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Factors associated with prolonged waiting times in geriatric primary care: systematic review of studies in public centers

Fatores associados a tempo de espera prolongados em cuidados primários geriátricos: revisão sistemática de estudos em centros públicos

Factores asociados con tiempos de espera prolongados en atención primaria geriátrica: revisión sistemática de estudios en centros públicos

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ABSTRACT

(1) Background: As the population ages, chronic diseases increase, and, consequently, this age group demands and requires better attention in the health service. The prevalence of certain diseases and risk factors is characteristic of older adults and is a reason that leads them to require primary health care services expeditiously; however, in many cases, this does not occur due to various factors associated with geriatric primary care. The objective of this article was to identify the factors associated with prolonged waiting times in geriatric primary care; **(2) Methods:** A systematic review of the literature was carried out, focusing on journals published in English and Spanish containing original studies or systematic reviews. Searches for studies were conducted between 2014 and 2024 in the Scopus, MedLine, SciELO, and PubMed databases; **(3) Results:** The results yielded 17 papers directly related to the exposed subject matter, of which 13 were published in English; moreover, a greater number of papers were published during 2020; **(4) Conclusions:** It is concluded that the factors associated with the prolongation of waiting times in geriatric primary care were sociodemographic characteristics (race, age), distance from the care center, contextual factors, ageism, and social support.

Keywords: primary care; elderly; waiting times; public health; associated factors

RESUMO

(1) Antecedentes: À medida que a população envelhece, as doenças crônicas aumentam e, como consequência, este grupo etário demanda e requer melhor atenção no serviço de saúde. A prevalência de certas doenças e fatores de risco é característica dos adultos mais velhos, e é uma razão que os leva a requerer serviços de atenção primária de saúde de forma expedita; no entanto, em muitos casos, isso não ocorre devido a diversos fatores associados à atenção primária geriátrica. O objetivo deste artigo foi identificar os fatores associados a tempos de espera prolongados na atenção primária geriátrica; **(2) Métodos:** Foi realizada uma revisão sistemática da literatura, com foco em revistas publicadas em inglês e espanhol que continham estudos originais ou revisões sistemáticas. As buscas por estudos foram realizadas entre 2014 e 2024 nas bases de dados Scopus, MedLine, SciELO e PubMed; **(3) Resultados:** Os resultados renderam 17 artigos diretamente relacionados ao tema exposto, dos quais 13 foram publicados em inglês; além disso, um maior número de artigos foi publicado durante 2020; **(4) Conclusões:** Conclui-se que os fatores associados ao prolongamento dos tempos de espera na atenção primária geriátrica foram as características sociodemográficas (raça, idade), a distância do centro de atendimento, os fatores contextuais, o etarismo e o apoio social.

Palavras-chave: atenção primária; idosos; tempos de espera; saúde pública; fatores associados.

RESUMEN

(1) Antecedentes: A medida que la población envejece, las enfermedades crónicas aumentan y, como consecuencia, este grupo de edad demanda y requiere una mejor atención en el servicio de salud. La prevalencia de ciertas enfermedades y factores de riesgo es característica de los adultos mayores, y es una razón que los lleva a requerir servicios de atención primaria de salud de manera expedita; sin embargo, en muchos casos, esto no ocurre debido a diversos factores asociados con la atención primaria geriátrica. El objetivo de este artículo fue identificar los factores asociados con tiempos de espera prolongados en la atención primaria geriátrica; **(2) Métodos:** Se llevó a cabo una revisión sistemática de la literatura, centrándose en revistas publicadas en inglés y español que contenían estudios originales o revisiones sistemáticas. Las búsquedas de estudios se realizaron entre 2014 y 2024 en las bases de datos Scopus, MedLine, SciELO y PubMed; **(3) Resultados:** Los resultados arrojaron 17 artículos directamente relacionados con el tema expuesto, de los cuales 13 fueron publicados en inglés; además, se publicó un mayor número de artículos durante 2020; **(4) Conclusiones:** Se concluye que los factores asociados con la prolongación de los tiempos de espera en la atención primaria geriátrica fueron las características sociodemográficas (raza, edad), la distancia del centro de atención, los factores contextuales, el edadismo y el apoyo social.

Palabras clave: atención primaria; ancianos; tiempos de espera; salud pública; factores asociados.

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The study identifies actionable barriers (ageism, sociodemographic disparities) in geriatric care, urging policy reforms to reduce waiting times and improve equitable access in public health systems.

Originality/value:

This review synthesizes global evidence (2014–2024) on understudied geriatric care delays, offering a systematic analysis of multifactorial causes to inform targeted interventions and theoretical framework.

INTRODUCTION

Currently, there is a clear need to improve primary health care services in terms of costs to the State, speed of service, overcrowding, and patient safety. In that aspect, public health faces a series of problems ranging from overcrowding to excessive waiting times; aspects that correlate with higher mortality and lower satisfaction of patients who make use of such services. This reality has affected the various areas that make up primary care in public health centers, especially geriatric care, which receives a population of older adults who require special care appropriate to the particular characteristics of the age group to which they belong (Ribotta, 2022; Failache et al., 2024).

It highlights the fact that this population will continue to grow at a fairly rapid rate, with older adults aged 65 years and older expected to reach 16% by 2050 (United Nations Department of Economic and Social Affairs, Population Division, 2022). This reality includes major challenges for healthcare systems worldwide and is expected to impose significant socioeconomic burdens for the care required. This reality is because older adults experience a progressive deterioration of their physical and cognitive capacities (Abreus et al., 2020; Alonso et al., 2023); and because they need special attention, greater interest is demanded from governments, since studies show that there are still obstacles that limit older people from obtaining health services in the shortest possible time (Ramos-Alania, 2020; Chen et al., 2023)

There are many inconveniences that older adults experience when requesting medical services in public health centers. According to the literature, they are underestimated simply because of their chronological age; an aspect that represents an obstacle to accessing various health resources, such as surgical interventions, prescription of medications, rehabilitation services, and unjustified delays, compared to the care received by younger people (Álvarez et al., 2016; Oliveira de Araújo et al., 2023).

According to the situation experienced by the elderly, the relevance of the present study consists of the importance of a public health service provided with quality to this population; therefore, it is necessary to identify which are the aspects or elements that intervene as factors associated with the prolongation of waiting times in geriatric primary care. The research questions established were the following:

What are the characteristics of the publications reviewed concerning the subject studied in terms of year of publication, language, authors, journal name, and indexation, among others?

What are the factors associated with prolonged waiting time for older adults in public health centers managed by the authors reviewed?

The objective was to identify the factors associated with prolonged waiting times in geriatric primary care.

METHODS

The study was a systematic review carried out according to the selection and evaluation of each selected document. The search process started with updated bibliographic sources linked to the study objective, using the Scopus, MedLine, SciELO, and PubMed databases, as well as academic search engines, for example, Google Scholar.

The selection of the documents was made considering the most relevant ones published in the last ten years. Likewise, the keywords "primary care", "older adult", "waiting times", "public health" and "associated factors" were used; these terms were strategically chosen to delimit the search since there is ample information on the web. Therefore, the keywords were located in the abstract, objectives, main findings, or conclusions of studies published between 2014 and 2024.

The inclusion criteria considered were the following: research articles, systematic reviews or meta-analyses, open access texts, published in Spanish or English between 2014 and 2024, publications whose sample were geriatric patients and whose subject matter was related to the area of public health.

On the other hand, the exclusion criteria were the use of a language other than English or Spanish, documents with problems of access to the text in its entirety, documents that only included young people and adults in primary care services, studies in areas other than health, and papers resulting from congresses or book chapters.

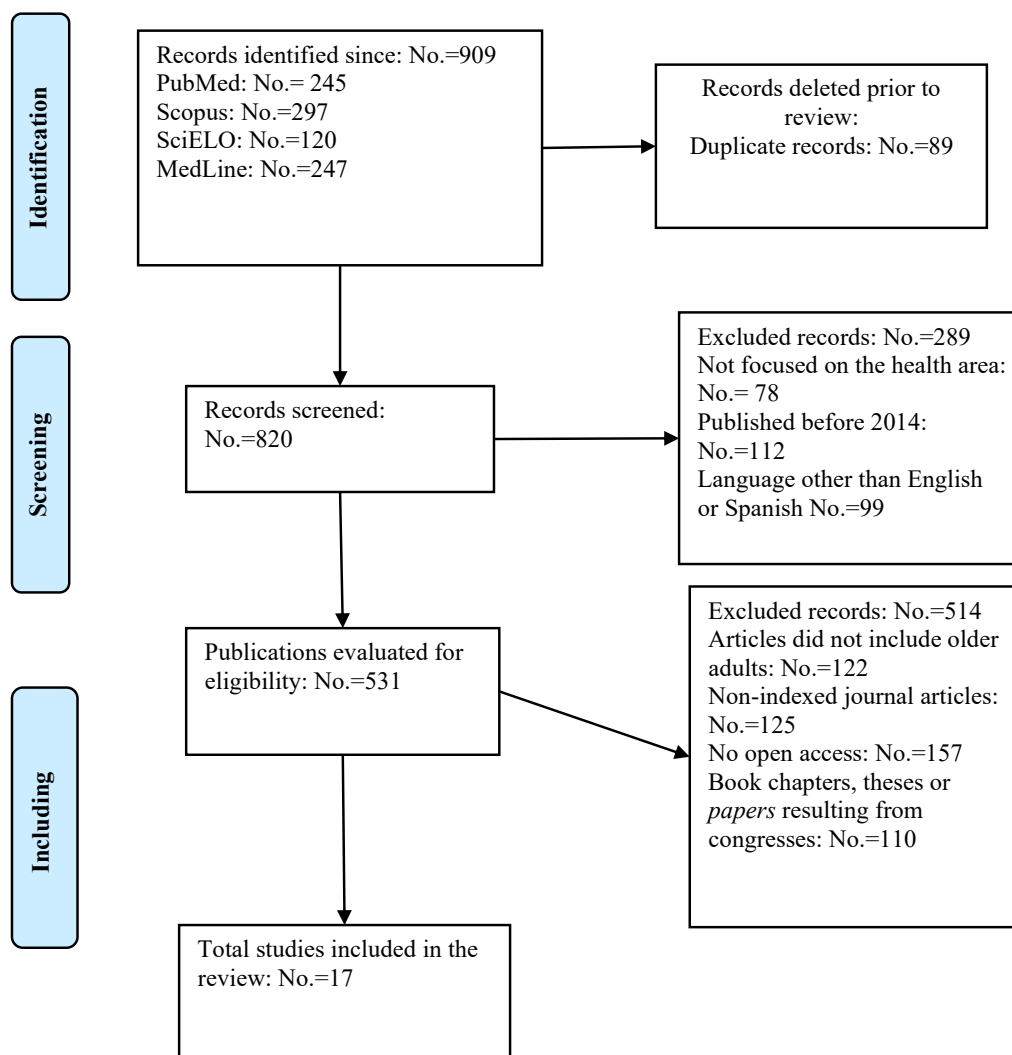
The Prisma (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology (Page et al., 2021) was used to search, considering the inclusion and exclusion criteria established for the selected studies.

Finally, concerning search terms and Boolean operators, combinations of the following topics were included: Primary care, older adults, waiting times, and public health. Articles with the following terms or combinations of terms in the title, keywords, or abstract were retained: ("older adult") OR ("Primary care") OR ("waiting times") AND ("Older Adults") OR ("public health") OR ("geriatrics") AND ("Primary care") OR ("waiting times").

RESULTS AND DISCUSSION

The search yielded 247 records in Medline, while 297 records were found in Scopus, 120 in SciELO, and 245 in PubMed. The total sum of documents in the databases resulted in 909 records, of which 89 were duplicates and were therefore eliminated. The remaining 820 documents were screened for titles and abstracts. Based on the process, 289 publications were excluded; 531 articles were searched for retrieval; however, it was impossible to access the full text of 157 of them. In addition, 122 articles did not include older adults as samples or as a central element of the study, 125 documents were not published in indexed journals and 110 were book chapters, theses, or papers resulting from congresses, therefore, they were excluded. Based on their eligibility, full-text publications were exhaustively analyzed, including only 17 publications (Figure 1).

Figure 1. Selection process. Prisma Flowchart



Note. Authors' development

Characteristics of the studies analyzed

The included studies consisted of six systematic reviews, five presented a quantitative approach, five were qualitative and only one presented a mixed approach. Likewise, of the total number of documents examined (17), thirteen were published in English and four in Spanish; in addition, the publications were made in journals whose indexing corresponded to 17.64% for Scopus and the same percentage for SciELO.

The existence of journals whose indexing was in two or even three different databases stood out; for example, in PubMed/Scopus there were three articles (17.64 %), in Scopus/MedLine, two (11.76 %), while journals with triple indexing such as MedLine/PubMed/Scopus had 6 (35.29 %) published studies (Table 1).

Regarding the years of publication, 2020 stood out with four studies (23.52 %), 2019 and 2016 with three papers each (17.64 %), 2018 presented two articles (11.76 %), and the years 2014, 2015, 2021, 2023 and 2024 only one publication made during each year (5.88 %), respectively.

Table 1. Characteristics of the articles reviewed

Author(s) Year	Title	Type of Study	Journal	Language
D'cruz & Banerjee (2020)	An invisible human rights crisis: the marginalization of older adults during the COVID-19 pandemic: an advocacy review.	Review	<i>Psychiatry Research</i>	English
li & Niu (2019)	Are the Japanese satisfied with their health care system and services? Empirical evidence from survey data.	Quantitative	<i>Health Policy</i>	English
Arroyo & Vásquez (2016)	Elderly people's perception of the care received in health care institutions in the city of Durango.	Qualitative	<i>Revista pueblos y fronteras digital</i>	Spanish
Santoyo & Arredondo (2020)	Review and analysis of the determinants of access to primary health care services in rural and urban elderly populations.	Review	<i>Horizonte Sanitario</i>	Spanish
Peña-Montoya et al. (2016)	Access to health services for older adults. Antioquia-Colombia	Quantitative	<i>Universidad y Salud</i>	Spanish
Ford et al. (2016)	Access to primary care for socioeconomically disadvantaged seniors in rural areas: A Realist review	Review	<i>BMJ Open</i>	English
Ford et al. (2018)	Access to primary care for socioeconomically disadvantaged elderly in rural areas: a qualitative study.	Qualitative	<i>PLoS ONE</i>	English
Kalpna et al. (2014)	Toward patient-centered care: a systematic review of older adults' views on quality emergency care.	Systematic review	<i>Annals of Emergency Medicine</i>	English
Kelly et al. (2019)	"They don't care about us": experiences of primary health care of older people in Cape Town, South Africa.	Qualitative	<i>BMC Geriatrics</i>	English
Pan et al. (2019)	Seniors get priority in terms of waiting time under the emergency triage system in Guangzhou, China	Quantitative	<i>Geriatrics & Gerontology International</i>	English
Mwakilasa et al. (2021)	Experiences of elderly care in the emergency department: a concurrent mixed methods study.	Mixed	<i>Journal of Patient Experience</i>	English
Alhamdan et al. (2015)	Evaluation of health care services provided to older adults in primary health care centers and their internal environment.	Quantitative	<i>Saudi Med J</i>	English
Motsohi, et al. (2020)	A qualitative assessment of older people's experience of health care at two primary level clinics in Cape Town, South Africa.	Qualitative	<i>BJGP Open</i>	English
Kurpas et al. (2018)	Patient-centered access to care: a framework analysis of the care interface for frail older adults.	Qualitative	<i>BMC Geriatrics/</i>	English
Edney et al. (2023)	An exploration of health care use among older people waiting for and receiving aged care services in the Australian community	Quantitative	<i>Geriatrics & Gerontology International</i>	English
García et al. (2020)	The Color of COVID-19: Structural Racism and the Disproportionate Impact of the Pandemic on Black and Latino Seniors	Review	<i>Journals of Gerontology</i>	English
De Tapia et al. (2024)	Barriers to access according to the stages of the health care process for older adults.	Narrative literature review	<i>Gerokomos</i>	Spanish

Note. Authors' development

Discussion of the thematic categories

Concerning the second research question posed in this review, referring to the factors associated with the prolongation of waiting time for older adults in public health centers, these were grouped into the following categories: sociodemographic characteristics (race, age), distance from the health care center, contextual factors, ageism, and social support. Some of these categories increased with the appearance of covid-19 because although they already existed, the social changes derived from isolation reinforced their continuity.

All the studies analyzed raised reflections on the need to build strengthened geriatric care systems, as well as to promote appropriate quality care focused on older adults, since population aging brings health and social specificities, which necessarily require to be addressed in an organized and systematic manner (Kelly et al., 2019; De Tapia et al., 2023).

Among the aspects that should be considered as fundamental when providing quality care are waiting times, an element of utmost importance for the elderly to feel well attended and to have an opinion regarding the way they were treated and the institutional care received. In other words, it is not pleasant for any patient or user of a health center to spend long periods receiving primary care, much less for the elderly; this is due to their physical fragility (Arroyo & Vásquez, 2016; Kelly et al., 2019; Mwakilasa et al., 2021; Alhamdan et al., 2015).

This physical fragility, according to Arroyo & Vásquez (2016), is due to the existence of some ailments, including spinal problems, rheumatoid arthritis or vertigo, which limit the ability of older adults to remain seated or standing for long periods, a situation that increases the discomfort caused by the disease.

The study conducted by Arroyo & Vásquez (2016) showed that the care received by older adults in primary health centers is satisfactory; however, a considerable number of them have negative opinions about it. The latter perception is due

to inadequate treatment by medical staff, long waiting periods, and lack of medications.

Other elements considered are the approaches that were obtained in the review regarding sociodemographic characteristics (race, age), distance from the health care center, contextual factors, ageism, and social support as factors associated with the prolongation of waiting times in geriatric primary care. Table 2 shows the most relevant findings related to these aspects; it also reveals the important challenges and gaps that exist between each of the studies reviewed.

Table 2. Findings on factors associated with prolonged waiting times in geriatric primary care

Autor(s)	Findings
D'cruz & Banerjee (2020)	In the wake of the pandemic, older adults face several interrelated risks to their health and well-being due to direct (biological) and indirect (biological, psychological, and social) factors. Some, such as ageism and sexism, existed before the pandemic. Others, such as increased risk of morbidity and mortality and restrictions in access to essential services, appeared in the context of the pandemic.
Li & Niu (2019)	Overall satisfaction in Japan was much lower than in other high-income countries. Older respondents (≥ 65 years) evaluated the system with twice as much favorability as younger respondents. In addition, respondents' overall satisfaction with the health care system showed a direct relationship with their evaluations of the services received. This higher satisfaction could be due to the greater care needs of the elderly and the use of health services that involve a lower financial burden compared to the young.
Arroyo & Vázquez (2016)	The results indicate that, on average, half consider the care received to be satisfactory, while the other half express negative opinions. The latter perception focuses on inadequate treatment by physicians, long waiting times and shortage of medicines. Waiting times represent one of the most relevant aspects that participants consider when formulating a positive or negative opinion on institutional treatment and care.
Santoyo & Arredondo (2020)	Distance, waiting times, costs and social support are the main determinants of access to primary care services. In North America, access to these services for older adults presents differences associated with race; in particular, in the United States, African American, Latino, and Native American elders face more barriers than people classified as white.
Peña-Montoya et al. (2016)	The time it takes to assign an appointment with a general practitioner continues to be a barrier to access to health services among older adults in the department of Antioquia. This situation is explained by characteristics such as area of residence, perception of health status, educational level and type of affiliation, depending on the region of the department.
Ford et al. (2016)	People residing in rural areas face personal and community situations, in addition to health barriers, that limit their access to primary care. Initiatives should focus on local contextual factors to facilitate recognition of problems, reception at health centers, navigation of the system, ease of booking appointments, access to adequate transportation and sufficient time with professional staff. All of this requires adequate provision of care resources.
Ford et al. (2018)	Various barriers hinder access to primary care for this age group. When reorganizing services to reduce costs, commissioners and practitioners must keep in mind the perceived social contract and models of care that underpin the way many older people relate to the health system.
Kalpna et al. (2014)	Communication barriers involve staff recognition of educational and cultural differences, as well as physical and mental disabilities, which can hinder effective communication. In general, older patients require more communication support and accommodation from ED staff. Prolonged waiting times are especially difficult for the frail elderly, who often have psychosocial and medical issues that require accommodation not generally available in emergency care settings.
Kelly et al. (2019)	Older people, especially those with lower functional capacity, encounter specific difficulties in traveling to clinics, enduring long waiting times (involving considerable physical burden), and receiving care from staff with limited expertise in chronic diseases and geriatric problems.
Pan et al. (2019)	Under the hospital emergency triage system, older adults are more likely to receive care within the stipulated waiting time than younger patients.
Mwakilasa et al. (2021)	Long waiting times and inadequate waiting conditions - such as lack of communication, privacy, and personal attention - emerged as major challenges in the ED. Some older patients expressed a preference for receiving care in separate spaces within the ED.
Alhamdan et al. (2015)	Long waiting times and lack of telephone availability at the facilities resulted in the lowest levels of satisfaction. The results reflect that older adults face difficulties with signage when moving to a new clinic, which is a major problem for the visually impaired and those who cannot read. The availability of seating and restrooms, as well as the layout of waiting areas, represents a key concern for this group.
Motsohi, et al. (2020)	Problems of access and care in primary care centers relate to age-specific holistic needs, which are not fully met by current mechanisms. Actions are required in facilities to complement perceived adequate clinical care by facilitating access, matching services to needs, reducing waiting times, and fostering environments where older people feel respected and listened to.
Kurpas et al. (2018)	In general terms, services were considered accessible and acceptable, but not available. Low availability was due to high staff turnover, shortage of human resources, and lack of trained professionals. Long waiting times were reported in specialized and rehabilitation services, as well as clinics located in remote areas. The cost of treatment acted as a barrier to access and generated inequalities in the system. Participants described a lack of integration between health and social care systems, characterized by different priorities and unarticulated budgets.
Edney et al. (2023)	The study did not identify an impact of waiting time on health care costs. However, inpatient geriatric care increased after the implementation of Home Care Packages (HCPs), while primary care and other forms of secondary care decreased. Previous studies reported an increased risk of mortality and admission to permanent residential care for older people with longer wait times, suggesting that HCPs may provide protective effects when received earlier and wait times are reduced.
García et al. (2020)	Studies also reveal that minorities must wait longer to see a health care provider and are less likely to receive proper diagnosis and effective treatment for pain because of structural constraints, racial stereotypes, and false beliefs about genetic differences held by some professionals. These delays and deficiencies in diagnosis and treatment can have fatal consequences for minority COVID-19 patients, especially when their health status is already compromised.
De Tapia et al. (2024)	Administrative and organizational barriers reduce the likelihood that older adults will complete the process of accessing health services. These barriers appear more frequently in the final stages of the process, because of limited-service hours, long waiting lists, bureaucratic or technology-dependent referral processes, and insufficient human and material resources. Physical-geographical barriers are present in the access and impact phases of care, since the distance to the health center, its location, the infrastructure of the place and the available transportation system can limit the effective use of services by older adults, which conditions timely care and health outcomes.

Note. Authors' development

Age and race

Currently, there is no precise definition of who constitutes the group of older adults, whether the elderly or the oldest old. However, in developed countries, the term oldest old refers to persons aged 85 years or older, whereas in developing countries it refers to persons aged 80 years or older (Wu & Gu, 2021). The American Geriatrics Society and the World Health Organization define the oldest old as individuals over 80 years of age, while the British Geriatrics Society uses 85 years as a

threshold. Recently, ages between 85 and 90 years or older constitute the cutoff for categorizing the oldest old (Escourrou et al., 2022).

On the other hand, the fact that there are people aged 60 years and older, who face several barriers to accessing comprehensive and affordable care, especially in the area of health, stands out. Thus, the problems of access and care for older patients in primary care centers are related to specific needs referred to their age, which are not fully met by the current mechanisms adapted to the elderly (Motsohi et al., 2020).

According to Kalpana et al (2014), hospital facilities must be prepared to receive an older adult population, which represents a significant portion of the population receiving emergency care. Specifically, in the United States, the highest rates of emergency visits are found among patients aged 75 years or older. Despite this reality, there is a quality gap in the care provided, especially in terms of waiting times (Kurpas et al., 2018; García et al., 2021).

Another aspect cataloged as a factor associated with prolonged waiting times in geriatric primary care is race. In this regard, Santoyo & Arredondo (2020) were able to establish that, unlike in other regions, in the United States an older adult can access primary care services taking into account racial differences; that is, in North America, black, Latino and Native Indian older adults face a series of barriers when compared with people classified as white. The same is true in South Africa, where the income and race of older adults condition access to available and quality healthcare services; this situation affects the health, functional capacity, and quality of life of people in poor, predominantly African and colored communities (Kelly et al., 2019).

Ageism

Ageism is seen as a series of prejudices, stereotypes, and discrimination related to people's age (Tarazona-Santabalbina et al., 2021). Although it is not a new term, after the pandemic its use became more common due to the lack of attention given to older adults, who had to face more obstacles due to their age during the health emergency. The most representative aspects of that time were ageism and sexism, and the marginalization of older adults was the last common avenue through which these factors operated (D'cruz & Banerjee, 2020).

For Motsohi et al (2020), there is a perception of widespread structural ageism in primary-level clinics in Cape Town, South Africa. The data obtained evidenced explicit and implicit references to ageism. Users of these clinics expressed that they are treated differently because they are older; furthermore, they stated that the medical staff's communication with older patients was not the best or most appropriate. In this sense, it is recommended to carry out value clarification workshops for health personnel and frontline workers regarding ageism in health centers.

Long distances

Another element associated with the prolongation of waiting times for the elderly was the long distances they had to travel from their residence to the primary health care centers. The existence of physical-geographical barriers can affect the scope and results of the care provided in the health area, since the distance that the elderly must travel to the health center and the adequacy or inadequacy of the characteristics of the elderly, among other factors, can limit the effective use of this service by older adults, even conditioning timely care and obtaining real health results (De Tapia et al., 2023).

Hence, the literature reviewed generally agrees that waiting times, distance, resources, costs incurred, and social support are the fundamental elements for accessing primary care services in the case of geriatric patients (Santoyo & Arredondo, 2020).

Social support

The study by Edney et al (2023) showed that the population of individuals aged 65 years and older is increasing in Australia and that many of these individuals require assistance to meet their needs or admission to an aged care facility. As a result, the Australian government subsidizes a variety of community services for the elderly, such as home care packages to assist people in the home. These packages provide personal care and domestic assistance through the provision of social support.

Similarly, it was noted in several studies that elderly patients viewed their caregivers as their safeguard in the community, as caregivers were viewed as their only advocates or sources of support in the hospital. The role of the home caregiver represents another aid provided by the state and is of great importance because many elderly patients often underestimate their own home care needs and the services they may require at particular times (Shankar et al., 2014). It is worth noting that this kind of social support only occurs in high-income countries, such as Japan, and Australia, among others (Li & Niu, 2019; Edney et al., 2023).

In contrast, the study by Kurpas et al (2018) highlighted the problem of long waiting times for specialized care and rehabilitation services, as well as quite distant care centers. In addition, they pointed out the lack of sufficient places for long-

term hospital care, social workers, and caregivers; while describing a poorly functioning social care system, where bureaucratization caused delays in the provision of services to the most vulnerable. This situation exposed the lack of social support from the state for older adults in terms of primary care received.

Contextual factors

Overall, people living in rural areas face personal and community situations and health barriers that limit their access to primary health care. This situation does not spare older adults, who must have initiatives oriented to such local contextual factors to help them recognize their problems and be able to navigate the health care system, book appointments easily, access adequate transportation, and have sufficient time with professional staff to improve their experience (Ford et al., 2016).

Authors such as Kalpana et al (2014) point out that another aspect to consider is communication barriers, which imply that healthcare personnel should recognize the educational and cultural differences existing in certain areas, as well as the physical and mental disabilities that may prevent effective communication with users. Generally, geriatric patients will have greater communication and accommodation needs on the part of primary care staff. It should also be noted that waiting times to see a physician does not include the time spent waiting for nursing staff, which is another aspect to be considered. Hence, long waiting times can be difficult to manage for the frail elderly, as many have psychosocial and medical problems that require special accommodations that are generally not available in the primary care setting.

Apart from the long waiting times to which the geriatric population is subjected in primary care centers, there are other aspects such as the lack of availability of a telephone; this situation generated less satisfaction in the sample examined in the study by Alhamdan et al (2015). Likewise, this study identified some difficulties related to the signage of a new clinic attended by older adults, since proper identification of areas and spaces is very important for visually impaired and illiterate people.

Finally, another element presents in the review, as a contextual factor, was the availability of seats and bathrooms in the health centers. This is because there are patients who move around in wheelchairs and need to be next to the people who accompany them while they wait. These issues, although they seem simple and unimportant, are quite significant and are aspects of accessibility and layout - including seating and basic facilities - that should be a priority in the creation of primary care health centers for the elderly (Alhamdan et al., 2015; Motsohi et al., 2020).

Trends and directions in the literature on factors associated with waiting times in geriatric primary care

A considerable amount of research on primary care in older adults indicates the existence of significant racial and ethnic differences in the types of services used by older adults. In addition, minority access to and use of services is best described in terms of inequality. That is, White older adults are more likely to receive primary care services (Santoyo & Arredondo, 2020). The findings of the review demonstrate the need for health systems to report and implement measures that account for care stratified by race and ethnicity to monitor the impact on primary care received by this population. It is also essential to conduct more studies and promote public policies that address the challenges faced by socially disadvantaged older adults. In contrast, Li & Niu's (2019) study in Japan evidenced a low level of satisfaction despite excellent access to medical care. However, older adults (over 65 years of age) evaluated the health care system almost twice as favorably as younger respondents.

On the other hand, the analysis reveals that age discrimination (ageism) is common in health systems, especially in medical care. Older people are confronted with aspects such as lengthy processes for receiving care, diagnostic tests, monitoring of medications and long waiting periods. These manifestations of ageism reflect a knowledge gap and also include implicit forms. The studies reviewed address ageism both explicitly and implicitly, which has been evidenced by previous research (D'cruz & Banerjee, 2020; Motsohi et al., 2020).

Studies identify three dimensions of ageism: stereotypes, prejudice and discrimination (Tarazona-Santabalbina et al., 2021). However, most measurements do not cover these three dimensions. The fact that many of the studies reviewed correspond to systematic reviews and qualitative studies could have limited the findings related to this factor. This situation might have been different if the review had included a larger number of studies with a quantitative approach and standardized measurement scales. As a result, the studies do not offer solid analysis on the measurement of ageism. Similarly, few studies address it as a determinant factor in primary care for the geriatric population. Thus, the development and evaluation of this concept remains stagnant when examining the literature as a whole. Studying ageism represents an opportunity for future research and may provide relevant implications at the policy level, including possible legislation to prohibit age discrimination in health care facilities.

Long distances are among the factors associated with longer waiting times for older adults, especially when they need transportation due to the lack of support from family members to go to health centers. This situation occurs more frequently in rural areas, where people must travel considerable distances to access medical care. Studies have shown that greater distance between residents and health professionals reduces the possibility of accessing primary care services (De

Tapia et al., 2023). Future research should focus on proposing effective measures that consider both distance and travel time for older adults living in rural or remote areas. In addition, it is recommended to integrate Geographic Information Systems with diverse methodologies to respond to the needs of this population and improve the overall delivery of services.

Social support is a fundamental aspect of primary care for older adults. Studies highlight the importance of establishing a social bond that favors the well-being of this population. They also recommend that health institutions incorporate social workers capable of providing assistance in the face of physical or functional disabilities, since these conditions increase the risk of isolation and loneliness in older adults (Santoyo & Arredondo, 2020; Edney et al., 2023). Interest in investigating social support in this population has grown significantly and is expected to continue as a priority line of study. This topic, far from closing the research gap, widens it, since each related phenomenon introduces new elements that enrich the knowledge on the care of the elderly.

Finally, understanding the characteristics of aging and its relationship to decision making in primary care is essential. Context should be considered a key factor. Analyzing the role of contextual factors as determinants of older adult satisfaction opens new possibilities for future research. It is essential for staff to provide primary care to maintain a close link with the institutional infrastructure and the contextual reality of the patient (Shankar et al., 2014; Ford et al., 2016). The scant attention this relationship has received in literature compels a cautious interpretation of the existing evidence. Most research only offers general observations, so there is a need to expand studies describing and explaining this interaction.

Implications and future research

This study identified five factors associated with prolonged wait times in geriatric primary care. Future research should analyze the relationship between these factors and the quality of care received by older adults. In addition, they should verify whether there is systematic monitoring of the accessibility of services, with the aim of contributing to the formulation of public policies and exploring the possibility of taking advantage of waiting time as a window to implement clinical strategies that benefit this population. Recognizing these factors is key to the health care field. Researchers can identify emerging areas of study and foster productive collaborations that include them. Health authorities and professionals linked to academia and health services have the potential to use the analysis developed to assess the impact of sociodemographic and contextual factors on the care received by older adults in public facilities. Further research is also needed on how to reduce waiting times and personalize clinical care according to the characteristics of each older patient.

Strengths and limitations

This systematic review had both strengths and limitations. Among the limitations, we identified that most of the included studies were systematic reviews and qualitative studies, which can generate selection biases and restrict the depth of the analysis. As for the quantitative studies, most were characterized by their cross-sectional and descriptive design, which precludes follow-up over time or establish cause-effect relationships.

As a strength, this review managed to encompass a variety of methodological designs and gathered relevant information on the factors that influence waiting times in geriatric primary care. The systematic approach applied allowed us to explore and synthesize the evidence on a topic that has received little attention. The five factors identified have not been addressed together in previous research. Some additional limitations detected at the end of the analysis should be noted. Despite the use of specific keywords to guide the search, it is likely that some relevant studies were excluded due to a different choice of terminology. Likewise, only publications in English and Spanish were considered, thus excluding works in other languages such as Portuguese.

The restriction of the inclusion period to the last 10 years allowed the incorporation of older studies, which could have affected the timeliness of the findings. However, factors linked to waiting times in primary care for older adults have persisted over time. This is evidenced by the studies of Kalpana et al. (2014), Alhamdan et al. (2015), Ford et al. (2016) and Peña-Montoya et al. (2016), whose results, obtained during the early years of the review period, are still relevant today.

FINAL REMARKS

The review highlighted the global importance of the aging process in society, the growing demand for primary care, and issues related to the possibility of accessing adequate health services.

The study systematically reviewed and summarized the literature on waiting times for primary care to which older adults are exposed. As a result, the following factors associated with prolonged waiting times in geriatric primary care were identified: sociodemographic characteristics (race, age), distance from the care center, contextual factors, ageism, and social support. When these indicators are present from the patient's perspective, it becomes possible for physicians, different health systems, and health policy makers to understand the relevance of adequate primary care provided to older adults.

Furthermore, understanding the perspective of the geriatric patient is of utmost importance if patient-centered care and the adjustment of such services to the needs of this often-neglected sector of the population are to be achieved.

Apart from the associated factors already mentioned, waiting times are often the result of the services offered, extra factors and procedures associated with the disorganization that exists in health centers concerning personal patient information, as well as the lack of environments and a system that constantly collapses.

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C. elaboration of figures and tables:	25%	25%	25%	25%
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