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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 for addressing the needs of this population.

Aim. 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.

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 providerpatient 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 persons 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 ageing population presents many opportunities and public health challenges that the health care 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 provided care to the elderly and are educated to understand and treat their often complex and 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 characterise 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 aetiology 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 ageing 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 ageing, 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 hospitalisation, 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 centres globally. The rationale for conducting this rapid review is the increasing global ageing 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.

Methods

The rapid review employed the Preferred Reporting Items for Systematic Reviews and Metaanalyses (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.

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, 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 centres 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 were 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 rates 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 information on the impact of healthcare services quality on older people satisfaction at geriatric medical centers. It extracted data on factors related to or that influence healthcare service quality. Content analysis was used to synthesis 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 hospitalisation. Chang et al. (2021) proposed that efforts to improve the QoL of older adults in geriatric conditions led to the emergence of person-centred care (PCC). PCC may effectively enhance QoL in the social, emotional, and physical dimensions. Individualised 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 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 centres. 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) posits 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 promoting 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, analysing, 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' hospitalisation 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 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 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' behavioural 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 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-centred perspective can help nurses to communicate with people whether they are older or not. Strategies for person-centred 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 ageing 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 centres. **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 centres 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 centres, 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 improving 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 ageing 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 specialisation, new policies should align with the health operations, interventions and other medical-related activities performed in geriatric centres. Policies should also require hospitals to create geriatric units that only treat and care for older adults. Such units would specialise 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 ageing 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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health#:~:text=At%20this%20time%20the%20share,2050%20to%20reach%20426%2 0million.

Table 1. Eligibility criteria.

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

Authors &	Design	Level	Participants	Measures	Procedure	Analysis	Findings
Year							
Atad &	Quantitative	II	236	1. Frailty (shrinkage,	After signing the	Participants submitted	Healthcare
Caspi	(cross-		independent	muscle weakness,	consent form,	their exercise logs and	quality in
(2020)	sectional		residents in	slowness and low	participants	completed QOL	physical activity
	study)		an assisted	fitness and fatigue)	underwent	questionnaires. Data	impacts older
			living facility	2. weekly physical	assessment in a	were analysed using	adults' perceived
			in Israel	activity	designated room in	SPSS version 25	QoL and physical
				3. quality of life	the residential	analysis to evaluate	health
			Ages ranging	4. demographic	facility, followed by	whether PA impacted	
			between 66-	information	an explanation of	participants' QOL and	
			94 years		the study process.	physical health.	
				QoL and physical	Researchers		
			Both male	health measured	motivated		
			and female	using World Health	participants to		
				Organization Quality	perform physical		
				of Life Instruments	activity.		
				(WHOQOL-BRIEF)			
				questionnaire			

				Physical level ascertained from attendance list completed by exercise class			
				instructors			
Burlakov	Quantitative	II	86 family	Perceptions of ward	Data was collected	Analysis was	Improving ward
et al.	(cross-		members of	quality and safety	using a validated	conducted using a t-	quality and safety
(2021)	sectional		patients		self-administered	test for independent	climate enhances
	study)		hospitalised	Data collected using	questionnaire.	samples, a multiple	patient and
			in ICU or	two versions of a	Participants signed	regression model, and	family
			general	self-administered	informed consent	a Pearson correlations	satisfaction
			wards and	questionnaire (one	forms before filling	coefficient.	
			101 nurses	for the family	out the		
			who treated	members and the	questionnaires.		
			these patients	other for the nurses)			
Chang et	Quantitative	II	202 older	Cognitive	Researchers	Researchers used	There correlation
al. (2021)	(Descriptive		adults	impairment,	received ethical	univariate analyses to	between quality
	study)		patients	depression, care	approval, a nurse	determine the	of life and
			admitted to	dependency,	selected	relationships among	

			three	long-	interactions between	participants f	for the	research va	ariables and	depression	and
			term	care	nurses and patients,	study,	and	multiple	linear	care depende	ency
			hospita	ls	and quality of life.	employed		regression	to		
						convenience		determine	the extent to		
			Male	and	Depression was	sampling.		which the	se variables		
			female		assessed using Short	Researchers		predicted	quality of		
					Geriatric Depression	explained	the	life.			
			Aged	above	Scale	study's purp	ose to				
			65 year	S	Interactions between	the h	ospital				
					nurses and patients	administrator	s,				
					were assessed using	obtained perm	nission				
					the Nurse-Patient	to proceed,	and				
					Interaction Scale.	obtained c	onsent				
					QoL was assessed	from the patie	ents.				
					using the Quality of						
					Life-Alzheimer's						
					Disease						
Even-	Quantitative	II	55	older	Quality of life	After approv	val by	The analy	sis focused	Quality of	life
Zohar	(non-		people	living	Place of residence	the	ethics	on differen	nces in the	among the	older
(2014)	randomized		in	their	Socio-demographic	committee,	data	level of	f quality	people livin	ng at
			homes	who	variables	was collected	l using	between	the two	their homes	who

	experimental		are men	nbers				demograp	hics	and	groups,	correlations	are me	mbers	of a
	study)		of	а	Data colle	ected	using	quality	of	life	between	demographic	suppor	tive	
			supportiv	ve	questionn	aires		questionn	aires.		variables	and quality	comm	unity	was
			commun	ity	(demogra	phic	and	Participan	its of	f the	of life i	n the entire	higher		than
			with	an	quality	of	life	supportive	e		sample, a	nd predictors	among	the c	older
			average	age	questionn	aires		communit	y	were	of quality	of life,	people	living	in a
			of 74.7	years				identified	thr	ough			nursing	g home	e.
			and 60	older				social	WOI	rkers.			The	place	of
			people 1	iving				Participan	its	in			resider	nce wa	as a
			in nu	rsing				nursing ho	omes	were			predict	tor	of
			homes	with				identified	thr	ough			quality	<i>.</i>	
			an ave	erage				managers	ofnu	irsing					
			age of	75.8				homes,	S	social					
			years.					workers a	nd nu	irses.					
			Male	and											
			female												
Gindin et	Quantitative	III	4,156	older	Measures		are	Nursing		staff	Research	ers analysed	Poor	quality	v of
al. (2014)	(Cross-cultural		residents	5	informatio	on	on	trained in	usin	g the	rates of i	nsomnia and	care i	in nur	rsing
	investigation)		from 57	long-	insomnia,	age,	sex,	InterRAI	Ι	LTCF	its	correlates.	homes	result	ts in
					activities	of	daily	instrumen	t ve	ersion	Multivari	ate logistic	poor		QoL

			term care	living, major	2 performed the	regression was	manifested by
			facilities	stressful life events,	assessment during	employed to assess	depression and
			Aged above	sleep medication use,	the baseline and	insomnia-associated	insomnia,
			65 years	physical activity,	asked about	factors, controlling for	resulting in
			Male and	depression and	resident's health	demographic	declined
			female	cognitive status.	status. Each	variables.	satisfaction
				Data collected using	participating		
				International	country provided		
				Resident Assessment	ethical approval		
				Instrument (interRai)	according to local		
					institutional review		
					board regulations.		
Hartgrink	Quantitative	III	500	Measures were	The study collected	Researchers analysed	Older adults who
et al.	(longitudinal		individuals	quality of life,	data using a	data using descriptive	experience higher
(2015)	study)		above 65	patient's perceptions	questionnaire after	statistics, correlations	levels of care
			years	of quality of	recruiting	and multilevel	record the highest
			admitted to	integrated care	participants.	analyses.	QoL after
			the Vlietland	delivery and patients'			hospital
			Hospital	experiences with			discharge,
			between June	hospital care.			recording higher

			and October	Quality of life was			satisfaction with
			2010	assessed using a			the received
			Male and	questionnaire			services
			female	(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).			
Merims et	Quantitative	III	200 adults 65	Participation in	All patients were	Statistical analyses	Older adults
al. (2018)	(Cross-		years and	leisure activities	admitted to one of	were performed using	undergoing
	sectional		older	Purpose in life	the studied	SPSS. Pearson rank	outpatient
	study)		hospitalized	Socio-demographic	rehabilitation	correlation was used to	rehabilitation
			in a large	and clinical data	departments. After	analyse associations	supported by
			geriatric	Rehabilitation	signing the consent	between participation	leisure activities,
			rehabilitation	outcomes	form, data were	in leisure activities,	the purpose of
			obtained		collected from	spirituality, and the	life, and

			using a	Purpose in life	patient records,	outcomes of geriatric	spirituality
			convenience	assessed using the	purpose-in-life	rehabilitation.	provided by
			sample.	Purpose in Life Test	tests, and leisure	Predictors of	geriatric nurses
			Male and	Participation in	activities index.	rehabilitation were	result in higher
			female	leisure activities was	These tools were	analysed using	health-related
				assessed using	used because they	multivariate general	QoL, enhancing
				Leisure Activities	are validated.	linear regressions.	their satisfaction.
				Index			
				These tools were			
				chosen because they			
				are the most widely			
				used and validated			
				instruments in Israel			
Podell et	Quantitative	III	879, 671	Personal and socio-	Data were collected	The analysis involved	Quality of care
al. (2018)	(observational		older Israeli	demographic data	from patient's	determining the annual	offered to the
	study)		residents	Quality indicators	electronic medical	trends for each quality	older population
			aged 65 years	Vaccinations	records.	indicator. Socio-	has improved
			or older	Bodyweight		demographic variables	significantly due
			Male and			were assessed using a	to the monitoring
			female			z-typed test.	of primary care
							quality

							indicators.
							Improved quality
							of care has
							resulted in
							enhanced
							satisfaction.
Poot et al.	Quantitative	II	2664 primary	Satisfaction	The research	Researchers evaluated	Older adults'
(2014)	(cross-		care patients	Complexity of health	procedure involved	complexity and	dissatisfaction
	sectional		aged above	problems	recruiting	satisfaction using	with general
	study)		75 years	Socio-demographic	participants from	logistic regression	practice is
			living in the	characteristics	primary care	models, categorical	strongly related
			community	Functional status	practices, selecting	variables using	to the rising
			and in care	Health and illness	a random sample,	Pearson's Chi-square	complexity of
			homes	Data was collected	and conducting	test and differences	health problems
			Male and	using interviews	interviews using	between groups in	independent of
			female	using validated	validated	continuous variables	age, demographic
				questionnaires.	questionnaires	using the Kruskal-	and clinical
					(interviews	Wallis test	parameters. The
					conducted after		satisfaction level
					participants gave		is inversely
					written informed		associated with

					consent). The study		the complexity of
					was approved by		health problems.
					the Medical Ethics		
					Committee of the		
					Leiden University		
					Medical Centre.		
Shuv-Ami	Quantitative	III	One	Service quality	Data were collected	The study hypotheses	Different
& Shalom	(non-		thousand two	Demographical	randomly from an	were tested using	demographic
(2017)	randomized		people aged	characteristics of	internet panel	ANOVA.	groups have
	experimental		above 18	patients	comprising more		different
	study)		years who	The measure of	than 50000 people		perspectives of
			accompanied	service quality is	aged 18 and above.		service quality in
			patient to a	SERVQUAL scale.			emergency units
			hospital ER				of hospitals.
			were				
			obtained				
			through a				
			convenience				
			sampling				
			approach.				

			Male and				
			female				
Wilde et	Quantitative	II	428 older	Medical-technical	Selection of	Researchers analysed	Older adults have
al., (1995)	(Theoretically-		people (aged	competence,	participants, data	data using students' t-	diverse
	based survey)		60 years and	physical-technical	collection using the	tests, and X2 tests to	expectations
			above) in	conditions, identity-	Questionnaire	test the significance of	about quality of
			four different	oriented approach,	Quality from the	differences in	care received in
			care	and social-cultural	Patients'	proportions between	different settings.
			environments	atmosphere	Perspective, data	subgroups. Analysis of	Older adults'
			Male and	Data was collected	analysis	variance analysed the	perceived quality
			female	using personal		effects between age	of care is critical
				interviews structured		and type of care	because it
				from a questionnaire,		environment.	influences their
				Quality from the			perceptions of
				Patient's Perspective			their health
							status. Older
							adults who
							believe they have
							received quality
							care highly rate

			their physica	al and
			psychologica	al
			well-being	and
			indicate	high
			satisfaction.	

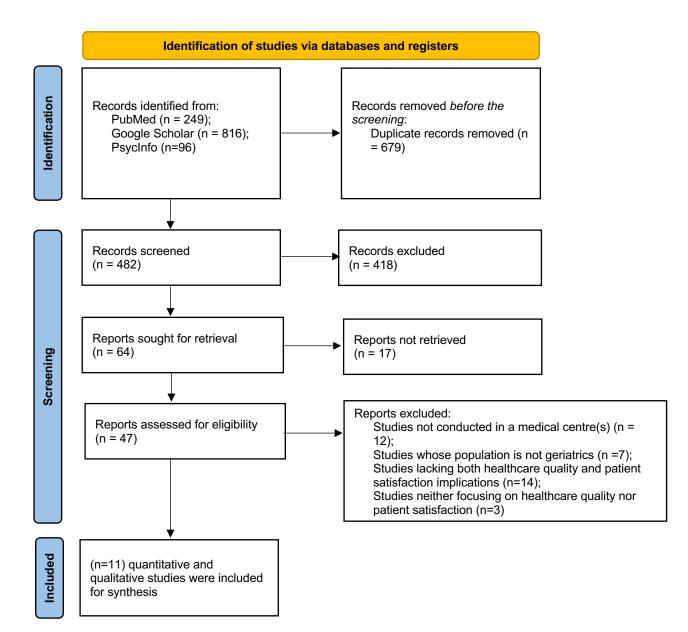


Figure 1. PRISMA flow diagram for study selection.