

Impact of healthcare service quality on older people's satisfaction at geriatric medical centers: a rapid review

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Abstract

Introduction. Older adults are concerned about the quality of care as many of them are vulnerable to the co-occurrence of geriatric syndromes and age-related diseases due to accumulated impairments in multiple systems. Literature indicates that though people are living longer, they are not necessarily living healthier, which creates the need for providing quality healthcare services specifically to address the needs of this population. B This rapid review investigates the impact of healthcare service quality on older people's satisfaction at geriatric medical centers.

Methods. The rapid review includes 11 articles from searches on PubMed, PsycINFO and Google Scholar.

Results. The reviewed studies indicate that the quality of healthcare services to older adults enhances their satisfaction at senior facilities and produces positive patient outcomes. A thematic analysis of these studies revealed four major themes related to the review topic: perceived quality of healthcare services, patients' quality of life, patient satisfaction, and provider-patient communication.

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Implications for practice. Nurses should provide high-quality care to older adults in geriatric settings to improve patients' and their families' satisfaction. Nurses should target quality leadership, implement quality improvement, and communicate effectively. Nurses should also offer patient-centered care by involving family members in care planning.

Summary statement of implications for practice

What does this research add to existing knowledge in geriatrics?

The study presents a 'new perspective' of looking at the content of the current literature.

The new perspective is the quality of care of older adults within geriatric settings.

What is the importance of this study for geriatric nurses?

Geriatric nurses can use this information to ensure provision of high-quality care to older adults in all healthcare settings to address the contemporary health problems experienced by this population. Providing quality care will improve patient satisfaction, quality of life, and provider-patient communication.

How could the findings be used to influence policy or practice or research or education?

- Policymakers should develop guidelines for geriatric care to improve high-quality geriatric services for older adults with different conditions.
- Nursing educators should train geriatric nursing students and practising geriatric nurses on evidence-based approaches to providing high-quality geriatric care.

Introduction

Older people are living longer and make up a growing share of the population in most countries worldwide [World Health Organization (WHO), 2021]. WHO (2021) forecasts that by 2030, one in six people will be aged 60 years or over. The WHO (2021) also estimates that in 2030, the share of this population will increase from 1 billion in 2020 to 1.4 billion (WHO, 2021). The increasing aging population presents many opportunities and public health challenges that the healthcare sector should prepare to address. For instance, older adults face the challenge of a shortage of geriatric nurses, which provides an opportunity to train more nurses. Geriatric nurses provide care to the elderly and are educated to understand and treat their often complex physical and mental health needs. They are nurse practitioners and hold a certification in geriatrics. Fox *et al.* (2017) indicate that nurses provide care to older adults in multiple settings, but a majority of them have little to no background in geriatric nursing. Therefore, increasing the

number of geriatric nurses will play a critical role in addressing the increasing older population's health needs and ensuring quality care. Multiple complex health states characterize older age and are commonly referred to as geriatric syndromes (GSs). GSs are widely identified in older adults but not attributed to a specific isolated underlying disease. GSs develop due to accumulated changes in multiple systems that alter older adults' compensatory ability (Magnuson *et al.*, 2019). The etiology underlying the occurrence of GSs tends to be multifactorial. The co-occurrence of multiple geriatric syndromes and age-related diseases is a growing concern for older people. Wister *et al.* (2018) note that aging is characterized by the accumulation of age-related physiological changes and changes in psychosocial functioning. GSs include physical frailty, incontinence, cognitive impairment and dementia, social isolation, sensory deficits, dependency, falls, depressive symptoms, thinness, and polymedication (Dartigues *et al.*, 2022). Age-related diseases include cancer, osteoporosis, pulmonary and cardiac diseases, hypertension, peripheral vascular diseases, diabetes, and other chronic diseases (Dartigues *et al.*, 2022). The information presented in this paragraph indicates that though people are living longer, they are not necessarily living healthier. This creates the need for providing quality health care services specifically for addressing the needs of this population. The literature indicates that due to the physiological changes associated with aging, this population is predisposed to multiple health conditions. Related to this predisposition, quality care is a concern for the older population. The rationale is that GSs predict a more significant likelihood of hospitalization, increased health use and cost, and increased overall mortality.

Based on the above background information, this rapid review investigates the impact of healthcare service quality on older adults' satisfaction in geriatric medical centers globally. The rationale for conducting this rapid review is the increasing global aging population and the need to improve services to older people in geriatric hospitals. The rapid review provides recommendations on how geriatric hospitals can improve the quality of care provided to geriatric patients. The rapid review also helps plan future quantitative studies on the topic. The rapid review includes predefining criteria for the inclusion and publication of articles, a detailed research protocol, a comprehensive and systematic search of all the studies done on the subject, and filtering the studies according to pre-determined criteria.

Materials and Methods

The rapid review employed the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines for writing a research report (Page *et al.*, 2021). The PRISMA flow diagram indicating the number of studies identified for each step is presented below.

Table 1. Eligibility criteria.

Inclusion	Exclusion
Only studies in medical/clinical settings, including long-term care facilities, were selected.	Studies conducted in intermediate medical centres
Studies conducted among geriatric patients older than 65 years of age	Studies concentrating on patient satisfaction without any healthcare quality implications
Studies on either patient satisfaction (including life satisfaction) or healthcare quality	Studies on healthcare quality without any patient satisfaction implications
Studies published in peer-reviewed journals that began publication earlier than 2012	Studies focusing on homecare
Studies published between 1990 and 2022	Excluded correctional and qualitative studies because they do not show impact
Quantitative studies that used intervention study approach	

Databases used and MeSH terms

The advanced search was conducted on PubMed, PsycInfo, and Google Scholar using MeSH terms. The MeSH terms used were patient satisfaction, older adult, healthcare quality, geriatric center, long-term care facility, and nursing home. The search process involved using these terms separately or combining two or more terms. The search terms combinations used were 'patient satisfaction' AND 'older adult' AND 'geriatric center' OR 'long-term care facility'. The search process and the combination of the search terms were similar in the three databases. The search period of search articles was from 1990 to 2022.

Inclusion and exclusion criteria

Studies focusing on patient satisfaction or healthcare quality for older adults were selected for inclusion. However, studies undertaken in intermediate medical centers or homecare contexts, or focusing on patient satisfaction without healthcare implications were excluded. Table 1 summarises the inclusion and exclusion criteria used.

Selection process

According to the PRISMA flow diagram, the initial search produced 1,161 articles. The author checked the hits for duplicate records and removed 679 duplicates. The article titles and abstracts were read, and relevant articles were chosen for further examination. 418 articles irrelevant to the review topic were eliminated. Sixty-four articles remained. Seventeen articles were not retrieved because they did not allow full access. Lastly, the remaining 47 articles were assessed for eligibility. This stage eliminated 32 articles because they were conducted in medical centers (n=12), the population of the study was not geriatric patients (n=7), they lacked both healthcare quality and patient satisfaction implications (n=14), and did not focus on healthcare quality and patient satisfaction (n=3). Fifteen studies were selected for inclusion. Table 2 summarizes the characteristics of the included studies.

Two researchers independently assessed the risk of bias in the included studies using the Risk of Bias in Non-Randomized Studies of Interventions (ROBINS-I) tool. ROBINS-I is a tool for evaluating the risk of bias in non-randomized studies. The rationale for using this tool is its effectiveness in undertaking rapid reviews that include non-randomized studies (Sterne *et al.*, 2016). The six steps proposed by the tool for each of the 11 studies were reviewed and the overall risk of bias in the studies were rated as low risk. The authors made this judgment because none of the signaling questions for a domain suggested a potential problem. Based on this judgment, the articles' results have a low risk of bias.

Data extraction and synthesis

Data was extracted by capturing the key characteristics of the information in the journal articles. This process extracted informa-

tion on the impact of healthcare service quality on older people's satisfaction at geriatric medical centers. It extracted data on factors related to or that influence healthcare service quality. Content analysis was used to synthesize the data. The two researchers independently classified the data systematically and identified patterns and themes. The researchers then analysed the results of each reviewed article and classified the data into four themes; perceived quality of healthcare services, patients' quality of life (QoL), patient satisfaction, and provider-patient communication. Any discrepancies between the two researchers during the data extraction and quality evaluation processes were resolved by consensus method.

Results

The final rapid review included 11 studies published between 1990 and 2022. The 11 studies employed different quantitative research approaches. As shown in Figure 1 (PRISMA Flowchart), the author retrieved and included 11 quantitative studies from searches on PubMed, PsycINFO, and Google Scholar.

The articles (n=1) identified through the Israel Journal of Health Policy Research (IJHPR), one was included in the final selection (Podell *et al.*, 2018). Out of the 816 records identified on Google Scholar, five were selected for meeting the eligibility criteria (Atad & Caspi, 2020; Even-Zohar, 2014; Gindin *et al.*, 2014; Merims *et al.*, 2018; Shuv-Ami & Shalom, 2017). Out of the 96 records identified on PsycInfo, two were selected; (Chang *et al.*, 2021; Wilde *et al.*, 1995). Out of the 249 records identified on PubMed, three were selected for review; (Burlakov *et al.*, 2021; Hartgerinkn *et al.*, 2015; Poot *et al.*, 2014).

The included studies indicate that the quality of healthcare services older adults receive enhances their satisfaction at senior facilities and produces positive patient outcomes. For instance, Burlakov *et al.* (2021) indicated that improving safety climate and ward quality enhanced patient and family satisfaction. The authors also suggested that implementing quality improvement initiatives enhanced family satisfaction with the patient's admission. Shuv-Amin and Shalom (2017) support this by indicating that the hospital work environment improves patient outcomes.

Perceived quality of health services

Burlakov *et al.* (2021) determined that nurses taking care of patients in critical condition should provide high levels of quality care to enhance patients' and their families' satisfaction. The study also indicated that quality of care includes engaging families in clinical decisions. Podell *et al.* (2018) suggested the quality of care offered to the older population has improved significantly due to the monitoring of primary care quality indicators. Shuv-Ami and Shalom (2017) found that different demographic groups have different perspectives of service quality in emergency units of hospitals. Wilde *et al.* (1995) reported older adults have diverse expectations about the quality of care they should receive in different healthcare settings. Concerning quality of care for older people, these empirical studies suggest positive correlations between old age and better self-rated physical health and psychological well-being (Burlakov *et al.*, 2021). Receiving quality care improves older adults' well-being ratings. This population's perceived quality of care also depends on the care environment, as each environment is connected to different expectations and needs (Podell *et al.*, 2018). Therefore, perceived quality of care is critical because it influences older individuals' perceived physical and psychological health.

Quality of life

Atad and Caspi (2020) indicate that healthcare quality in physical activity impacts older adults' perceived QoL and physical health. Even-Zohar (2014) supports this by showing that QoL was higher among the older population living at home who belonged to a supportive community compared to those admitted to a nursing home. The supportive community provides several high-quality services, such as social services and an emergency call button. Merims *et al.* (2018) indicated that older adults undergoing outpatient rehabilitation supported by leisure activities, the purpose of life, and spirituality result in higher health-related QoL. Gindin (2014) reported that poor quality of care in nursing homes results in poor QoL manifested by depression and insomnia. Hartgerinkn *et al.* (2015) indicated that providing quality health services to older adults improves QoL after hospitalisation. The study found a longitudinal relationship between patient's perceived quality of care delivery, experiences with care, and the quality of older adults lives three months after hospitalisation. These findings by Hartgerinkn *et al.* (2015) imply that older adults who experience higher levels of care record the highest QoL after hospital discharge. The findings also indicate the significance of providing quality care services to older people. The rationale is that quality care services improve older adults' function leading to independence after hospitalization. Chang *et al.* (2021) proposed that efforts to improve the QoL of older adults in geriatric conditions led to the emergence of person-centered care (PCC). PCC may effectively enhance QoL in the social, emotional, and physical dimensions. Individualized nursing is essential for older adults as each older individual has unique mental, psychosocial, and physical problems, and different needs (Chang *et al.*, 2021). PCC improves QoL by resolving the social and psychosocial issues in older individuals.

Satisfaction

Poot *et al.* (2014) took a different approach by indicating that older adults' dissatisfaction with general practice is strongly related to the rising complexity of health problems independent of age, demographic, and clinical parameters. The satisfaction level is

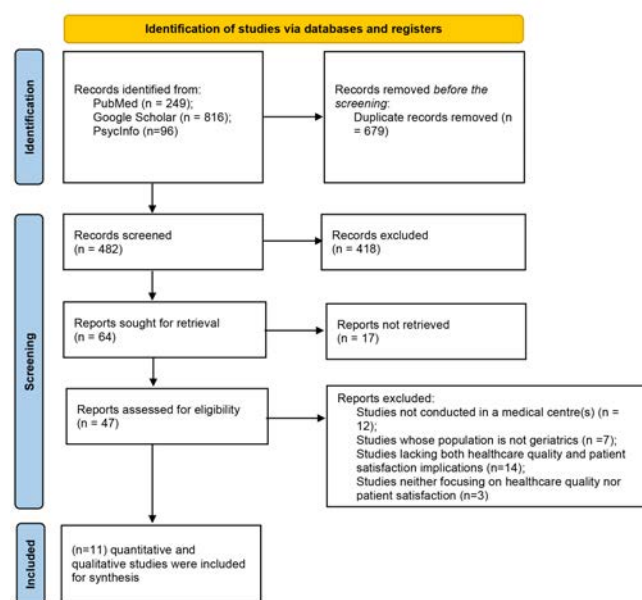


Figure 1. PRISMA flow diagram for study selection.

inversely associated with the complexity of health problems (Poot *et al.*, 2014). Based on these outcomes, healthcare providers must consider the complexity of an older adult's health issues while developing care plans.

Communication

The reviewed literature identified communication between geriatric nurses and patients as critical in enhancing satisfaction at geriatric medical centers. Effective communication is an aspect of nursing. Therefore, geriatric nurses' communication with patients influences geriatric patients' healthcare quality and satisfaction. According to Jack *et al.* (2019), nurses may experience communication challenges with this population, especially for those with cognitive impairments or intubated. However, nurses can overcome these barriers through appropriate interventions. Nurses should effectively communicate with older adults because effective communication empowers, respects, and enables patients to maintain their independence (Jack *et al.*, 2019). Nurses must ensure effective communication with older people and equip themselves with the appropriate knowledge and skills to ensure patients feel understood, listened to, and cared for in and beyond geriatric settings. Jack *et al.* (2019) posit that nurses can communicate with older adults using verbal and non-verbal therapeutic communication techniques. Geriatric nurses should tailor therapeutic communication to a patient's culture, communication needs, and other personal characteristics (Jack *et al.*, 2019). Therefore, the geriatric nurse should use therapeutic communication to tailor messages to the individual, which supports the delivery of health-related knowledge and promotes health and well-being.

Table 2 summarises the features of the included studies.

Discussion

This rapid review screened 482 articles and selected 11 articles that provided information on the impact of quality healthcare services older people's satisfaction at geriatric medical centres. The reviewed studies indicated that the quality of healthcare services to older adults enhances their satisfaction at senior facilities and produces positive patient outcomes. A thematic analysis of these studies revealed four major themes related to the review topic: perceived quality of healthcare services, patients' quality of life, satisfaction, and provider-patient communication. The review added evidence on quality indicators and the impact of care quality on older adults' satisfaction and health status. Thematic analysis was appropriate for this rapid review because it is a qualitative research method that enables identifying, analyzing, describing, and reporting themes with a qualitative data set (Huisman & Tight, 2022).

Quality of care services is a multidimensional concept given diverse meanings in the literature. Patients' perspectives on what is essential concerning the kind of care they receive are identified as an aspect of quality of care. In the last several decades, healthcare professionals and managers have shifted towards using the patients' perspective to define and evaluate the quality of care (Duffy, 2022). Burlakov *et al.* (2021) found positive relationships between care quality and older adults' hospitalization satisfaction. The perceived quality of care factors are a commitment to quality leadership and implementing quality improvement initiatives. The literature indicates that care quality is critical for geriatric patients as they result in positive outcomes such as hospitalization satisfaction and health status. Perceived quality of care is the patients' overall attitude toward care services provided in healthcare facilities and mismatches between perceived services received and expectations. The literature shows that the perceived quality of

care has improved.

Future studies should investigate the perceived care quality between females and males. The rationale for this recommendation is that Shuv-Ami and Shalom (2017) found differences between perceived care quality in males and females but did not explain the differences. According to Wilde *et al.* (1995), older adults have diverse expectations about the quality of care received in different settings. Older adults' perceived quality of care is critical because it influences their perceptions of their health status. Older adults who believe they have received quality care highly rate their physical and psychological well-being. Geriatric nurses have a critical role in enhancing the quality of care to meet older adult's care quality expectations.

Quality care enhances the QoL. QoL is a multidimensional concept that includes subjective well-being and happiness and incorporates personal characteristics such as social, psychological, and physical aspects (Sinha, 2019). QoL is a significant indicator of individual health in exploring daily living functions and well-being. For instance, Atad and Caspi (2020) reported that enhancing older adults' capacity to engage in physical activity improves their QoL and physical health. Even-Zohar (2014) reported similar results that older individuals receiving home care in a supportive community had a better QoL than those admitted to a nursing home. The supportive community provides high-quality services. Merim *et al.* (2018) also showed that receiving high-quality services enhances health-related QoL. Gindin (2014) noted that poor quality of care leads to poor QoL. These articles had similar findings that quality care enhances health outcomes and is necessary for geriatric care. Enhancing the quality of care is critical for healthcare providers working with geriatric patients to enhance their QoL. However, most of the included articles relied on self-reported data, raising concerns about the evidence's quality. Future research should investigate how particular aspects of care influence the specific QoL. Geriatric nurses can enhance the QoL of this population through PCC, as proposed by Chang *et al.* (2021). The rationale is that PCC addresses a patient's physical, social, and emotional health. This approach to care also addresses patients' different health-related needs and resolves the social and psychosocial issues that affect this population. Therefore, geriatric nurses have a critical role in providing effective and quality care that enhances older adults' QoL.

Patient satisfaction is a widely used measure of healthcare quality linked to health outcome measures and patients' behavioral intentions. For instance, patients more satisfied with their care are more likely to comply with treatment and return to providers for additional care. Patient satisfaction also serves as an element for evaluating health plans, individual nurses and hospitals' performance. Satisfaction is related to the quality of care (Heidari *et al.*, 2017). Poot *et al.* (2014) indicated that older adults are indirectly proportional to the complexity of health care problems. These results suggest that geriatric nurses should consider the complexity of their patient's health problems to provide appropriate care that enhances satisfaction. Providing proper care that addresses complex health issues enhances patients' satisfaction with care. The evidence implies that the burden to improve satisfaction for older adults lies with geriatric nurses. The burden is heavier when geriatric nurses work with older adults experiencing complex health issues. Future research on satisfaction should investigate the specific care aspects that older adults associate with satisfaction to enable providers to provide care that enhances patient satisfaction.

Communication by geriatric nurses influences satisfaction. Jack *et al.* (2019) indicated that geriatric nurses must communicate effectively with members of this population to ensure they meet their needs. The authors warned that nurses must avoid negative

Table 2. Summary of the included studies.

Authors & Year	Design	Level	Participants	Measures	Procedure	Analysis	Findings
Atad & Caspi (2020)	Quantitative (cross-sectional study).	II	236 independent residents in an assisted living facility in Israel. Ages ranging between 66-94 years Both male and female.	1. Frailty (shrinkage, muscle weakness, slowness and low fitness and fatigue) 2. weekly physical activity 3. quality of life 4. demographic information. QoL and physical health measured using World Health Organization Quality of Life Instruments (WHOQOL-BRIEF) questionnaire. Physical level ascertained from attendance list completed by exercise class instructors.	After signing the consent form, participants underwent assessment in a designated room in the residential facility, followed by an explanation of the study process. Researchers motivated participants to perform physical activity.	Participants submitted their exercise logs and completed QoL questionnaires. Data were analysed using SPSS version 25 analysis to evaluate whether PA impacted participants' QoL and physical health.	Healthcare quality in physical activity impacts older adults' perceived QoL and physical health.
Burlakov <i>et al.</i> (2021)	Quantitative (cross-sectional study).	II	86 family members of patients hospitalised in ICU or general wards and 101 nurses who treated these patients.	Perceptions of ward quality and safety Data collected using two versions of a self-administered questionnaire (one for the family members and the other for the nurses).	Data was collected using a validated self-administered questionnaire. Participants signed informed consent forms before filling out the questionnaires.	Analysis was conducted using a t-test for independent samples, a multiple regression model, and a Pearson correlations coefficient.	Improving ward quality and safety climate enhances patient and family satisfaction.

Table 2. Summary of the included studies.

Chang <i>et al.</i> (2021)	Quantitative (Descriptive study).	II	<p>202 older adults patients admitted to three long-term care hospitals.</p> <p>Male and female.</p> <p>Aged above 65 years.</p>	<p>Cognitive impairment, depression, care dependency, interactions between nurses and patients, and quality of life.</p> <p>Depression was assessed using Short Geriatric Depression Scale.</p> <p>Interactions between nurses and patients were assessed using the Nurse-Patient Interaction Scale.</p> <p>QoL was assessed using the Quality of Life-Alzheimer's Disease.</p>	<p>Researchers received ethical approval, a nurse selected participants for the study, and employed convenience sampling. Researchers explained the study's purpose to the hospital administrators, obtained permission to proceed, and obtained consent from the patients.</p>	<p>Researchers used univariate analyses to determine the relationships among research variables and multiple linear regression to determine the extent to which these variables predicted quality of life.</p>	<p>There is correlation between quality of life and depression and care dependency.</p>
Even-Zohar (2014)	Quantitative (non-randomized experimental study).	II	<p>55 older people living in their homes who are members of a supportive community with an average age of 74.7 years and 60 older people living in nursing homes with an average age of 75.8 years.</p> <p>Male and female.</p>	<p>Quality of life.</p> <p>Place of residence.</p> <p>Socio-demographic variables.</p> <p>Data collected using questionnaires (demographic and quality of life questionnaires).</p>	<p>After approval by the ethics committee, data was collected using demographics and quality of life questionnaires. Participants of the supportive community were identified through social workers. Participants in nursing homes were identified through managers of nursing homes, social workers and nurses.</p>	<p>The analysis focused on differences in the level of quality between the two groups, correlations between demographic variables and quality of life in the entire sample, and predictors of quality of life.</p>	<p>Quality of life among the older people living at their homes who are members of a supportive community was higher than among the older people living in a nursing home.</p> <p>The place of residence was a predictor of quality.</p>
Gindin <i>et al.</i> (2014)	Quantitative (Cross-cultural investigation)	III	<p>4,156 older residents from 57 long-term care facilities</p> <p>Aged above 65 years</p> <p>Male and female.</p>	<p>Measures are information on insomnia, age, sex, activities of daily living, major stressful life events, sleep medication use, physical activity, depression and cognitive status.</p> <p>Data collected using International Resident Assessment Instrument (interRai).</p>	<p>Nursing staff trained in using the InterRAI LTCF instrument version 2 performed the assessment during the baseline and asked about resident's health status. Each participating country provided ethical approval according to local institutional review board regulations.</p>	<p>Researchers analysed rates of insomnia and its correlates. Multivariate logistic regression was employed to assess insomnia-associated factors, controlling for demographic variables.</p>	<p>Poor quality of care in nursing homes results in poor QoL, manifested by depression and insomnia, resulting in declined satisfaction</p>

Table 2. Summary of the included studies.

Hartgrink <i>et al.</i> (2015)	Quantitative (longitudinal study)	III	500 individuals above 65 years admitted to the Vlieland Hospital between June and October 2010 Male and female.	Measures were quality of life, patient's perceptions of quality of integrated care delivery and patients' experiences with hospital care. Quality of life was assessed using a questionnaire (Cantril's Self-Anchoring Ladder) Patient's perceptions of quality of integrated care delivery were assessed using Older Patients' Assessment of Integrated Care (O-PACIC scale).	The study collected data using a questionnaire after recruiting participants.	Researchers analysed data using descriptive statistics, correlations and multilevel analyses.	Older adults who experience higher levels of care record the highest QoL after hospital discharge, recording higher satisfaction with the received services.
Merims <i>et al.</i> (2018)	Quantitative (Cross-sectional study)	III	200 adults 65 years and older hospitalized in a large geriatric rehabilitation obtained using a convenience sample. Male and female	Participation in leisure activities. Purpose in life. Socio-demographic and clinical data. Rehabilitation outcomes. Purpose in life assessed using the Purpose in Life Test. Participation in leisure activities was assessed using Leisure Activities Index. These tools were chosen because they are the most widely used and validated instruments in Israel.	All patients were admitted to one of the studied rehabilitation departments. After signing the consent form, data were collected from patient records, purpose-in-life tests, and leisure activities index. These tools were used because they are validated.	Statistical analyses were performed using SPSS. Pearson rank correlation was used to analyse associations between participation in leisure activities, spirituality, and the outcomes of geriatric rehabilitation. Predictors of rehabilitation were analysed using multivariate general linear regressions.	Older adults undergoing outpatient rehabilitation supported by leisure activities, the purpose of life, and spirituality provided by geriatric nurses result in higher health-related QoL, enhancing their satisfaction.
Podell <i>et al.</i> (2018)	Quantitative (observational study)	III	879, 671 older Israeli residents aged 65 years or older. Male and female.	Personal and socio-demographic data. Quality indicators. Vaccinations. Bodyweight.	Data were collected from patient's electronic medical records.	The analysis involved determining the annual trends for each quality indicator. Socio-demographic variables were assessed using a z-typed test.	Quality of care offered to the older population has improved significantly due to the monitoring of primary care quality indicators. Improved quality of care has resulted in enhanced satisfaction.

Table 2. Summary of the included studies.

Poot <i>et al.</i> (2014)	Quantitative (cross-sectional study)	II	2664 primary care patients aged above 75 years living in the community and in care homes. Male and female.	Satisfaction. Complexity of health problems. Socio-demographic characteristics. Functional status. Health and illness. Data was collected using interviews using validated questionnaires.	The research procedure involved recruiting participants from primary care practices, selecting a random sample, and conducting interviews using validated questionnaires (interviews conducted after participants gave written informed consent). The study was approved by the Medical Ethics Committee of the Leiden University Medical Centre.	Researchers evaluated complexity and satisfaction using logistic regression models, categorical variables using Pearson's Chi-square test and differences between groups in continuous variables using the Kruskal-Wallis test.	Older adults' dissatisfaction with general practice is strongly related to the rising complexity of health problems independent of age, demographic and clinical parameters. The satisfaction level is inversely associated with the complexity of health problems.
Shiv-Atti & Shalom (2017)	Quantitative (non-randomized experimental study)	III	One thousand two people aged above 18 years who accompanied patient to a hospital ER were obtained through a convenience sampling approach. Male and female.	Service quality Demographical characteristics of patients The measure of service quality is SERVQUAL scale.	Data were collected randomly from an internet panel comprising more than 50000 people aged 18 and above.	The study hypotheses were tested using ANOVA.	Different demographic groups have different perspectives of service quality in emergency units of hospitals.
Wilde <i>et al.</i> (1995)	Quantitative (Theoretically-based survey)	II	428 older people (aged 60 years and above) in four different care environments. Male and female.	Medical-technical competence, physical-technical conditions, identity-oriented approach, and social-cultural atmosphere Data was collected using personal interviews structured from a questionnaire, Quality from the Patient's Perspective.	Selection of participants, data collection using the Questionnaire Quality from the Patients' Perspective, data analysis.	Researchers analysed data using students' t-tests, and X2 tests to test the significance of differences in proportions between subgroups. Analysis of variance analysed the effects between age and type of care environment.	Older adults have diverse expectations about quality of care received in different settings. Older adults' perceived quality of care is critical because it influences their perceptions of their health status. Older adults who believe they have received quality care highly rate their physical and psychological well-being and indicate high satisfaction.

stereotyping of older people because it can hinder effective communication. Nurses are responsible for communicating in a way that matches the level and needs of the older person, rather than using a single approach for all older people. Using a person-centered perspective can help nurses to communicate with people whether they are older or not. Strategies for person-centered communication are getting to know the patient, focusing on the older person's needs, identifying perceived barriers to communication, using appropriate methods to empower the person, and avoiding assumptions about an individual's ability to communicate (Jack *et al.*, 2019). Nurses can also enhance communication by being vigilant to stereotypes associated with aging and considering everyone as an individual. For instance, communicating with older people is critical during pain assessment. Effective communication by nurses is critical to enhancing therapeutic relationships, enhance and care, and health outcomes.

Strengths and limitations

This review included evidence from primary studies on the relationship between care quality and older adults' satisfaction. The limitations are that most included studies used convenience, homogenous samples and relied on self-reported data, which might be affected by the recall or reporting bias.

Conclusions

The healthcare system is gradually implementing relevant interventions to enhance the quality of care for different populations and clinical settings. One such population is older adults. The world is experiencing an increase in the number of older adults. Several nations are recording an increase in the population of older adults. This population requires tailored care services to address their unique health needs. Their unique health needs have led to an increased number of healthcare professionals with special skills to care for this population, such as geriatric nurses. Geriatric nurses have a fundamental role in providing quality care to this population. Nurses can enhance quality by implementing evidence-based interventions. Benefits of quality geriatric care include enhanced patient satisfaction, health-related QoL, reduced hospital stay, improved nurse-patient relationship, and better patient outcomes. Based on this rapid review, quality of care improves the satisfaction of older adults in geriatric centers.

Implications

The implications for practice are that geriatric nurses should provide high-quality care to older adults in geriatric settings to improve patients' and their families' satisfaction. Nurses should target quality leadership, implement quality improvement, and communicate effectively. Nurses should also offer PCC by involving family members in care planning and implementing health interventions that address each patient's specific needs. The need for higher-quality care creates unique opportunities for geriatric nursing. The increase in older adults provides opportunities for geriatric centers to provide high-quality care to older adults. Geriatric nurses can leverage this opportunity by equipping themselves with knowledge about geriatric-friendly care, advancing their competencies in caring for older adults in geriatric centers, and enhancing geriatric care through evidence-based practices. Geriatric nurses should also deal with the implications of climate change and sustainability on older adults' health and ways to mitigate these effects.

Education implications are that nursing educators should educate nursing students on evidence-based interventions for improv-

ing care for geriatric patients in geriatric settings. Health educators should train geriatric nurses on the unique features of older adults to enhance their care provision to this population. Educators can impact geriatric nurses with learning skills such as communication, tending to the patient's concerns about the care process, making treatment facilities safe for geriatric patients, and extensive knowledge of geriatric health issues. Educators should also educate future nurses about the aging process, and ways to help older adults protect their health and cope with changes to their mental and physical abilities to enable them to stay independent and active as long as possible.

Policy implications are that policymakers should develop procedures and guidelines to strengthen patient and family involvement and enhance patient satisfaction and specific care provision procedures for older adults. Due to the increase in specialization, new policies should align with the health operations, interventions, and other medical-related activities performed in geriatric centers. Policies should also require hospitals to create geriatric units that only treat and care for older adults. Such units would specialize in geriatric services, ensuring the population receives appropriate and high-quality services that enhance the population's health outcomes.

Research implications are that the review provides a foundation for further studies on older adults' satisfaction. Future research should further investigate the physiological and other changes that occur due to aging and specific geriatric-related approaches that nurses can employ to address specific health problems experienced by this population. Future research should also develop new geriatric models of care and advanced treatment for geriatric health issues that maintain quality care. Future research should also investigate the effects of climate change and sustainability on the health of the older population to provide geriatric nurses with knowledge on how to mitigate the effects of climate change on geriatric patients.

Recommendations

Future research on the topic should use more heterogeneous samples in terms of gender and diagnosed conditions, use data collection methods less affected by bias, and study the reasons for the differences in perceived care quality among different groups. Future research should investigate how particular aspects of care influence the specific QoL and the specific communication aspects that older adults associate with satisfaction to enable providers to communicate effectively with older adults. Future studies should also investigate the particular aspects of care that geriatric patients associate with quality care.

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