REVISTA ENFERMAGEM ATUAL IN DERME

COGNITIVE ASSESSMENT TOOLS FOR THE ELDERLY IN PRIMARY HEALTH CARE: A SCOPING REVIEW

HERRAMIENTAS DE EVALUACIÓN COGNITIVA PARA ANCIANOS EN ATENCIÓN PRIMARIA DE SALUD: UNA REVISIÓN DEL ALCANCE

INSTRUMENTOS DE AVALIAÇÃO COGNITIVA DA PESSOA IDOSA NA ATENÇÃO PRIMÁRIA À SAÚDE: REVISÃO DE ESCOPO

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ABSTRACT
Introduction: Population aging brings with it challenging health problems for health systems, such as dementias. **Objective:** To map in the literature the instruments that assist in the cognitive assessment of older adults in primary health care. **Method:** The scoping review was conducted based on the recommendations of the Joanna Briggs Institute and the PRISMA-ScR guidelines. The databases used were: Medical Literature Analysis and Retrieval System online (MEDLINE) via PubMed, SCOPUS, Web of Science, Science Electronic Library Online (SCIELO) and Latin American and Caribbean Health Sciences Literature (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL-Ebsco), accessed through the Portal of Periodicals of the Coordination for the Improvement of Higher Education Personnel (CAPES). As gray literature, Google Scholar was consulted, and the following descriptors were used: Elderly; Alzheimer's Disease; Primary Health Care; Mental State Tests and Dementia; and Cognitive Test, along with their English-language equivalentes. **Results:** Initially, 2043 articles were found and after removing duplicates and reading the texts in full, 74 studies were obtained for analysis. A total of 129 cognitive assessment instruments were identified, the most frequently cited being the Mini-Mental State Examination (MMSE), the General Practitioner's Cognition Assessment (GPCOG) and the Rowland Dementia Rating Scale (RUDAS). **Conclusion:** This review showed different cognitive assessment tools used in Primary Health Care, with application time, validation for use by the multi-professional team, gratuity and non-interference of level of education or cultural bias in the results being the criteria considered for choosing the best tool.
Keywords: Aged; Primary Health Care; Mental Status and Dementia Tests; Neuropsychological Tests.

RESUMEN
Introducción: El envejecimiento de la población trae consigo problemas de salud que suponen un reto para los sistemas sanitarios, como las demencias. **Objetivo:** Mapear la literatura sobre instrumentos que ayudan en la evaluación cognitiva de las personas mayores en la atención primaria de salud. **Método:** La revisión exploratoria se realizó siguiendo las recomendaciones del Instituto Joanna Briggs y las directrices PRISMA-ScR. Bases de datos: Medical Literature Analysis and Retrieval System online (MEDLINE) a través de PubMed, SCOPUS, Web of Science, Science Electronic Library Online (SCIELO) y Latin American and Caribbean Literature in Health Sciences (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL-Ebsco), accedidas a través del Portal de Periódicas (CAPES). Como literatura gris la búsqueda en Google Scholar con los descriptores: Ancianos; Enfermedad de Alzheimer; Atención Primaria de Salud; Pruebas de Estado Mental y Demencia y Test Cognitivo, y sus derivados en inglés. **Resultados:** Inicialmente se encontraron 2043 artículos y, tras eliminar duplicados y leer los textos en su totalidad, se obtuvieron 74 estudios para el análisis. Se identificaron 129 instrumentos de evaluación cognitiva, siendo los más citados el Mini-Mental State Examination (MMSE), el General Practitioner Cognition Assessment (GPCOG) y el Rowland Dementia Rating Scale (RUDAS). **Conclusión:** La revisión mostró diferentes herramientas de evaluación cognitiva utilizadas en Atención Primaria de Salud, siendo el tiempo de aplicación, la validación para su uso por el equipo multiprofesional, la gratuidad y la no interferencia del nivel educativo o sesgo cultural en los resultados los criterios considerados para elegir la mejor herramienta.
Palabras clave: Anciano; Atención Primaria de Salud; Pruebas de Estado Mental y Demencia; Pruebas Neuropsicológicas.

RESUMO
Introdução: O envelhecimento populacional traz consigo problemas de saúde desafiadores para os sistemas de saúde, como as demências. **Objetivo:** Mapear na literatura os instrumentos que auxiliam na avaliação cognitiva da pessoa idosa na atenção primária à saúde. **Método:** A revisão de escopo foi conduzida com base nas recomendações do Instituto Joanna Briggs e das diretrizes PRISMA-ScR. As bases de dados foram: Medical Literature Analysis and Retrieval System on-line (MEDLINE) via PubMed, SCOPUS, Web of Science, Science Eletronic Library Online (SCIELO), Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL-Ebsco), acessadas pelo Portal de Periódicos CAPES. Como literatura cinzenta foi consultado o Google Scholar, e utilizados os descritores: Idoso; Doença de Alzheimer; Atenção Primária à Saúde; Testes de Estado Mental e Demência e Teste Cognitivo, e seus derivados em inglês. **Resultados:** Foram encontrados, 2043 artigos e após a remoção de duplicatas e leitura completa dos textos, foram obtidos 74 estudos para análise. Foram identificados 129 instrumentos de avaliação cognitiva, sendo os mais citados: Miniexame do Estado Mental (MEEM), Avaliação da Cognição do Clínico Geral (GPCOG) e Escala de Avaliação de Demência de Rowland (RUDAS). **Conclusão:** A revisão mostrou diferentes instrumentos de avaliação cognitiva utilizados na Atenção Primária à Saúde, sendo o tempo de aplicação, a validação para ser usado pela equipe multiprofissional, a gratuidade e a não interferência do grau de estudo ou preconceitos culturais nos resultados, os critérios considerados para a escolha da melhor ferramenta.
Palavras-chave: Idoso; Atenção Primária à Saúde; Testes de Estado Mental e Demência; Testes Neuropsicológicos.

REVISTA ENFERMAGEM ATUAL IN DERME

INTRODUCTION

The aging process is characterized as a systematic, dynamic and continuous evolution, which involves morphological, cognitive, biochemical and psychological changes. One of the phenomena of contemporary society is the acceleration of population aging, with an increase in the proportion of elderly people and a reduction in the younger population. As people age, there is an increased risk of developing chronic diseases and the emergence of age-related limitations [1].

With the inversion of the age pyramid, age-related health issues arise, many cases involving decreased cognitive capacity and loss of abilities to perform daily activities. This increase in longevity is also associated with the incidence of degenerative diseases, such as Alzheimer's Disease (AD). Such conditions can have negative consequences for the autonomy, independence and quality of life of the elderly [2].

Dementia is recognized as one of the main conditions associated with aging and, consequently, with cognitive decline. AD is the main cause of dementia among the elderly, affecting approximately 55 million people worldwide, along with their families. In Brazil, approximately 1.2 million individuals live with this condition, and approximately 100,000 new cases are diagnosed each year[3].

As life expectancy increases, the importance of early identification of cognitive decline becomes increasingly pressing. This detection not only offers the opportunity for more effective therapeutic intervention, but also allows patients and family members to plan future care and decisions in advance. The various demands placed on health professionals in Primary Health Care (PHC), combined with the diversity of cognitive deficits resulting from aging and the variability of tools, make cognitive assessment complex[4].

Therefore, it is essential that health professionals, especially nurses, who deal directly with this population in PHC, have access to accurate and effective detection instruments that can assist in cognitive screening and assessment, aiming at the early identification of degenerative diseases. Therefore, this review aimed to map the instruments in the literature that assist in the cognitive assessment of elderly people in PHC. This study will be relevant not only for the area of investigative and experimental research, but also for the clinical practice of professionals who perform screening for cognitive decline.

METHOD

This is a scoping review conducted based on the methodological framework proposed by the Joanna Briggs Institute (JBI)[5], in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses-extension for scoping reviews (PRISMA-ScR)[6] guidelines. A previous review was carried out that did not detect the existence of another ongoing study on the topic, thus, the review protocol was registered in the Open Science Framework (OSF), with Digital Object Identifier (DOI): 10.17605/OSF.IO/FMZA6.

REVISTA ENFERMAGEM ATUAL IN DERME

Review question

The question was based on the elements of the mnemonic PCC, which stands for Population, Concept and Context, where P (population) corresponded to the elderly person, C (concept) to cognitive assessment instruments and C (context) to Primary Health Care. Therefore, the guiding question established is: "What instruments are used in the cognitive assessment of elderly people in Primary Health Care?"

Elegibility criteria

Articles available in full, of any methodological design, as well as dissertations and theses, which described instruments for cognitive assessment of elderly people in PHC, without delimitation of time frame or language, were included. Publications of the editorial type, expert opinions, course completion papers, dissertations and theses were excluded.

Types of Evidence Sources

The searches were conducted in the following databases: Medical Literature Analysis and Retrieval System on-line (MEDLINE) via PubMed, SCOPUS, Web of Science, Science Electronic Library Online (SCIELO), Latin American and Caribbean Literature in Health Sciences (LILACS), and Cumulative Index to Nursing and Allied Health Literature (CINAHL-Ebsco), accessed through the Journal Portal of the Coordination for the Improvement of Higher Education Personnel (CAPES). Google Scholar was consulted as gray literature.

Research strategy

To develop the search strategies, the study question composed of the mnemonic PCC, the eligibility criteria, the particularities of each database and which descriptors and/or keywords could retrieve the studies were observed. In accordance with the specifications of the descriptors specific to the selected databases, the following controlled vocabularies were used: Medical Subject Headings (MeSH) for MEDLINE via PubMed, Scopus and Web of Science; CINAHL subject headings for the search in CINAHL; and Health Sciences Descriptors (DeCS) for SCIELO, LILACS via BVS and Google Scholar.

The descriptors and keywords were combined using the Boolean operators OR and AND, using the terms Elderly; Elderly Person; Alzheimer's Disease; Alzheimer's Dementia; Primary Health Care; Basic Health Care; Mental State and Dementia Tests and Cognitive Test, and their derivatives in the English language. Table 1 below presents the vocabulary and search strategy used.

REVISTA ENFERMAGEM ATUAL IN DERME

Table 1 - Vocabularies used and search strategies adopted in the databases. Teresina, Piauí, Brazil, 2024.

Health Sciences Descriptors (DeCS)	
Descriptors	**Keywords/Alternative Terms**
Elderly Mental Status Tests and Dementia Alzheimer's Disease Primary Health Care	Elderly person Cognitive test Alzheimer's dementia Primary Health Care
Medical Subject Headings (MeSH)	
Descriptors	**Keywords/Alternative Terms**
Aged Alzheimer Disease Primary Health Care Mental Status and Dementia Tests	Cognitive Test Alzheimer Dementia Basic Health Services

DATABASE	**SEARCH STRATEGIES**
MEDLINE via PubMed	(((Aged) AND ((Alzheimer Disease) OR (Alzheimer Dementia))) AND ((Primary Health Care) OR (Basic Health Services))) AND ((Mental Status and Dementia Tests) OR (Cognitive Test))
SCOPUS	(ALL (aged) AND ALL ("Alzheimer Disease" OR "Alzheimer Dementia") AND ALL ("Primary Health Care" OR "Basic Health Services") AND ALL ("Mental Status and Dementia Tests" OR "Cognitive Test"))
Web of Science	ALL=((Aged) AND (“Alzheimer Disease” OR “Alzheimer Dementia”) AND (“Mental Status and Dementia Tests” OR “Cognitive Test”))
CINAHL	(Aged) AND ("Alzheimer Disease" OR "Alzheimer Dementia") AND ("Primary Health Care" OR "Basic Health Services") AND ("Mental Status and Dementia Tests" OR "Cognitive Test")
SCIELO	(((((Idoso) AND ("Pessoa Idosa") OR (Anciano) AND (“Doença de Alzheimer”) OR (“Demência de Alzheimer”) OR (“Enfermedad de Alzheimer”)) AND (“Atenção Primária à Saúde”) OR (“Atenção Básica à saúde”) OR (“Atención Primaria de Salud”) OR (“Atención Básica”)) AND (“Testes de Estado Mental e Demência”) OR (“Teste Cognitivo Pruebas de Estado Mental y Demencia”) OR (“Prueba Cognitiva”)) AND (Aged)) OR ("Alzheimer Disease") AND ("Mental Status and Dementia Tests") OR ("Cognitive Test")
LILACS via BVS	((mh: (Idoso)) AND ((mh:("Doença de Alzheimer")) AND ((mh:(" Teste Cognitivo")) AND (db:("LILACS"))
GOOGLE SCHOLAR	(Aged) AND ("Alzheimer Disease" OR "Alzheimer Dementia") AND ("Primary Health Care" OR "Basic Health Services") AND ("Mental Status and Dementia Tests" OR "Cognitive Test")

Source: Prepared by the authors (2024).

REVISTA ENFERMAGEM ATUAL IN DERME

Study selection

The publications were initially selected by evaluating the title and abstract, and after this process they were analyzed in full. The Rayyan-Intelligent Systematic Review software was used to enable the selection and analysis of the studies retrieved from the databases.

Two independent reviewers evaluated the titles and abstracts of the studies identified during the initial search to determine their relevance in relation to the inclusion criteria. Then, the studies considered relevant in the first stage were analyzed in full, and considered whether they met the inclusion criteria; disagreements between the two reviewers were analyzed by discussion and consultation with a third reviewer.

Data extraction

For data extraction, a table was constructed, according to JBI guidelines[5], with the following variables: year of publication, country/continent, type of study, objective, age group, sex, education, cognitive assessment instruments, application strategy and time. The identification code of the articles was recorded sequentially according to the order of reading and data collection.

Presentation of results

The results were presented in tables, aiming to map the instruments that assess cognitive decline and the variables selected for this review.

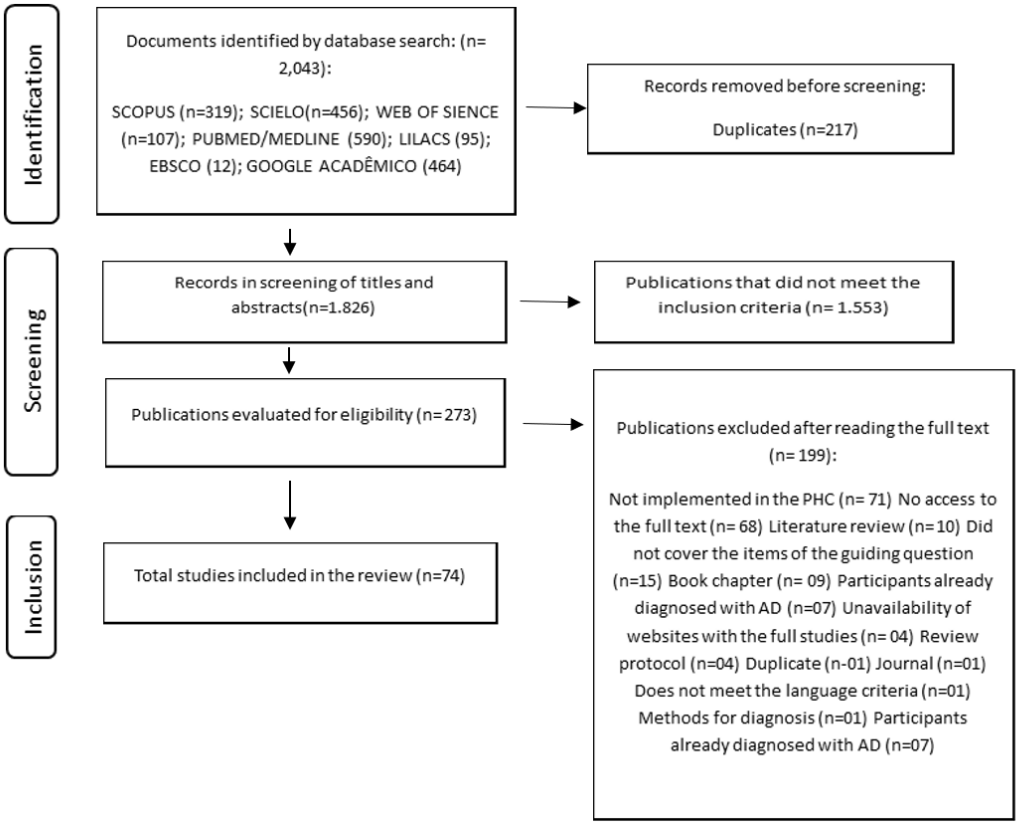
As the study was conducted with public domain data, ethical assessment was not necessary.

RESULTS

After analyzing the 2,043 studies identified, only 74 articles answered the research question and comprised the final sample. The flowchart (Figure 1) shows the selection of studies.

REVISTA ENFERMAGEM ATUAL IN DERME

Figure 1 - Flowchart of study selection. Teresina, Piauí, Brazil, 2024.



Source: Flowchart based on PRISMA.

The articles analyzed were published between 2000 and 2023, with emphasis on the years 2020[7-13], 2021[14-20], 2022[21-25] and 2023[26-31]. Regarding the characteristics of the participants in the studies analyzed, the predominant age range was from 65 years of age [12-15,24,32-43], with elderly people of both sexes. The level of education ranged from illiterate to postgraduate, with emphasis on illiterate [7,10,22,41,44-47], low education [8,15,34,39,48,49] and medium education [17,28,30,34,37]. Regarding the location, most studies were developed in European countries [7,11,12,14,15,21-23,29,32,33,37-39,44,45,50-56] and American countries [8,10,13,17,26,27,30,34-36,41-43,46,48,57-65].

A total of 129 instruments were mapped, more than half of which were applied through interviews by previously trained health professionals and in relation to the application time, the largest number was applied between 05 and 17 minutes. The most cited instruments were: Mini-Mental State Examination (MMSE)[8-11,16,18,25,32,42,47,51,52,56,51-58,63,65,67,68], General Practitioner's Assessment of Cognition (GPCOG)[8,22,25,51,68,69] and the Rowland Dementia Assessment Scale (RUDAS)[7,22,48,66] (Table 2).

REVISTA ENFERMAGEM ATUAL IN DERME

Table 2 - Cognitive assessment instruments. Teresina, Piauí, Brazil, 2024.

NPI-NH: Neuropsychiatric Inventory Nursing Home [14]	Mindmore[21]
RUDAS: Escala de Avaliação de Demência de Rowland [7,22,48,66]	MoCA: Avaliação Cognitiva de Montreal [8,16,22,26]
TICS: Entrevista por Telefone para o Estado Cognitivo[23,41,67]	BCSI-D: Brief Community Screening Instrument for Dementia [24]
MEEM: Miniexame do Estado Mental [8-11,16,18,25,32,42,47,52,56,51, 52, 58, 63, 65,67,68]	6CTI [32]
GPCOG: General Practitioner Assessment of Cognition ([25,32,51,66,68,69]	CDR: Clinical Dementia Rating [50]
Escala de Avaliação da Doença de Alzheimer [33]	Teste de memória cognitiva [33]
Teste de Fluência Verbal de letras, evocação imediata e tardia da história [33]	Teste de Trail Making A e B [33]
Teste de linguagem - WAISS-III na tradução para o sueco [33]	WHOQOL-OLD: World Health Organization Quality of Life [10]
BASIC-Q: Questionário de Avaliação Breve da Cognição Prejudicada [12]	SIS: Rastreador de Seis Itens [22,58,71]
MoCA: Avaliação Cognitiva de Montreal [13,16,17,58]	Teste Informatizado [13]
Avaliação da Memória Subjetiva [13]	TYM: Test Your Memory Test [51]
MIS: Memory Impairment Screen [34,66,67]	FA: Fluência animal [34]
MB: Months Backwards [34]	IBS: Triagem baseada em informantes [34]
NINDS-CSN: AD8 and Stroke-Canadian Stroke Network [72]	HVLT: O Teste de Aprendizagem Verbal Hopkins [35,43,63]
Figura de Rey: Figura Complexa de Rey-Osterrieth modificada[35]	Trailmaking: Testes A e B de Trailmaking de velocidade e funcionamento executivo [35]
Teste de Fluência Verbal [35,65]	Práxis Construcional [35]
CSI-D: Entrevista Comunitária de Triagem para Demência [36]	Teste de Orientação Temporal de Benton [37]
DME: Teste do comprometimento subjetivo da memória [49]	Bateria de Avaliação Frontal [58]
MEC de Lobo: versão espanhola do Mini-Exame do Estado Mental de Folstein [38]	TR: Teste do relógio [18,38,43,44,46,63]
TIN: Teste do informador [38]	TFV: Teste de fluência verbal [18,38]
MIS-T: Memory Impairment Screen for Telephone [16,59]	MMS: Mini-Mental State [44,45]
Questionário Curto Portátil de Estado Mental [39]	Teste de orientação temporal de Benton [39]
Fluência verbal [39]	Teste dos sinos [39]
Teste de trilha [39]	Teste de semelhanças [39]
SML: Perda de memória subjetiva [39]	Cognistat: Exame do Estado Cognitivo Neurocomportamental [40]
RGA: Avaliação Geriátrica Rápida [60]	STICS-m: Entrevista Telefônica para Status Cognitivo [11,67]
TYM: Test Your Memory [16,52,61]	GDS: Geriatric Depression Scale [8,65]
GAI: Geriatric Anxiety Inventory [38]	ACE-R: Addenbroke's Cognitive Examination –Revised [38]
MAC-Q: Memory Complaint Questionnarie [38]	Cognigram [62]
DRS: Escala de Avaliação de Demência [63]	Teste de trilha [63]
MyCog [27]	FCSRT: Teste de lembrete seletivo gratuito e orientado com recordação imediata [34]
DuCA: Avaliação Cognitiva de Estágio Duplo [28]	BHA: Brain Health Survey [17]
IQCODE: Questionário do Informante sobre Declínio Cognitivo em Idosos [45,67]	CSI-D: Teste comunitário de triagem para demência [45]
TICS: Instrumento Telefônico para Triagem Cognitiva [45]	Mini-Cog [16, 46,47, 66,67]
Triagem de Habilidades Cognitivas [46,48]	CES-D: Escala de Depressão [52]
GEFS: Escala de Funções Gregas do Dia a Dia [52]	CognICA [29]
Teste de recordação de palavras após a distração [42]	UPDRS: Unified Parkinson Disease Rating Scale [42]
CFT: Teste de Figuras Complexas de Rey-osterrieth [18]	SDMT: Symbol Digit Modalities Test [18]

REVISTA ENFERMAGEM ATUAL IN DERME

SCWT: Stroop Color-Word Test [18]	ADAS Cog: Escala de Avaliação da Doença de Alzheimer [64,66]
C3B: Bateria Cognitiva da Cleveland Clinic [55]	6CIT: Teste de comprometimento cognitivo de seis itens [53,66]
CASI: Cognitive Abilities Screening Instrument [66,73]	CDR: Clinical Dementia Rating [73,19]
AD8: Teste Ascertainment of Dementia-8 [73]	AQT: Teste Rápido de Velocidade Cognitiva [54]
Escala de Memória Grega [55]	Figura Complexa de Taylor [55]
Boston Naming e Peabody Picture Vocabulary 22 [55]	Fluência Verbal Semântica [55]
Trail Making Test [55]	Symbol Digit Modality Test [55]
Escala de Avaliação de Demência de Mattis [55,48]	TMT: Trail Making Test [43,55]
VAT: Teste de Associação Visual [56]	TICS-M: Entrevista por telefone para status cognitivo modificado [11]
7MS: Teste da tela de sete minutos [16,65,66,67]	FOME: Avaliação abreviada de memória de objeto Fuld()
ACE: Exame Cognitivo de Addenbrooke()	Testes de dinheiro [16]
Fototeste [16,66]	AD8: Entrevista com informante de oito itens [16]
IQCODE Curto: Questionário do Informante sobre Declínio Cognitivo em Idosos [16]	PFAQ: Questionário de Atividades Funcionais Pfeffer [16]
AMTS: Pontuação abreviada do teste mental [20,66,67]	BAS: Triagem Breve de Alzheimer [66]
BLT/Ash: Teste de Memória Ashford [66]	BOMC: Teste de Orientação-Memória-Concentração Abençoado de 6 itens [66]
BVRT: Teste de Retenção Visual de Benton [66]	CAMCI: Teste de Comprometimento Cognitivo Leve Abreviado em Chinês [66]
HDS-R: Escala de Demência de Hasegawa Revisada [66]	IST: Isaacs Set Test [66]
MAT: Teste de Alternância Mental [66]	M@T: Teste de Alteração de Memória [66]
mMEEM: Miniexame Físico modificado [66]	S-MEEM: Miniexame Padronizado do Estado Mental [66]
MOST: Teste de Triagem de Orientação de Memória [66]	SAS-SI: Instrumento de Triagem Curto e Doce [66]
SLUMS: Exame do Estado Mental da Universidade de Saint Louis [66]	SPMSQ: Questionário Portátil Curto sobre o Estado Mental [66,67]
STMS: Teste Curto do Estado Mental [66]	T&C: Teste de Tempo e Mudança [66]
BHA-CS: Pontuação Cognitiva de Avaliação da Saúde Cerebral [31]	C-ABC: bateria informatizada de avaliação da cognição [31]
SPMSQ: Short Portable Mental Status Questionnaire [67]	Mental Status Questionnaire [67]
FCSRT: Free and Cued Selective Teste de Lembrança [67]	Escala de Avaliação e do Cambridge Cognition Examination [48]
Cognitive Abilities Screening Instrument [48]	Teste de Memória de Figuras [48]
Teste de Desenho do Pentágono [48]	

Source: Prepared by the authors (2024).

DISCUSSION

Based on the panoramic observation of the countries in which the studies were conducted, the predominance of the European continent is noted, which, throughout its historical, social and population development, has guaranteed assistance policies for the elderly. As a result, the State has implemented actions that track fragilities, vulnerabilities and ensure the conjunction between the social and health sectors[74].

In Brazil, the National Policy for the Elderly aims to ensure essential rights; one of its guidelines is to prioritize the family as the basis for care, in addition to supporting studies and research on aging. Through the epidemiological profile, the State aims to detect pathologies common to the elderly, promote programs and prophylactic measures, in addition to guiding the

development of training for interprofessional teams[75].

Regarding the target audience of the studies analyzed, there were large variations in age range; there are records of cognitive assessment with younger people, however, the number of studies increased considerably from 60 years of age onwards. Age bias is linked to brain aging, in which there is deterioration of white and gray matter, and these changes are commonly signaled as disorders of cognition, memory, planning, and even motor changes[76].

Education greatly influences the applicability of cognitive assessment instruments, as there is a risk of false positives for people who have not developed memorization, reading, pronunciation, decoding, and knowledge of terms; and a risk of false negatives for those with a higher level of education. Therefore, the interpretation of the results of the application of the instruments requires cutoff points according to the years studied[77].

Among the different instruments identified in this review, the test most discussed among the articles was the MMSE[8-11,16,18,25,32,42,47,51,52,56,51-58,63,65,67,68]. This is a globally used instrument, mainly in consultations with the elderly; It can be applied in up to 10 minutes and does not require specific material. It has been validated in the Brazilian version and indicates what should be investigated further. Despite its quick application, there is interference due to educational and age bias. This is a test whose results present cutoff points according to the respondent's level of education[78].

The MMSE is the most widely used cognitive screening test in Brazil and worldwide. Although it is widely validated and considered the gold standard, it has limitations, such as reduced sensitivity to distinguish different types of brain impairment, verbal bias and restricted assessment of specific functions, which can compromise more accurate diagnoses[8-11].

Two studies conducted in locations on the extremes of Brazil, with elderly people in Bahia[79] and RS[80], identified that the population with less education had worse performance on the MMSE; as did a study carried out in Norway over two years, in which the results of the participants tested by the MMSE were affected by education, and it was found that the group with more years of education had higher scores[81].

The second most cited instrument was the GPCOG[8,22,25,51,68,69], a two-stage test that takes an average of 6 minutes to complete. It has minimal cultural, linguistic, and educational bias and is independent of the patient's gender and emotional state. Information is also provided by the caregiver/informant. Therefore, the scale not only reflects patients' cognitive changes but also assesses daily life from the perspective of caregivers. It is a valid, efficient, and well-accepted instrument for dementia screening in primary care. In a test in the Chinese population, the GPCOG showed better sensitivity in screening than the MMSE[82].

REVISTA ENFERMAGEM ATUAL IN DERME

However, the GPCOG has important limitations, such as the need for an informant, which may make it difficult to apply in some contexts. Its validation was performed with a limited sample, which compromises the generalization of the results. There is a risk of incorrect application by professionals, affecting the accuracy of screening. The dependence on third-party reports limits the use of the test when there is no informant available. These factors reduce its effectiveness in diverse clinical settings with few resources[8,22,,82].

And the RUDAS instrument[7,22,48,66] was the third most cited; the author mentions the need for validation in different scenarios and in longitudinal studies to determine its sensitivity to changes in cognitive function over time. It is easily applicable, with good acceptance by patients and professionals, an application time of 5 to 8 minutes and good sensitivity to discriminate healthy people from those with cognitive impairment, with low interference from culture, language and educational level[83].

RUDAS still needs to be validated in different contexts and through longitudinal studies. Its use may be limited, as it was tested in a restricted sample of elderly people in specific environments. The influence of age on test performance is still uncertain and requires further investigation. Data on its effectiveness in monitoring cognitive changes over time are lacking[7,22,,83,84].

Cognitive assessment instruments are highly relevant in nursing consultations, especially in the context of primary care. The authors suggest six criteria for selecting the most appropriate tool: validation in primary care, usability by the multidisciplinary team, adequate psychometric criteria, no interference due to educational level or cultural prejudices, time < 5 minutes, and finally, free of charge[25].

This review includes a variety of instruments aimed at cognitive assessment in the elderly. However, it is noted that not all of these instruments have been validated or culturally adapted to the Brazilian reality, which may limit their applicability in national clinical practice. Among the validated and most widely used instruments in Brazil, the following stand out: the Mini Mental State Examination (MMSE), the Verbal Fluency Test, the Clock Drawing Test (CDT), the Montreal Cognitive Assessment (MoCA), and the General Practitioner's Assessment of Cognition (GPCOG), among others. These instruments are widely used due to their practicality, reduced application time and good sensitivity in screening for cognitive impairment at different levels of health care[8-11, 16, 22,25,26].

The most widely used cognitive assessment instruments stand out for their practicality, speed and ease of application, and are ideal for clinical and research contexts. These instruments are effective in screening for cognitive deficits, functioning as gold standard tools in initial screening. Their wide scientific acceptance is due to the support of extensive national and international literature. In addition, they are versatile, allowing monitoring of

REVISTA ENFERMAGEM ATUAL IN DERME

clinical evolution and analysis of associated risk factors[9,10,11,26].

In this sense, nurses have many tools at their disposal to perform cognitive screening of elderly individuals, but it is necessary to increase access to these instruments for PHC professionals and to begin their introduction to their application while they are still in their undergraduate studies. Training professionals to recognize easy-to-use instruments and their importance for the correct management of cases is essential for early detection of cognitive decline in elderly individuals and for preventive measures and maintenance of preserved functions to be adopted by the team and by the family and/or caregivers.

In the meantime, the study brings relevant implications for the practice of health professionals, especially for nursing in Primary Health Care (PHC), by mapping effective cognitive assessment instruments for the early detection of cognitive decline in elderly individuals. The use of validated, brief and easy-to-apply tools that enable rapid and culturally appropriate screenings is emphasized. The research also guides the careful selection of instruments based on technical and operational criteria, reinforcing the importance of ongoing training for professionals. The potential of digital technologies in optimizing cognitive screening is also noteworthy. Finally, the adoption of these instruments favors individualized care, aligned with public policies for dementia care.

LIMITATIONS

The limitations of this study include the lack of assessment of the methodological quality of the included studies, an inherent characteristic of scoping reviews, and the descriptive scope of the review, as it may limit the depth of analysis of the identified instruments.

CONCLUSION

This research identified several instruments for cognitive assessment of elderly individuals in Primary Health Care, with the most cited being the Mini-Mental State Examination, the General Practitioner's Assessment of Cognition and the Rowland Dementia Rating Scale. The selection of the most effective cognitive screening tools and their validation for the Brazilian population can foster new studies, debates and research to build a less empirical and more scientific practice, taking into account the sensitivity, specificity and cut-off points of each instrument, which vary according to the target audience.

The invaluable value of research for evidence-based practice is evident, as well as the urgency of actions that promote the training of health professionals, especially nurses, and the need to develop technologies that contribute to the dissemination of the use of these tools in primary care, in order to track cognitive changes early.

The characteristics considered essential for the instruments to achieve the purpose of assessing cognitive functions take into account the non-interference of the level of study or

REVISTA ENFERMAGEM ATUAL IN DERME

cultural prejudices, validation for the multidisciplinary team, application time, free of charge, awareness strategies to reduce stigma and the expansion of cognitive screening through technology.

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REVISTA ENFERMAGEM ATUAL IN DERME

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