health problems, particularly among older people, discouraging them from seeking help [32]. This combined with the general lack of awareness creates a troubling gap in detecting and addressing mental health issues in older people, presenting a substantial challenge to their overall health-related quality of life.

(2) *Social Isolation and Loneliness.* As individuals age, they often encounter diverse life events and transitions that may result in social isolation and sensations of solitude, presenting considerable psychological hurdles [33]. The loss of companions or family members, combined with declining physical health that restricts mobility, can isolate older individuals from their social circles [23]. Whether residing alone by choice or due to circumstances, this situation can intensify feelings of isolation. These cumulative experiences may ultimately lead to profound loneliness [34]. Research has

TABLE 1: Challenges in older people's health-related quality of life.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[17] China	Aged 60 years or above	Randomized controlled trial	To examine the effects of the therapeutic VR experience in older people with physical disabilities in LTCF in (a) increasing mental well-being, (b) reducing depressive symptoms, (c) reducing loneliness, (d) increasing health-related quality of life, and (e) increasing perceived social support	Role of social support and community
[18] China	Older people	Longitudinal cohort study	To investigate the prevalence of two conditions, angina and stroke, and relevant risk factors among older adults in six low—and middle—income countries (LMICs)	Age-related conditions including cardiovascular diseases
[19] Finland	Minimum age limit was set at 55 years	Qualitative study	What the most meaningful elements were in residents' descriptions of the senior housing complex as a place to live, and more specifically, what the elements were that they described most meaningful in making the decision to move there	Improvement in living conditions
[20] France	Aged $\geq 75$ years	Cross-sectional study	To describe the overall medication profile of patients aged $\geq 75$ years with advanced CKD from a multicenter French study and specifically the renally (RIMs) and potentially inappropriate-for-the-elderly medications (PIMs) that they take	Age-related conditions including diabetes, kidney disease, and vision loss
[21] United States	Aged $\geq 65$ years	Cross-sectional study	To examine the prevalence of major drug–drug interactions (DDIs) and to determine concordance among two clinical support software systems in a cohort of ambulatory older adults with cancer at our institution	Age-related conditions including cancer
[22] Poland	Early old age	Cross-sectional study	To assess the impact of physical ailments in the course of knee osteoarthritis (KOA) on the quality of life (QoL) of patients in early old age	Age-related conditions including degenerative diseases
[23] United kingdom	Older people	Mixed-methods study	To explore what matters to older people when discussing social connectedness	Social isolation and loneliness
[24] Europe	Older people with dementia or Parkinson's disease	Mixed-method study	To investigate the needs and requirements of the potential end users (older people with neurodegenerative diseases, caregivers, and health care professionals) and other key stakeholders in the development of the PROCare4Life platform	Dementia and neurodegenerative conditions
[25] United states	Older adults aged $\geq 65$ year	Health records survey	To estimate the risk of hospitalization and emergency department (ED) visits associated with PIM prescriptions over different exposure periods and PIM drug categories	Age-related diseases and conditions
[26] China	Aged $\geq 60$	Cross-sectional study	To confirm the relationship between the intrinsic capacity (IC) level and age friendly living environment with functional ability (FA), especially in older adults with low intrinsic capacity (IC)	Impairment of health-related quality of life
[27] Canada	Aged 65 or over	Longitudinal study	To advance mobility research by utilizing a constructivist grounded theory (CGT) approach to understand the mobility experiences of active older adults with low income and their attitudes, meaning, and motivations of mobility in order to provide insight into how they overcome physical and social health disparities and remain active over a period of 4 years	Less accessibility to treatment
[28] United States	Older patients	Qualitative study	To use the technology acceptance model (TAM) as a framework for qualitatively describing the user interface and user experience (UI and UX), intent to use, and use behaviors among older patients with multiple chronic conditions (MCC)	Scarcity of specialized professionals



TABLE 1: Continued.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[29] Sweden	Aged 70 and older	Cross-sectional online survey	To explore the specific situation of people aged 70 and older in relation to COVID-19, more specifically, how people age 70 and older (a) perceive information and act on recommendations about the COVID-19 pandemic and (b) perceive how their mental health is affected by the current situation	Mental health problems
[30] China	Aged $\geq 60$	Cross-sectional study	To investigate the prevalence, risk factors, and management of dementia and mild cognitive impairment in adults aged 60 years or older in China	Mental health problems
[31] United States	55 years and above	Cross-sectional study	To investigate the impact of objective and subjective social isolation from extended family members and friends on depressive symptoms and psychological distress among a national sample of older adults	Mental health issues
[32] United States	Older people	Cross-sectional study	To evaluate the effect of depression, loneliness, substance use problems, and HIV stigma on primary markers of immune function in a sample of 120 older adults living with HIV (OALWH) with substance-related issues	Mental health problems
[33] United States	Older people	Case study	To characterize personal and neighborhood contextual influences on social isolation and loneliness among older adults	Social isolation and loneliness
[34] Australia	Older people (60+ years)	Mixed-methods study	To explore factors related to older people's (60+ years) participation in community-based activities and links between their participation and levels of social isolation, loneliness, and social connectedness	Social isolation and loneliness
[35] United States	Low-income older adults	Longitudinal study	To assess the effect of a peer intervention in addressing loneliness, isolation, and behavioral health needs in this population	Consequences of social isolation and loneliness
[36] Australia	Older people	Mixed-methods case study	To explore the impact of membership of a multiactivity, multicentre community group on social well-being of older adults	Risks of social isolation and loneliness
[37] India	Aged above 60 years	Questionnaire-based survey	To analyze the knowledge about oral lesions, the symptoms of such lesions, and their attitude toward the treatment of these problems faced by institutionalized geriatric individuals	Less affordability of care
[38] Japan	Aged 65 years and above	Cross-sectional study	To assess the association between each type of long-term care (LTC) services that home-dwelling older individuals utilized at their end of life and place of death	Affordability of care
[39] United States	Older people	Cross-sectional study	To estimate hypothetical out-of-pocket costs associated with guideline-recommended outpatient medications for the initial treatment of eight common chronic diseases among older adults with Medicare prescription drug plans (PDPs)	Less affordability of care
[40] Taiwan	Middle-aged and older adults	Qualitative Study	To explore the self-management experiences of middle-aged and older adults with diabetes through a focus group	Less affordability of care due to financial strain
[41] Republic of Korea	Older adults ( $\geq 65$ years)	Cross-sectional descriptive correlational design	To identify gender differences in the health status, community service needs, and quality of life of older adults living alone in an urban city in South Korea	Health disparities among older persons due to socioeconomic situation
[42] India	60 years and above	Cross-sectional study	To explore the factors associated with cognitive impairment especially, alcohol consumption, smoking, and chewing tobacco later in life	Health disparities among older persons
[43] Ghana	Poor older people, caregivers, and formal health care providers	Cross-sectional study	To explore barriers to formal health care use among older people; little is known from the perspective of vulnerable older people in Ghana	Health disparities among older persons

TABLE 1: Continued.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[44] United Kingdom	Aged $\geq 55$ years	Cross-sectional study	To analyze inequalities in health-related quality of life (HRQoL) and five determinants of health in older adults across all ethnic groups in England	Health disparities among older persons
[45] China	Older people	Longitudinal healthy longevity survey	To explore the effect of social participation on disparity in mental health among urban and rural older adults in China	Health disparities among older persons
[46] India	Older people	Cross-sectional study	To investigate the association of tooth loss with self-rated health and psychological and subjective well-being among older adults in India.	Lack of supportive policies
[47] Thailand	Older people	Cross-sectional study	To determine the impact of dental status, types, and quality of dental prostheses on body composition, masticatory performance, and oral health-related quality of life (OHRQoL)	Lack of supportive policies
[48] China	Older people	Cross-sectional study	To determine the prevalence of anxiety and depression and their associated factors among community-dwelling older adults in China	Lack of supportive policies
[49] China	Older people	Cross-sectional study	To assess the level of intrinsic capacity among community-dwelling older adults and examine its relationship with self-care capacity and social engagement	Lack of supportive policies
[50] Bangladesh	Aged 60 years and above	Cross-sectional study	To explore the prevalence and determinants of self-reported functional status among the older adults residing in the Rohingya refugee camp in Bangladesh	Implementation hurdles
[51] Ireland	Older adults (65yrs+)	Cross-sectional study	To identify the prevalence of mobile device usage among older adults (65yrs+) who present to acute hospitals and explore their willingness to use mHealth	Implementation hurdles
[52] Singapore	Older individuals aged 66–86 years	Mixed-methods study	To explore older people's accessibility and receptiveness toward counseling, to assess the improvement of older people's dignity in emotional management and decision-making processes following psychological counseling, and to propose an intervention model for enhancing older people's well-being through psychological counseling	Implementation hurdles
[53] Ghana	Aged 65 and above	Mixed-methods study	To investigate the dietary habits of the elderly in the Kwahu South District of the Eastern Region of Ghana and further ascertain the factors that constitute nutritional challenges among this group	Implementation hurdles
[54] United Kingdom	Older adults ( $\geq 75$ years)	Mixed-methods study	To develop the content, implementation strategies, service and professional guidance to support older adults with frailty to manage their pain	Implementation hurdles

indicated that loneliness impacts mental well-being, contributing to conditions like depression and anxiety, while also carrying significant consequences for physical health [35]. It has been associated with an elevated risk of conditions such as heart disease and can adversely affect the immune system, potentially resulting in various health issues [36]. Consequently, addressing social isolation and loneliness emerges as crucial for enhancing the quality of health in older persons.

**3.1.3. Socioeconomic Challenges.** Many socioeconomic factors pose considerable challenges to health-related quality of life for older people, creating disparities and obstacles in accessing and affording necessary health care.

(1) *Affordability of Care.* The soaring expenses in health-care pose a major worry for numerous older people, particularly concerning the substantial costs associated with long-term care. This becomes a financial barrier for many older people who require such care due to chronic conditions or functional limitations [37]. Long-term care encompasses crucial services like home care, assisted living facilities, and nursing homes, all vital components of comprehensive care for older people [38]. Even individuals with health insurance may not find complete protection from the financial burdens of health care. Copayments, deductibles, and out-of-pocket expenses for medications, equipment, and services not covered by insurance can rapidly accumulate. This accumulation renders necessary treatments and care financially unattainable for many older persons

TABLE 2: Advancements in older people's health-related quality of life.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[55] United States	Older people	Mixed-methods study	To (a) describe the development of a website housing asynchronous and accessible telehealth education modules (TEMs) targeting the needs of older adults, and (b) evaluate the extent to which TEMs improve self-perceived telehealth competency for older adults	Role of telemedicine
[56] United States	Older veterans with traumatic brain injury	Mixed-methods pilot study	To adapt goal-oriented attentional self-regulation (GOALS) for delivery to older Veterans via in-home video telehealth (IVT) and evaluate feasibility and participant-rated acceptability of the telehealth GOALS intervention (TeleGOALS)	Role of telemedicine
[57] India	Older people	Qualitative study	To address India's digital divide, emphasizing marginalized groups, and shift focus to internet use outcomes, contributing to a disadvantage-charting operational framework	Role of telemedicine
[58] Singapore	Older people	Qualitative study	To investigate HSB and the associated technology use among the older population, ultimately proposing implications for practice to address their unmet health needs	Role of telemedicine
[59] United States	Older people	Qualitative study	To better understand wearable activity monitor (WAM) use and its relationship with physical activity (PA) among older adults	Wearable health technology
[60] Republic of Korea	Older people	Cross-sectional survey	To investigate the acceptability of digital health wearable technology in health care by the Korean older adults and their attitude toward the use of smart health watches by using an extended technology acceptance model while considering the context of the COVID-19 pandemic	Wearable health technology
[61] United States	Aged 65 years and older	Longitudinal cohort study	To examine the trends in and factors associated with digital health technology use among older adults with cancer	Wearable health technology
[62] Singapore	Older people	Qualitative study	To explore the adoption of mobile and wearable technology in the physical activity of older adults	Wearable health technology
[63] United States	Older people	Longitudinal study	To investigate the safety of IV-tPA in elderly patients with occult trauma	Precision medicine and personalized care
[64] Italy	Older patients (aged $\geq 65$ years)	Retrospective study	To evaluate and compare the safety and efficacy of guselkumab, risankizumab, and tildrakizumab in real-world practice in elderly patients	New treatment methods
[65] Australia	Aged 70 years and older	Randomized controlled trial	To evaluate whether comprehensive geriatric assessment (CGA) can improve health-related quality of life (HRQOL) in older people with cancer who are starting systemic anticancer treatment	New treatment methods
[66] Australia	Aged $\geq 60$ years	Randomized, crossover Trial	To assess the efficacy and safety of closed-loop insulin delivery compared with sensor-augmented pump therapy among older adults with Type 1 diabetes	New treatment methods
[67] Portugal	Older people	Qualitative descriptive study	To explore older adults' perceived barriers to participation in a fall prevention strategy	Preventative care strategies
[68] Canada	Older people	Randomized clinical trial	To assess the effect of a home-based exercise program as a fall prevention strategy in older adults who were referred to a fall prevention clinic after an index fall	Preventative care strategies
[69] United Kingdom	65–99-year-old adults	Cross-sectional study	To draw attention to the nature and pattern of recent global and regional prevalence estimates and projections of diabetes in older adults (65–99 years) and to describe the societal health implications of these changes on a global scale	Preventative care strategies

TABLE 2: Continued.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[70] Netherlands	Older people	Qualitative study	To assess current collaboration and communication in nutritional care of malnourished older adults across health-care settings and provides recommendations for improvement	Preventative care strategies
[5] Spain	65 and 87 years of age	Descriptive and correlational study design	To determine the differences in autonomy in both basic activities of daily life in instrumental activities of daily life, as well as functional capacity, fragility, and risk of falls between an active group and a sedentary group	Improvement in living conditions
[71] United States	Older people	Qualitative study	To discuss how the expanded Andersen model may be adapted to present constructs that reflect the actual use of services by long-term services and supports (LTSS) type when considering a racially and ethnically diverse group of older adults	Improvement in living conditions
[1] Mexico	60 years and older	Cross-sectional study	To explore characteristics associated with low perception of autonomy among community-dwelling older adults	Improvement in living conditions
[72] United States	Older people	Qualitative study	To explore the barriers and facilitators of transportation among diverse older adults	Improvement in living conditions
[73] United States	Older people	Explanatory sequential mixed-methods study	To determine how social networks influence therapeutic self-care behaviors and health among community dwelling older people living with multiple long-term conditions	Improvement in living conditions
[74] Taiwan	Older people	Cross-sectional study	To investigate the comfort levels and factors that contributed to comfort among older people living in long-term care facilities (LTCFs)	Improvement in living conditions
[75] Turkey	Aged 65 years and older	Cross-sectional study	To examine the relationship between quality of life, satisfaction with life and multidimensional perceived social support in people aged 65 years and older	Role of social support and community
[76] United States	Aged 57–85 years	Longitudinal mediation analysis	To distinguish the pathways through which social disconnectedness (e.g., small social network, infrequent social interaction) and perceptions of social isolation (e.g., loneliness, perceived lack of support) contribute to anxiety and depression symptom severity in community-residing older adults aged 57–85 years at baseline	Role of social support and community
[77] Turkey and United States	Older people	Correlational study	To identify the social–psychological barriers to public support for legal initiatives aimed to secure a healthy and productive future for older people	Government policies favoring health care for older people
[78] Nepali	Older people	Cross-sectional study	To evaluate factors associated with health care utilization (HCU) and to assess vertical and horizontal equity in utilization among Nepali older adults	Government policies favoring health care for older people
[79] China	Older people	Cross-sectional study	To investigate the travel characteristics and influential factors of travel mode choice for health care activity by the elderly in core area and suburb	Government policies favoring health care for older people
[80] China	Older people	Quasinatural experiment	To explore the association between digital health care service reform (DHSR) and health inequity (HI) for older individuals to augment comprehension of DHSR implementation	Government policies favoring health care for older people
[81] Switzerland	Older people	Discrete choice experiment design	To identify attributes reflecting features of health care delivery in Switzerland relevant to chronic patients and the general population aged 50+ that are actionable and realistic for policy implementation	Government policies favoring health care for older people



TABLE 2: Continued.

Author, year, country	Sample/age	Study design	Objectives/research question	Finding
[82] China	Aged 60 and above	Cross-sectional study	To assess the present inequality and horizontal inequity for health service use among the elderly in China and to identify the main determinants associated with the disparity	Government policies favoring health care for older people
[83] France	Aged 80 years or more living at home	Cross-sectional study	To assess health-related quality of life (HRQoL) in French community-dwelling people aged 80 years and over and to investigate the sociodemographic and health characteristics and life events associated with HRQoL	Global initiatives and programs
[84] United States	Older people	Cross-sectional study	To identify the most salient themes concerning the use of medical and recreational cannabis by older adults living in Colorado	Global initiatives and programs
[85] United States	Older people	Two cross-sectional studies	To examine sex differences in the cross-sectional association between $A\beta$ and regional tau deposition as measured with positron emission tomography (PET)	Global initiatives and programs
[44] United Kingdom	Aged $\geq 55$ years	Cross-sectional study	To analyze inequalities in health-related quality of life (HRQoL) and five determinants of health in older adults across all ethnic groups in England	Global initiatives and programs

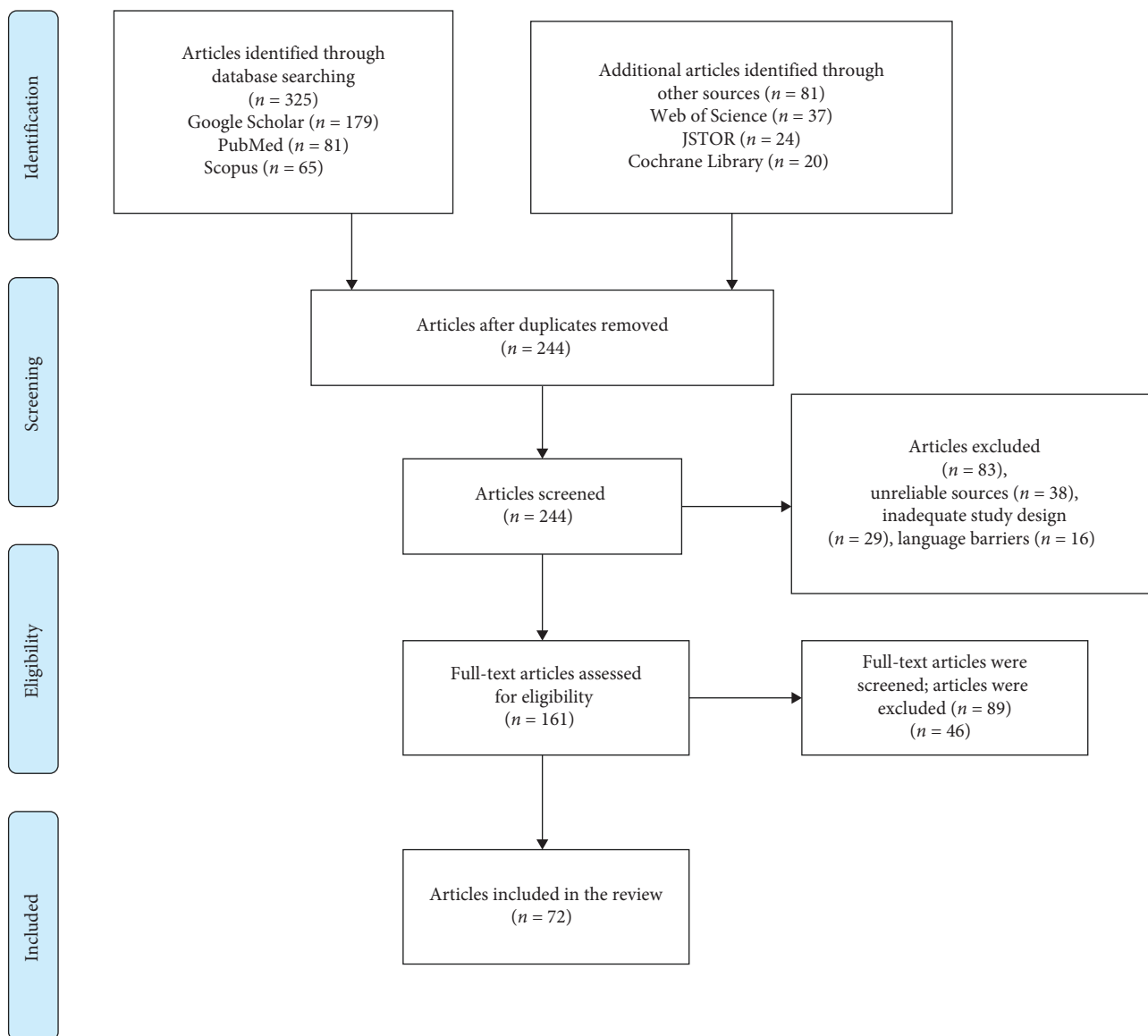


FIGURE 1: PRISMA flow diagram.

[39]. The resulting financial strain may lead to delays in seeking care, nonadherence to prescribed treatments, or financial hardships, all of which significantly impact the health quality and overall well-being of older people [40].

(2) *Health Disparities among Older Persons.* Various socioeconomic factors wield considerable influence over health outcomes in older persons, resulting in pronounced disparities in health-related quality of life for older people. An individual's socioeconomic situation, encompassing income, education, and profession, profoundly shapes their health outcomes [41]. Those at lower socioeconomic levels often grapple with restricted access to adequate treatment, poor health literacy, and heightened exposure to health risks, leading to poorer overall health outcomes [42].

Race and ethnicity introduce additional complexities to health status variations among older persons. Factors such as cultural barriers, linguistic challenges, and systemic biases in health care contribute to disparities, resulting in worse health outcomes and diminished health care access for older persons from racial and ethnic minority groups [43]. Gender serves as another determinant, with older women, often outliving men, being more prone to living with chronic conditions and experiencing higher rates of disability [44]. This heightened health care need can be burdensome, especially for those with lower incomes. These socioeconomic challenges present significant hurdles to achieving optimal health-related quality of life in older persons, emphasizing the imperative for more equitable and accessible health care policies and practices. Ensuring that all seniors, regardless of income, race, or gender, have access to medical care that facilitates aging in place with respect and dignity requires a dedicated effort to address and rectify these disparities in the healthcare landscape [45].

*3.1.4. Policy Challenges.* Older people's health-related quality of life is profoundly influenced by the structure and effectiveness of public policies, and often, significant hurdles lie within these realms. From gaps in the design of supportive policies to difficulties in implementation, policy challenges remain vital to address to improve health-related quality of life for older people.

(1) *Lack of Supportive Policies.* Over the years, considerable progress has been made in shaping policies to enhance care for older people. Nevertheless, there exists a noticeable gap in the formulation of comprehensive and inclusive policies that adequately address the diverse needs of the older population. Current policies must take a holistic approach to address a myriad of needs, spanning health care services, long-term care, financial security, and social support for older persons [46]. Health care services, in particular, necessitate a more integrated model encompassing preventative care, rehabilitation, mental health services, and social care alongside traditional medical care [47]. Given the economic challenges faced by many older individuals, policies ensuring financial security, such as affordable health care, pensions, and subsidies, assume critical importance [48]. Equally vital are policies addressing social needs, including housing, transportation, and community programs to combat isolation—areas often lacking sufficient policy support [49]. These policy

gaps can leave numerous older people without the necessary assistance, intensifying their challenges and contributing to compromised health outcomes.

(2) *Implementation Hurdles.* Transforming progressive and well-designed policies into effective practice can prove challenging, hindered by several factors. Chief among these challenges is often a lack of adequate funding, acting as a primary barrier [50]. The provision of services and support outlined in policies becomes feasible with the necessary financial resources [51]. Furthermore, infrastructural issues, encompassing the need for additional facilities, personnel, or technological resources, can significantly impede service delivery [52]. Resistance from various sectors poses another significant hurdle. This resistance may stem from a lack of understanding of the needs of older people, conflicting priorities, or reluctance to deviate from established practices [53]. Consequently, these challenges create a considerable gap between policy and practice in health care for older persons, leaving many older persons without the essential support despite seemingly robust policies [54]. Addressing these policy challenges is paramount for enhancing the health-related quality of life for older persons, necessitating commitment, resources, and a comprehensive understanding of the unique needs of this demographic.

### *3.2. Advancements in Health-Related Quality of Life for Older People*

*3.2.1. Technological Advancements.* Technological innovations have significantly transformed health care delivery, offering the immense potential to overcome many challenges (Table 2) in health-related quality of life for older people.

(1) *Role of Telemedicine.* Telemedicine has revolutionized health care delivery, offering significant advantages for older people grappling with mobility or accessibility challenges. Through digital platforms, health care providers can conduct remote consultations, diagnoses, and treatments, sparing older people from the burdensome routine of hospital visits [55]. This technological intervention provides immediate medical care, ensures continuous health monitoring, and promotes consistent interactions with health care professionals [56]. Beyond convenience, telemedicine empowers older individuals to actively engage in their health management from the comfort of home, enhancing their overall health care experience [57]. This transformative approach addresses the unique needs of older people and signifies a pivotal shift toward more accessible and patient-centric health care practices [58].

(2) *Wearable Health Technology.* Wearable health technology has transformed the landscape of personal health monitoring, encompassing a spectrum from health-monitoring smartwatches to heart rate sensors and fall detection systems [59]. The real-time data gleaned from these wearables provide invaluable insights into diverse health parameters [60]. This innovation holds particular significance for older individuals, ushering in a substantial shift. Immediate alerts from these devices enable prompt responses to potential health irregularities, while continuous tracking supports more effective management of chronic conditions [61]. Furthermore, these

wearables grant older people increased independence, empowering them to monitor their health and manage self-care routines autonomously [62]. Consequently, wearable health technology enhances the standard of care and enriches the lives of older people. Amid rapid technological progress, it is crucial to harness these innovations to cultivate a health care environment conducive to older people, thereby enhancing their health and overall life experiences.

**3.2.2. Medical Advancements.** Medical advancements play a pivotal role in overcoming the challenges in health-related quality of life for older people, offering innovative treatment methods, and reinforcing the importance of preventive care.

*(1) New Treatment Methods.* A striking advancement in modern medicine lies in the evolution of more sophisticated, less invasive, and highly efficient treatment modalities. One groundbreaking innovation is precision medicine, a revolutionary approach tailoring treatment plans to individual genetic profiles, ushering in a new era of targeted and personalized care [63]. The emergence of minimally invasive surgeries has further elevated patient experiences, offering reduced recovery times, decreased discomfort, and minimized complication risks compared to traditional invasive procedures [64]. These advancements are particularly advantageous for older people, as they tend to encounter greater challenges in recovering from invasive treatments due to age-related factors and potential existing health conditions.

Additionally, the advent of targeted therapies represents another milestone in medical progress. This approach focuses on treating specific affected areas or systems in the body while minimizing harm to healthy ones [65]. The targeted nature of these therapies reduces the side effects often associated with conventional treatments, a significant benefit for older patients who are more vulnerable to side effects due to age and frequently coexisting health issues [66]. This collective progress in medical methodologies exemplifies a commitment to improving treatment outcomes and enhancing the overall well-being of patients, especially the older population.

*(2) Preventative Care Strategies.* In today's health care landscape, the emphasis on preventative care is as paramount as curative treatments. This approach encompasses diverse strategies, including routine screenings for the early detection of potential diseases, adherence to regular vaccination schedules to guard against infectious diseases, and lifestyle modifications to cultivate healthier habits [67]. Among these pillars, regular health screenings hold particular importance, offering a critical avenue for early detection and timely intervention, especially for older individuals. Early diagnosis often leads to more manageable treatments and enhanced health outcomes [68]. Vaccinations play a crucial role in shielding against various infections, which can be particularly severe in older people due to their typically weaker immune systems [69]. Moreover, fostering healthy lifestyle habits, such as maintaining a balanced diet, engaging in regular physical exercise, prioritizing mental well-being, and eliminating harmful practices like smoking, significantly contributes to disease prevention [70]. These comprehensive strategies are essential in the management of health-related

quality of life for older people, effectively reducing disease prevalence, improving overall health status, and ultimately extending life expectancy.

**3.2.3. Social and Societal Advancements.** Social and societal advancements significantly impact the quality of health for older people, with improved living conditions and the critical role of social support and community engagement leading the charge.

*(1) Improvement in Living Conditions.* The well-being of older people is profoundly shaped by their living environments, and recent years have witnessed notable strides in this regard. The emergence of elder-friendly housing options, equipped with accessibility aids, emergency response systems, and specialized facilities catering to seniors' needs, reflects a positive shift [5]. Simultaneously, the expansion of in-home care services provides older people with medical support, assistance in daily activities, and companionship, fostering independence while ensuring necessary care [71]. Assisted living communities present a pragmatic alternative, offering a nuanced balance between autonomy and comprehensive care [1]. These settings provide a secure and interactive atmosphere for older people to engage with peers while receiving expert support for their health and daily needs [19].

However, despite these advancements improving living conditions for older persons, challenges persist. Affordability and accessibility issues may impede many older people from benefiting from these enhanced environments [72]. Additionally, the emotional strain associated with leaving one's home to transition to assisted living facilities poses a substantial challenge [73]. Addressing these challenges is imperative to ensure that advancements in living conditions contribute positively to the overall quality of health for older people. Efforts must focus on making improved living options more accessible and addressing the emotional aspects of these transitions to truly enhance the well-being of older people [74].

*(2) Role of Social Support and Community.* The importance of social support and community involvement in enhancing the well-being of older people cannot be overstated. Strong social networks significantly contribute to the mental, emotional, and physical well-being of older individuals [17]. Participation in community activities, like joining local clubs, engaging in volunteer programs, or partaking in group exercises, fosters a sense of belonging, enhances self-esteem, and overall contributes to the well-being of older people [75]. Furthermore, the rise of technology has led to virtual communities, offering older individuals' opportunities to connect, participate in online events, and access health resources [76]. These digital platforms play a crucial role in addressing feelings of isolation among older people, providing valuable avenues for social engagement and connection in the digital realm.

**3.2.4. Policy Advancements.** Policy advancements are crucial in improving health-related quality of life for older people by instituting protective measures, promoting access to health-care, and encouraging active aging.

*(1) Government Policies Favoring Health Care for Older People.* The recognition of quality health care's significance

for older individuals is growing on a policy level, with governments worldwide initiating efforts to enhance the health-related quality of life for their older populations [77]. These initiatives include policies that subsidize health care for older persons, stimulating the demand for targeted and effective medical services tailored to their needs [78]. Increased government funding for research on age-related health issues has led to breakthroughs in understanding and treating ailments prevalent among older people [79]. Policies promoting active aging, emphasizing regular physical activity, mental engagement, and social involvement, are gaining momentum to maintain health and well-being in old age [80]. These comprehensive initiatives are shaping a policy landscape advocating for holistic health care for older people. Nevertheless, challenges exist, such as unequal access due to socioeconomic disparities or regional differences [81]. Additionally, the implementation and effectiveness of these policies can vary, necessitating ongoing assessment and improvements for a more equitable and impactful approach [82].

(2) *Global Initiatives and Programs.* In recent years, there has been a substantial surge in global initiatives and programs dedicated to addressing the challenges posed by an aging population. Governments, international organizations, and nonprofit entities are acknowledging the imperative to cater to the needs and rights of older persons [83]. The aging and health program is a pivotal component, focusing on the formulation of age-friendly policies and services. This encompasses the enhancement of health care systems, the promotion of active aging, and the resolution of elder abuse and neglect issues [84].

Moreover, understanding the importance of fostering the well-being of older people is integral to ensuring healthy lives and overall prosperity. This commitment has led to the implementation of various global programs for older persons, aiming to improve healthcare access, enhance social inclusion, and provide financial security [85]. Nongovernmental organizations have played a crucial role in these endeavors by advocating for the rights of older persons and implementing programs to address their diverse needs. Their initiatives span from ensuring health care and income security to promoting intergenerational solidarity and combating age discrimination [44]. Ultimately, these global initiatives and programs reflect a collective dedication to constructing inclusive societies where older people can lead fulfilling lives. By prioritizing their well-being, ensuring access to essential services, and actively empowering them to participate in society, these initiatives honor the valuable contributions of older individuals while also striving to create a more age-friendly world.

#### 4. Discussion

This scoping review revealed that the landscape of health care for older individuals is undergoing a transformative shift propelled by technological, medical, social, and policy advancements. As we delve into the intricate web of challenges that older individuals face in maintaining health-related quality of life, a nuanced understanding of the interconnectedness among these challenges and the advancements designed to address them becomes imperative.

This research explored how technological innovations have emerged as powerful allies in overcoming challenges related to health care accessibility and monitoring for older individuals. Telemedicine, a revolutionary advancement, stands out as a solution to the physical and logistical challenges associated with aging [86]. By facilitating remote consultations, diagnoses, and treatments, telemedicine offers a lifeline for those facing mobility or transportation obstacles [87]. Its role in immediate medical care, continuous health monitoring, and promoting consistent interactions with health care professionals addresses the unique needs of older individuals [88]. The synergy with wearable health technology amplifies the impact, providing real-time data and empowering older individuals to actively engage in their health management [89]. Wearable devices, ranging from smartwatches to sensors, offer insights into diverse health parameters, enabling prompt responses to potential health irregularities and supporting effective management of chronic conditions [90]. The seamless integration of telemedicine and wearable health technology enhances the standard of care and enriches the lives of older people by fostering independence and autonomy [91].

This review found that medical advancements play a pivotal role in mitigating challenges related to the aging process and the increased susceptibility to diseases. Precision medicine, a groundbreaking approach tailoring treatment plans to individual genetic profiles, addresses the complexities of age-related conditions [92]. Its targeted and personalized care minimizes the risks and discomfort associated with traditional invasive procedures, particularly advantageous for older individuals [93]. Similarly, the emergence of minimally invasive surgeries reduces recovery times and complication risks, aligning with the age-related challenges in recovering from invasive treatments [94]. The interplay extends to preventative care strategies, emphasizing routine screenings for early disease detection and adherence to vaccination schedules [95]. These strategies, integral components of modern health care, contribute to the early diagnosis and management of health issues, particularly critical for older individuals susceptible to various ailments [89].

In addition, this review revealed that social and societal advancements significantly impacted the quality of health for older individuals, with improvements in living conditions and the role of social support leading the charge. Elder-friendly housing options, in-home care services, and assisted living communities reflect positive strides in improving living conditions [96]. However, challenges in affordability and emotional strains persist, emphasizing the need for policies and societal initiatives to address these issues [97]. The correlation with social support and community engagement is evident in the crucial role they play in enhancing the well-being of older people [10]. Strong social networks contribute to mental, emotional, and physical well-being, while community activities and virtual platforms combat social isolation and loneliness [98]. The integration of technology, through virtual communities and online events, offers older individuals' opportunities for social engagement and connection, highlighting the interrelated nature of technological and social advancements [99].



Moreover, the findings of this study underscored the pivotal role of policy advancements in elevating the health-related quality of life of older individuals. Governments worldwide recognize the significance of quality health care for aging populations and have initiated efforts to enhance accessibility [12]. Subsidies for health care, increased funding for research, and policies promoting active aging demonstrate a commitment to holistic health care [100]. The interplay with global initiatives and programs further emphasizes the collective dedication to constructing inclusive societies [101]. The aging and health program, focusing on age-friendly policies and services, aligns with the broader global initiatives to improve health care access, enhance social inclusion, and provide financial security [102]. However, challenges such as unequal access and regional disparities highlight the need for ongoing assessment and improvements in policy formulation [103].

Furthermore, this study identified that the physical and medical challenges associated with aging, including susceptibility to diseases and limited accessibility to treatments, find their solutions in the integration of advancements. While telemedicine addresses logistical barriers and provides immediate medical care [104], precision medicine [105], and minimally invasive surgeries [106] offer advanced treatment options. Wearable health technology complements these medical interventions by providing real-time data and supporting continuous health monitoring [107]. However, challenges persist in the form of multiple chronic conditions leading to polypharmacy and the need for specialized health care providers [108]. Bridging these gaps requires not solely technological solutions but additionally policy initiatives that ensure the availability and accessibility of advanced medical services for older individuals.

This study also recognized that the psychological challenges faced by older individuals, encompassing mental health issues and social isolation, necessitate a comprehensive approach. Technological advancements, particularly in telemedicine and wearable health technology, extend their utility beyond physical health monitoring to include mental health assessments [109]. However, challenges persist in societal perceptions and stigma surrounding mental health in older individuals [110]. The interrelation with social isolation emphasizes the role of societal initiatives in fostering awareness, reducing stigma, and promoting social engagement [111]. Integrating mental health considerations into policy frameworks becomes essential for ensuring a holistic approach to health care that encompasses both physical and mental well-being [112].

This research also highlighted socioeconomic challenges, such as the affordability of care and health disparities, intersect with advancements in medical treatments and accessibility. While precision medicine and minimally invasive surgeries offer advanced treatment modalities, policies must ensure their affordability and accessibility [113]. Health disparities based on socioeconomic factors, race, ethnicity, and gender underscore the need for equitable health care policies [114]. The interconnection with policy challenges highlights the importance of effective implementation to bridge the gap between policy intentions and practical outcomes [115]. A holistic and interconnected

approach is essential for addressing the complex web of challenges in socioeconomic well-being for older individuals [116].

Finally, the review of advancements and challenges in health care for older individuals unveils a dynamic and interconnected landscape. Technological innovations, medical advancements, societal initiatives, and policy formulations collectively contribute to enhancing the health quality and overall well-being of older individuals. Recognizing the intricate web of challenges and advancements is imperative for crafting holistic and effective strategies that address the unique needs of the aging population. As we navigate the evolving landscape of aging and health care, a synergistic approach that leverages the interconnected nature of these advancements becomes paramount for ensuring a healthy and fulfilling aging experience.

## 5. Conclusions

The advancements in enhancing health-related quality of life for older persons present a promising trajectory for improving the well-being of older individuals. The positive impact of medical breakthroughs, technological innovations, and increased awareness is evident in the strides made to tailor health care services to the specific needs of the older population. The improvements encompass better treatments, enhanced diagnostics, and increased accessibility to healthcare resources. However, it is imperative to recognize and address the persistent challenges that continue to affect health-related quality of life for older people. The highlighted physical and medical challenges, coupled with limited access to treatments and specialized care, underscore the need for focused attention to ensure equitable health care provision for all older people. Additionally, the significance of mental health issues among older people cannot be overstated, emphasizing the necessity for increased recognition and support to enhance overall well-being and quality of life. Moreover, socioeconomic challenges, including care affordability and financial strains, pose formidable barriers to accessing adequate healthcare services for older people. Addressing these challenges requires the implementation of policies that promote affordability and accessibility of healthcare tailored to the unique needs of the older population.

Collaboration among health care professionals, policy-makers, researchers, and community organizations is identified as vital to overcoming these obstacles. The pooling of resources, expertise, and knowledge can lead to the development of comprehensive solutions that further enhance health-related quality of life for older people. This collaborative effort involves integrating medical advancements, promoting mental health awareness and support, implementing socioeconomic reforms, and designing supportive policies. The implications of this study extend to the vision of a future where older individuals experience improved health outcomes, enhanced quality of life, and dignified aging. By continuously striving to bridge the gap between advancements and challenges, society can foster an environment that values and supports the health and happiness of all its members, with a specific focus on prioritizing the well-being of our aging population.



## Data Availability

Data sharing are not applicable to this article as no new data were created or analyzed in this study.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## Authors' Contributions

Moustaq Karim Khan Rony, Mst. Rina Parvin, and Khadiza Akter designed the study, collected, organized, and analyzed the data, and drafted the manuscript. Md. Wahiduzzaman and Mohammad Ullah designed the study, conducted data analysis, and assisted in organizing the manuscript. All the authors read and approved the manuscript.

## Acknowledgments

The authors are very pleased to acknowledge—Dr. Hasnat M. Alamgir (Professor and Head, Department of Public Health; State University of Bangladesh), Professor Anisur Rahman Forazy (Principal, International Nursing College, Bangladesh), and Adib Mahmood Tipu (Research Assistant, Action Research for Public Health Development in Bangladesh).

## References

- [1] S. Sánchez-García, C. García-Peña, E. Ramírez-García, K. Moreno-Tamayo, and G. R. Cantú-Quintanilla, "Decreased Autonomy In Community-Dwelling Older Adults," *Clinical Interventions in Aging*, vol. 14, pp. 2041–2053, 2019.
- [2] WHO, *Constitution*, WHO, 1946.
- [3] F. Enssle and N. Kabisch, "Urban green spaces for the social interaction, health and well-being of older people— an integrated view of urban ecosystem services and socio-environmental justice," *Environmental Science & Policy*, vol. 109, pp. 36–44, 2020.
- [4] I. Levkovich, S. Shinan-Altman, N. Essar Schwartz, and M. Alperin, "Depression and health-related quality of life among elderly patients during the COVID-19 pandemic in Israel: a cross-sectional study," *Journal of Primary Care & Community Health*, vol. 12, 2021.
- [5] I. Tornero-Quiñones, J. Sáez-Padilla, A. Espina Díaz, M. T. Abad Robles, and Á. Sierra Robles, "Functional ability, frailty and risk of falls in the elderly: relations with autonomy in daily living," *International Journal of Environmental Research and Public Health*, vol. 17, no. 3, Article ID 1006, 2020.
- [6] M. S. Fragala, E. L. Cadore, S. Dorgo et al., "Resistance Training for Older Adults: Position Statement From the National Strength and Conditioning Association," *Journal of Strength and Conditioning Research*, vol. 33, no. 8, pp. 2019–2052, 2019.
- [7] K. N. G. Long, E. S. Kim, Y. Chen, M. F. Wilson, E. L. Worthington Jr, and T. J. VanderWeele, "The role of Hope in subsequent health and well-being for older adults: an outcome-wide longitudinal approach," *Global Epidemiology*, vol. 2, p. 100018, 2020.
- [8] L. Klompstra, A. W. Ekdahl, B. Krevers, A. Milberg, and J. Eckerblad, "Factors related to health-related quality of life in older people with multimorbidity and high health care consumption over a two-year period," *BMC Geriatrics*, vol. 19, no. 1, Article ID 187, 2019.
- [9] P. D. Hart and D. J. Buck, "The effect of resistance training on health-related quality of life in older adults: systematic review and meta-analysis," *Health Promotion Perspectives*, vol. 9, no. 1, pp. 1–12, 2019.
- [10] M. Dehi and F. Mohammadi, "Social participation of older adults: a concept analysis," *International Journal of Community Based Nursing & Midwifery*, vol. 8, no. 1, pp. 55–72, 2020.
- [11] S. Santhalingam, S. Sivagurunathan, S. Prathapan, S. Kanagasabai, L. Kamalarupan, and M. Barman, "The effect of socioeconomic factors on quality of life of elderly in Jaffna district of Sri Lanka," *PLOS Global Public Health*, vol. 2, no. 8, Article ID e0000916, 2022.
- [12] T. Fulmer, D. B. Reuben, J. Auerbach, D. M. Fick, C. Galambos, and K. S. Johnson, "Actualizing better health and health care for older adults: commentary describes six vital directions to improve the care and quality of life for all older Americans," *Health Affairs*, vol. 40, no. 2, pp. 219–225, 2021.
- [13] G. Kojima, A. Liljas, and S. Iliffe, "Frailty syndrome: implications and challenges for health care policy," *Risk Management and Healthcare Policy*, vol. 12, pp. 23–30, 2019.
- [14] A. Z. Z. Phyo, D. A. Gonzalez-Chica, N. P. Stocks et al., "Impact of economic factors, social health and stressful life events on physical health-related quality of life trajectories in older Australians," *Quality of Life Research*, vol. 31, no. 5, pp. 1321–1333, 2022.
- [15] C. A. Atakro, A. Atakro, J. S. Aboagye et al., "Older people's challenges and expectations of healthcare in Ghana: a qualitative study," *PLOS ONE*, vol. 16, no. 1, Article ID e0245451, 2021.
- [16] H. Arksey and L. O'Malley, "Scoping studies: towards a methodological framework," *International Journal of Social Research Methodology*, vol. 8, no. 1, pp. 19–32, 2005.
- [17] R. Y. C. Kwan, F. Ng, L. C. W. Lam, R. C. Yung, O. S. K. Sin, and S. Chan, "The effects of therapeutic virtual reality experience to promote mental well-being in older people living with physical disabilities in long-term care facilities," *Trials*, vol. 24, Article ID 558, 2023.
- [18] Y. Ruan, Y. Guo, Y. Zheng et al., "Cardiovascular disease (CVD) and associated risk factors among older adults in six low-and middle-income countries: results from SAGE wave 1," *BMC Public Health*, vol. 18, no. 1, Article ID 778, 2018.
- [19] O. H. Jolanki, "Senior housing as a living environment that supports well-being in old age," *Frontiers in Public Health*, vol. 8, Article ID 589371, 2021.
- [20] C. Roux-Marson, J. B. Baranski, C. Fafin et al., "Medication burden and inappropriate prescription risk among elderly with advanced chronic kidney disease," *BMC Geriatrics*, vol. 20, no. 1, Article ID 87, 2020.
- [21] G. Nightingale, L. T. Pizzi, A. Barlow et al., "The prevalence of major drug-drug interactions in older adults with cancer and the role of clinical decision support software," *Journal of Geriatric Oncology*, vol. 9, no. 5, pp. 526–533, 2018.
- [22] A. Wojcieszek, A. Kurowska, A. Majda, H. Liszka, and A. Gądek, "The impact of chronic pain, stiffness and difficulties in performing daily activities on the quality of life of older patients with knee osteoarthritis," *International Journal of Environmental Research and Public Health*, vol. 19, no. 24, Article ID 16815, 2022.
- [23] T. Morgan, J. Wiles, H.-J. Park et al., "Social connectedness: what matters to older people?" *Ageing and Society*, vol. 41, no. 5, pp. 1126–1144, 2021.

- [24] M. Ahmed, M. Marín, D. How et al., “End Users’ and Other Stakeholders’ Needs and Requirements in the Development of a Personalized Integrated Care Platform (PROCare4Life) for Older People With Dementia or Parkinson Disease: Mixed Methods Study,” *JMIR Formative Research*, vol. 6, no. 11, Article ID e39199, 2022.
- [25] J. Lim, S. Jeong, S. Jang, and S. Jang, “Hospitalization and emergency department visits associated with potentially inappropriate medication in older adults: self-controlled case series analysis,” *Frontiers in Public Health*, vol. 11, Article ID 1080703, 2023.
- [26] Y.-S. Jiang, H. Shi, Y.-T. Kang et al., “Impact of age-friendly living environment and intrinsic capacity on functional ability in older adults: a cross-sectional study,” *BMC Geriatrics*, vol. 23, no. 1, Article ID 374, 2023.
- [27] T. Franke, J. Sims-Gould, H. Chaudhury, M. Winters, and H. McKay, “It makes your life worthwhile. It gives you a purpose in living: mobility experiences among active older adults with low income,” *Ageing and Society*, vol. 39, no. 8, pp. 1639–1666, 2019.
- [28] J. D. Portz, E. A. Bayliss, S. Bull et al., “Using the technology acceptance model to explore user experience, intent to use, and use behavior of a patient portal among older adults with multiple chronic conditions: descriptive qualitative study,” *Journal of Medical Internet Research*, vol. 21, no. 4, Article ID e11604, 2019.
- [29] J. Gustavsson and L. Beckman, “Compliance to recommendations and mental health consequences among Elderly in Sweden during the initial phase of the COVID-19 pandemic—a cross sectional online survey,” *International Journal of Environmental Research and Public Health*, vol. 17, no. 15, Article ID 5380, 2020.
- [30] L. Jia, Y. Du, L. Chu et al., “Prevalence, risk factors, and management of dementia and mild cognitive impairment in adults aged 60 years or older in China: a cross-sectional study,” *The Lancet Public Health*, vol. 5, no. 12, pp. e661–e671, 2020.
- [31] H. O. Taylor, R. J. Taylor, A. W. Nguyen, and L. Chatters, “Social isolation, depression, and psychological distress among older adults,” *Journal of Aging and Health*, vol. 30, no. 2, pp. 229–246, 2018.
- [32] H. J. Rendina, L. Weaver, B. M. Millar, J. López-Matos, and J. T. Parsons, “Psychosocial well-being and HIV-related immune health outcomes among hiv-positive older adults: support for a biopsychosocial model of HIV stigma and health,” *Journal of the International Association of Providers of AIDS Care (JIAPAC)*, vol. 18, 2019.
- [33] J. M. Finlay and L. C. Kobayashi, “Social isolation and loneliness in later life: a parallel convergent mixed-methods case study of older adults and their residential contexts in the Minneapolis metropolitan area, USA,” *Social Science & Medicine*, vol. 208, pp. 25–33, 2018.
- [34] J. Dare, C. Wilkinson, R. Donovan et al., “Guidance for research on social isolation, loneliness, and participation among older people: lessons from a mixed methods study,” *International Journal of Qualitative Methods*, vol. 18, 2019.
- [35] A. A. Kotwal, S. M. Fuller, J. J. Myers et al., “A peer intervention reduces loneliness and improves social well-being in low-income older adults: a mixed-methods study,” *Journal of the American Geriatrics Society*, vol. 69, no. 12, pp. 3365–3376, 2021.
- [36] G. Lindsay-Smith, G. O’Sullivan, R. Eime, J. Harvey, and J. G. Z. Van Uffelen, “A mixed methods case study exploring the impact of membership of a multi-activity, multicentre community group on social wellbeing of older adults,” *BMC Geriatrics*, vol. 18, no. 1, Article ID 226, 2018.
- [37] S. Palati, P. Ramani, H. J. Shrelin et al., “Knowledge, attitude and practice survey on the perspective of oral lesions and dental health in geriatric patients residing in old age homes,” *Indian Journal of Dental Research*, vol. 31, no. 1, Article ID 22, 2020.
- [38] K. Abe, A. Miyawaki, Y. Kobayashi, T. Watanabe, and N. Tamiya, “Place of death associated with types of long-term care services near the end-of-life for home-dwelling older people in Japan: a pooled cross-sectional study,” *BMC Palliative Care*, vol. 19, no. 1, Article ID 121, 2020.
- [39] T. Zhou, P. Liu, S. S. Dhruva et al., “Assessment of hypothetical out-of-pocket costs of guideline-recommended medications for the treatment of older adults with multiple chronic conditions, 2009 and 2019,” *JAMA Internal Medicine*, vol. 182, no. 2, Article ID 185, 2022.
- [40] F.-L. Wu, H.-C. Tai, and J.-C. Sun, “Self-management experience of middle-aged and older adults with type 2 diabetes: a qualitative study,” *Asian Nursing Research*, vol. 13, no. 3, pp. 209–215, 2019.
- [41] H. Ko, Y.-H. Park, B. L. Cho et al., “Gender differences in health status, quality of life, and community service needs of older adults living alone,” *Archives of Gerontology and Geriatrics*, vol. 83, pp. 239–245, 2019.
- [42] T. Muhammad, M. Govindu, and S. Srivastava, “Relationship between chewing tobacco, smoking, consuming alcohol and cognitive impairment among older adults in India: a cross-sectional study,” *BMC Geriatrics*, vol. 21, no. 1, Article ID 85, 2021.
- [43] W. Agyemang-Duah, C. Peprah, and P. Peprah, “Barriers to formal healthcare utilisation among poor older people under the livelihood empowerment against poverty programme in the Atwima Nwabiagya District of Ghana,” *BMC Public Health*, vol. 19, no. 1, Article ID 1185, 2019.
- [44] R. E. Watkinson, M. Sutton, and A. J. Turner, “Ethnic inequalities in health-related quality of life among older adults in England: secondary analysis of a national cross-sectional survey,” *The Lancet Public Health*, vol. 6, no. 3, pp. e145–e154, 2021.
- [45] J. Sun and S. Lyu, “Social participation and urban-rural disparity in mental health among older adults in China,” *Journal of Affective Disorders*, vol. 274, pp. 399–404, 2020.
- [46] T. Muhammad and S. Srivastava, “Tooth loss and associated self-rated health and psychological and subjective wellbeing among community-dwelling older adults: a cross-sectional study in India,” *BMC Public Health*, vol. 22, no. 1, p. 7, 2022.
- [47] S. Techapiroontong, N. Limpuangthip, W. Tumrasvin, and J. Sirotamarat, “The impact of poor dental status and removable dental prosthesis quality on body composition, masticatory performance and oral health-related quality of life: a cross-sectional study in older adults,” *BMC Oral Health*, vol. 22, no. 1, Article ID 147, 2022.
- [48] L. Lu, H. Shen, L. Tan et al., “Prevalence and factors associated with anxiety and depression among community-dwelling older adults in Hunan, China: a cross-sectional study,” *BMC Psychiatry*, vol. 23, no. 1, Article ID 107, 2023.
- [49] A. Y. M. Leung, J. J. Su, E. S. H. Lee, J. T. S. Fung, and A. Molassiotis, “Intrinsic capacity of older people in the community using WHO integrated care for older people (ICOPE) framework: a cross-sectional study,” *BMC Geriatrics*, vol. 22, no. 1, Article ID 304, 2022.

- [50] A. Anwar, U. N. Yadav, M. N. Huda et al., "Prevalence and determinants of self-reported functional status among older adults residing in the largest refugee camp of the world," *BMC Geriatrics*, vol. 23, no. 1, Article ID 345, 2023.
- [51] M. Aranha, J. Shemie, K. James, C. Deasy, and C. Heavin, "Behavioural intention of mobile health adoption: A study of older adults presenting to the emergency department," *Smart Health*, vol. 31, Article ID 100435, 2024.
- [52] H. Y. Hung, A. Azman, and P. S. Jamir Singh, "The impact of counseling on the dignity of older people: protocol for a mixed methods study," *JMIR Research Protocols*, vol. 12, Article ID e45557, 2023.
- [53] A. Amfo-Antiri, N. A. F. Agyapong, and L. Cobbah, "Dietary habits and nutritional challenges of the elderly in Ghana," *Journal of Nutrition and Metabolism*, vol. 2023, Article ID 3011067, 8 pages, 2023.
- [54] L. Brown, R. Mossabir, N. Harrison et al., "Developing the evidence and associated service models to support older adults living with frailty to manage their pain and to reduce its impact on their lives: protocol for a mixed-method, co-design study (The POPPY Study)," *BMJ Open*, vol. 13, no. 6, Article ID e074785, 2023.
- [55] S. Taylor, S. Souza, L. Little, and J. Odiaga, "Enhancing telehealth competency: development and evaluation of education modules for older adults," *OTJR: Occupational Therapy Journal of Research*, vol. 43, no. 3, pp. 478–486, 2023.
- [56] E. Kornblith, S. Schweizer, G. Abrams et al., "Telehealth delivery of group-format cognitive rehabilitation to older veterans with TBI: a mixed-methods pilot study," *Applied Neuropsychology: Adult*, pp. 1–13, 2023.
- [57] N. Bansal and H. Choudhary, "Growing old in the digital era: a qualitative study of internet use and outcomes among urban Indian older adults," *Working with Older People*, 2023.
- [58] Y. Zhang, E. W. J. Lee, and W.-P. Teo, "Health-seeking behavior and its associated technology use: interview study among community-dwelling older adults," *JMIR Aging*, vol. 6, Article ID e43709, 2023.
- [59] D. Zytneck, S. C. Folta, K. F. Reid, and V. R. Chomitz, "Better understanding wearable activity monitor use and non-use among older adults: a qualitative study," *Journal of Applied Gerontology*, vol. 42, no. 3, pp. 447–455, 2023.
- [60] K. S. L. T. Zin, S. Kim, H.-S. Kim, and I. F. Feyissa, "A study on technology acceptance of digital healthcare among older korean adults using extended tam (extended technology acceptance model)," *Administrative Sciences*, vol. 13, no. 2, Article ID 42, 2023.
- [61] W. Zhou, Y. Cho, S. Shang, and Y. Jiang, "Use of digital health technology among older adults with cancer in the United States: findings from a national longitudinal cohort study (2015–2021)," *Journal of Medical Internet Research*, vol. 25, Article ID e46721, 2023.
- [62] S. H. Lin, "Adoption of mobile and wearable technology for older adults' physical activity: a preliminary model," *Journal of Consumer Health on the Internet*, vol. 27, no. 2, pp. 139–155, 2023.
- [63] A. Sultan-qurraie, M. C. Previti, E. Eddington Alden, J. Han, N. Sheibani, and A. H. De Havenon, "Abstract TP48: IV-tPA In elderly with occult trauma is associated with high risk for hemorrhagic complication," *Stroke*, vol. 53, no. Suppl\_1, 2022.
- [64] A. Ruggiero, G. Fabbrocini, E. Cinelli, S. S. Ocampo Garza, E. Camela, and M. Megna, "Anti-interleukin-23 for psoriasis in elderly patients: guselkumab, risankizumab and tildrakizumab in real-world practice," *Clinical and Experimental Dermatology*, vol. 47, no. 3, pp. 561–567, 2022.
- [65] W. K. Soo, M. T. King, A. Pope, P. Parente, P. Dārziņš, and I. D. Davis, "Integrated geriatric assessment and treatment effectiveness (INTEGRATE) in older people with cancer starting systemic anticancer treatment in Australia: a multicentre, open-label, randomised controlled trial," *The Lancet Healthy Longevity*, vol. 3, no. 9, pp. e617–e627, 2022.
- [66] S. A. McAuley, S. Trawley, S. Vogrin et al., "Closed-loop insulin delivery versus sensor-augmented pump therapy in older adults with type 1 diabetes (ORACL): a randomized, crossover trial," *Diabetes Care*, vol. 45, no. 2, pp. 381–390, 2022.
- [67] J. Fernandes, S. Fernandes, A. Almeida, D. Vareta, and C. Miller, "Older adults' perceived barriers to participation in a falls prevention strategy," *Journal of Personalized Medicine*, vol. 11, no. 6, Article ID 450, 2021.
- [68] T. Liu-Ambrose, J. C. Davis, J. R. Best et al., "Effect of a home-based exercise program on subsequent falls among community-dwelling high-risk older adults after a fall: a randomized clinical trial," *JAMA*, vol. 321, no. 21, pp. 2092–2100, 2019.
- [69] A. Sinclair, P. Saeedi, A. Kaundal, S. Karuranga, B. Malanda, and R. Williams, "Diabetes and global ageing among 65–99-year-old adults: findings from the international diabetes federation diabetes atlas, 9th edition," *Diabetes Research and Clinical Practice*, vol. 162, Article ID 108078, 2020.
- [70] M. H. Verwijns, S. Puijk-Hekman, E. Van Der Heijden, E. Vasse, L. C. P. G. M. De Groot, and M. A. E. De Van Der Schueren, "Interdisciplinary communication and collaboration as key to improved nutritional care of malnourished older adults across health-care settings – a qualitative study," *Health Expectations*, vol. 23, no. 5, pp. 1096–1107, 2020.
- [71] J. L. Travers, K. B. Hirschman, and M. D. Naylor, "Adapting Andersen's expanded behavioral model of health services use to include older adults receiving long-term services and supports," *BMC Geriatrics*, vol. 20, no. 1, Article ID 58, 2020.
- [72] H. Dabelko-Schoeny, A. Maleku, Q. Cao, K. White, and B. Ozbilen, "“We want to go, but there are no options”: Exploring barriers and facilitators of transportation among diverse older adults," *Journal of Transport & Health*, vol. 20, Article ID 100994, 2021.
- [73] R. G. LeBlanc, L. Chiodo, and C. S. Jacelon, "Social relationship influence on self-care and health among older people living with long term conditions: a mixed-methods study," *International Journal of Older People Nursing*, vol. 17, no. 4, Article ID e12450, 2022.
- [74] M.-H. Ho, F.-H. Chu, Y.-F. Lin et al., "Factors associated with comfort as perceived by older people living in long-term care facilities," *Collegian*, vol. 29, no. 1, pp. 9–15, 2022.
- [75] D. S. Şahin, Ö. Özer, and M. Z. Yanardağ, "Perceived social support, quality of life and satisfaction with life in elderly people," *Educational Gerontology*, vol. 45, no. 1, pp. 69–77, 2019.
- [76] Z. I. Santini, P. E. Jose, E. York Cornwell et al., "Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): a longitudinal mediation analysis," *The Lancet Public Health*, vol. 5, no. 1, pp. e62–e70, 2020.
- [77] B. Kanık, Ö.M. Uluğ, N. Solak, and M. Chayinska, "“Let the strongest survive”: ageism and social darwinism as barriers to



- supporting policies to benefit older individuals,” *Journal of Social Issues*, vol. 78, no. 4, pp. 790–814, 2022.
- [78] S. Ghimire, D. R. Singh, S. J. McLaughlin, R. Maharjan, and D. Nath, “Health care utilization by older adults in Nepal: an investigation of correlates and equity in utilization,” *International Journal of Health Services*, vol. 52, no. 2, pp. 236–245, 2022.
- [79] M. Du, L. Cheng, X. Li, and J. Yang, “Factors affecting the travel mode choice of the urban elderly in healthcare activity: comparison between core area and suburban area,” *Sustainable Cities and Society*, vol. 52, p. 101868, 2020.
- [80] X. Qi, T. Feng, and R. Deng, “Digital health care service reform and health inequity for older people: a quasi-natural experiment in China,” *Frontiers in Public Health*, vol. 11, Article ID 1217503, 2023.
- [81] A. Nicolet, C. Perraudin, N. Krucien, J. Wagner, I. Peytremann-Bridevaux, and J. Marti, “Preferences of older adults for healthcare models designed to improve care coordination: evidence from Western Switzerland,” *Health Policy*, vol. 132, Article ID 104819, 2023.
- [82] X. Fu, N. Sun, F. Xu et al., “Influencing factors of inequity in health services utilization among the elderly in China,” *International Journal for Equity in Health*, vol. 17, no. 1, Article ID 144, 2018.
- [83] I. Jalenques, F. Rondepierre, C. Rachez, S. Lauron, and C. Guiguet-Auclair, “Health-related quality of life among community-dwelling people aged 80 years and over: a cross-sectional study in France,” *Health and Quality of Life Outcomes*, vol. 18, no. 1, Article ID 126, 2020.
- [84] J. Bobitt, S. H. Qualls, M. Schuchman et al., “Qualitative analysis of cannabis use among older adults in Colorado,” *Drugs & Aging*, vol. 36, no. 7, pp. 655–666, 2019.
- [85] R. F. Buckley, E. C. Mormino, J. S. Rabin et al., “Sex differences in the association of global amyloid and regional tau deposition measured by positron emission tomography in clinically normal older adults,” *JAMA Neurology*, vol. 76, no. 5, Article ID 542, 2019.
- [86] E. Şahin, B. G. Yavuz Veizi, and M. I. Naharci, “Telemedicine interventions for older adults: a systematic review,” *Journal of Telemedicine and Telecare*, vol. 30, no. 2, pp. 305–319, 2024.
- [87] J. A. Batsis, P. R. DiMilia, L. M. Seo et al., “Effectiveness of ambulatory telemedicine care in older adults: a systematic review,” *Journal of the American Geriatrics Society*, vol. 67, no. 8, pp. 1737–1749, 2019.
- [88] B. Haralambous, S. Subramaniam, K. Hwang, B. Dow, and D. LoGiudice, “A narrative review of the evidence regarding the use of telemedicine to deliver video-interpreting during dementia assessments for older people,” *Asia-Pacific Psychiatry*, vol. 11, no. 3, Article ID e12355, 2019.
- [89] T.-H. Tsai, W.-Y. Lin, Y.-S. Chang, P.-C. Chang, M.-Y. Lee, and S. Borsci, “Technology anxiety and resistance to change behavioral study of a wearable cardiac warming system using an extended TAM for older adults,” *PLOS ONE*, vol. 15, no. 1, Article ID e0227270, 2020.
- [90] M. S. Talukder, G. Sorwar, Y. Bao, J. U. Ahmed, and M. A. S. Palash, “Predicting antecedents of wearable healthcare technology acceptance by elderly: a combined SEM-Neural Network approach,” *Technological Forecasting and Social Change*, vol. 150, Article ID 119793, 2020.
- [91] J. Li, Q. Ma, A. H. S. Chan, and S. S. Man, “Health monitoring through wearable technologies for older adults: smart wearables acceptance model,” *Applied Ergonomics*, vol. 75, pp. 162–169, 2019.
- [92] M. Izquierdo, G. Duque, and J. E. Morley, “Physical activity guidelines for older people: knowledge gaps and future directions,” *The Lancet Healthy Longevity*, vol. 2, no. 6, pp. e380–e383, 2021.
- [93] Z. Feng, E. Glinskaya, H. Chen et al., “Long-term care system for older adults in China: policy landscape, challenges, and future prospects,” *The Lancet*, vol. 396, no. 10259, pp. 1362–1372, 2020.
- [94] A. Shabbir, R. K. Menon, J. Somani et al., “ELSA recommendations for minimally invasive surgery during a community spread pandemic: a centered approach in Asia from widespread to recovery phases,” *Surgical Endoscopy*, vol. 34, no. 8, pp. 3292–3297, 2020.
- [95] M. Izquierdo, R. A. Merchant, J. E. Morley et al., “International Exercise Recommendations in Older Adults (ICFSR): Expert Consensus Guidelines,” *The Journal of Nutrition, Health and Aging*, vol. 25, no. 7, pp. 824–853, 2021.
- [96] A. Gibson, N. Pope, D. Loeffler, S. Ratliff, and E. Engelhardt, “Identifying aging adults’ housing preferences: an age-friendly initiative,” *Journal of Gerontological Social Work*, vol. 66, no. 1, pp. 43–63, 2023.
- [97] M. G. Newman and N. H. Zainal, “The value of maintaining social connections for mental health in older people,” *The Lancet Public Health*, vol. 5, no. 1, pp. e12–e13, 2020.
- [98] N. J. Donovan and D. Blazer, “Social isolation and loneliness in older adults: review and commentary of a national academies report,” *The American Journal of Geriatric Psychiatry*, vol. 28, no. 12, pp. 1233–1244, 2020.
- [99] B. Barbosa Neves, R. Franz, R. Judges, C. Beermann, and R. Baecker, “Can digital technology enhance social connectedness among older adults? A feasibility study,” *Journal of Applied Gerontology*, vol. 38, no. 1, pp. 49–72, 2019.
- [100] M. Chen and Z. Wang, “Benefits for older people from government subsidies for healthcare in China: is the distribution equitable?” *Social Indicators Research*, vol. 160, no. 2-3, pp. 505–521, 2022.
- [101] M. Montero-Odasso, N. van der Velde, F. C. Martin et al., “World guidelines for falls prevention and management for older adults: a global initiative,” *Age and Ageing*, vol. 51, no. 9, Article ID afac205, 2022.
- [102] S. Pilleron, D. Sarfati, M. Janssen-Heijnen et al., “Global cancer incidence in older adults, 2012 and 2035: A population-based study,” *International Journal of Cancer*, vol. 144, no. 1, pp. 49–58, 2019.
- [103] R. A. Richardson, K. M. Keyes, J. T. Medina, and E. Calvo, “Sociodemographic inequalities in depression among older adults: cross-sectional evidence from 18 countries,” *The Lancet Psychiatry*, vol. 7, no. 8, pp. 673–681, 2020.
- [104] S. Elbaz, K. Cinalioglu, K. Sekhon et al., “A systematic review of telemedicine for older adults with dementia during COVID-19: an alternative to in-person health services?” *Frontiers in Neurology*, vol. 12, Article ID 761965, 2021.
- [105] N. Sadat Mosavi and M. Filipe Santos, “How prescriptive analytics influences decision making in precision medicine,” *Procedia Computer Science*, vol. 177, pp. 528–533, 2020.
- [106] R. E. Kelly, R. J. Obermeyer, M. J. Goretsky et al., “Recent modifications of the nuss procedure: the pursuit of safety during the minimally invasive repair of pectus excavatum,” *Annals of Surgery*, vol. 275, no. 2, pp. e496–e502, 2022.

- [107] M. Jaana and G. Paré, "Comparison of mobile health technology use for self-tracking between older adults and the general adult population in Canada: cross-sectional survey," *JMIR mHealth and uHealth*, vol. 8, no. 11, Article ID e24718, 2020.
- [108] H. D. Lum, K. Nearing, C. B. Pimentel, C. R. Levy, W. W. Hung, and B. Kaskie, "Anywhere to anywhere: use of telehealth to increase health care access for older, rural veterans," *Public Policy & Aging Report*, vol. 30, no. 1, pp. 12–18, 2020.
- [109] C. E. Gould, F. Ma, J. R. Loup, C. Juang, E. Y. Sakai, and R. Pepin, "Technology-based mental health assessment and intervention," in *Handbook of Mental Health and Aging*, pp. 401–415, Elsevier, 2020.
- [110] H. Yin, K. J. Wardenaar, G. Xu, H. Tian, and R. A. Schoevers, "Mental health stigma and mental health knowledge in Chinese population: a cross-sectional study," *BMC Psychiatry*, vol. 20, no. 1, Article ID 323, 2020.
- [111] D. W. L. Lai, J. Li, V. W. P. Lee, and X. Q. Dong, "Environmental factors associated with Chinese older immigrants' social engagement," *Journal of the American Geriatrics Society*, vol. 67, no. S3, 2019.
- [112] K. A. Van Orden, E. Bower, J. Lutz et al., "Strategies to promote social connections among older adults during, social distancing, restrictions," *The American Journal of Geriatric Psychiatry*, vol. 29, no. 8, pp. 816–827, 2021.
- [113] E. Faulkner, A.-P. Holtorf, S. Walton et al., "Being precise about precision medicine: what should value frameworks incorporate to address precision medicine? a report of the personalized precision medicine special interest group," *Value in Health*, vol. 23, no. 5, pp. 529–539, 2020.
- [114] L. E. Flores, W. R. Frontera, M. P. Andrasik et al., "Assessment of the inclusion of racial/ethnic minority, female, and older individuals in vaccine clinical trials," *JAMA Network Open*, vol. 4, no. 2, Article ID e2037640, 2021.
- [115] D. Burnes, C. Sheppard, C. R. Henderson Jr et al., "Interventions to reduce ageism against older adults: a systematic review and meta-analysis," *American Journal of Public Health*, vol. 109, no. 8, pp. e1–e9, 2019.
- [116] M.-F. Reyes, E. Satorres, and J. C. Meléndez, "Resilience and Socioeconomic status as predictors of life satisfaction and psychological well-being in Colombian older adults," *Journal of Applied Gerontology*, vol. 39, no. 3, pp. 269–276, 2020.