BMC Psychiatry

SYSTEMATIC REVIEW Open Access

Current state of dementia screening, risk reduction strategies, and barriers to the uptake of evidence-based dementia care in primary healthcare in Africa: a scoping review and call for implementation research

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Abstract

Introduction Dementia is a growing public health challenge worldwide, particularly in Africa. Although various screening tools have been used across different settings in the region, evidence on dementia screening practices, risk reduction strategies, and barriers to evidence-based dementia care has not been systematically mapped. This scoping review aimed to map the available evidence on dementia screening practices, risk reduction approaches, and barriers to dementia care across Africa.

Methods This scoping review was conducted in accordance with the Joanna Briggs Institute (JBI) methodology for scoping reviews and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) guidelines. The review protocol was prospectively registered on the Open Science Framework (OSF). A comprehensive search of major databases (PubMed/MEDLINE, Scopus, Web of Science, ScienceDirect, Google Scholar) and grey literature was conducted. Eligible studies focused on dementia screening, risk reduction strategies, and barriers to evidence-based dementia care in primary healthcare settings across Africa. Study selection and data extraction were independently performed by three reviewers, and findings were synthesized using descriptive mapping.

Results Of the 3,102 records identified, 16 studies met the inclusion criteria. Nine studies reported dementia screening practices using a range of screening tools, most commonly the Brief Community Screening Instrument for Dementia (CSID) and the Mini-Mental State Examination (MMSE). The available evidence suggests that dementia screening was largely conducted within research settings rather than as part of routine primary healthcare. Six studies identified barriers to evidence-based dementia screening and care, including workforce shortages, limited infrastructure and funding, inadequate training, low policy prioritization, sociocultural stigma, and limited public

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awareness. Only one study evaluated the implementation of dementia risk reduction strategies in an African context, highlighting an important evidence gap.

Conclusions Evidence on dementia screening, risk reduction, and care integration in African primary healthcare remains limited. Key barriers include health system constraints, workforce shortages, inadequate infrastructure and funding, and sociocultural challenges. Future implementation research should evaluate culturally appropriate strategies to strengthen dementia detection, prevention, and integration of dementia services into primary healthcare across Africa.

Keywords Dementia, Screening practices, Risk reduction strategies, Africa

Introduction

Dementia is a progressive, age-related neurodegenerative disorder characterized by cognitive impairments, challenges in performing daily tasks, and personality changes [1]. Common causes of dementia include Alzheimer's disease, vascular dementia, dementia with Lewy bodies, and frontotemporal dementia [2, 3]. Currently, there is no cure or disease-modifying treatment for Alzheimer's disease and related dementias. However, preventive measures such as controlling hypertension and diabetes, engaging in regular physical activity, maintaining a healthy diet, avoiding smoking and excessive alcohol use, and promoting cognitive and social engagement can reduce dementia risk or delay its onset, improve quality of life, and lessen the burden on healthcare systems [4].

Dementia is a major global public health challenge, particularly in light of aging populations [5], and can pose significant economic and caregiving burden on societies and families alike [6]. It is estimated that about two-thirds of individuals affected by dementia are living in low- and middle-income countries [7]. Dementia-related deaths globally increased from 0.56 million in 1990 to 1.62 million in 2019, with an estimated rise to 4.91 million by 2050 [8]. A review of evidence from China reported crude prevalence rates of 9.1% for dementia, 6.0% for Alzheimer's disease, 1.4% for vascular dementia, and 1.8% for other dementias in individuals aged ≥ 65 years. The overall sex- and age-standardized prevalence was 8.8%. Dementia and Alzheimer's disease were more prevalent in females than males (10.3% vs. 7.7%) , with increasing rates by age [9].

Dementia is a major burden in Africa, particularly in sub-Saharan Africa, with an incidence of 2.0% and a prevalence of 5.0% and the key risk factors include advanced age, low education, and poor baseline cognitive function [9, 10]. In Eastern Africa, dementia prevalence ranges from 6 to 23%, and cognitive impairment affects 7–44% of individuals aged 50–70. Risk factors include physical inactivity, poor ventilation, and history of central nervous system infections, chronic headaches, and depression, being unmarried, high alcohol consumption, low income, rural living, and low family support [11]. The pooled crude prevalence of dementia in Nigeria, which is located in Western Africa, is 4.9%, with a significantly higher prevalence in women (6.7%) compared to men (3.1%) [12].

Dementia risk-reduction strategies comprise interventions, behaviors, and policies that target modifiable risk factors to reduce the risk of dementia, whereas evidence-based dementia care integrates the best available scientific evidence, clinical expertise, and patient preferences. Despite the high prevalence of dementia risk factors and the substantial health and economic burden of dementia, no country in sub-Saharan Africa, including Ethiopia, has established a national dementia strategy to guide efforts to implement dementia risk reduction and improve dementia care [13–15].

To the best of our knowledge, no scoping review has systematically mapped the evidence on dementia screening practices, the implementation of dementia risk-reduction strategies, and barriers to the uptake of evidence-based dementia care in Africa. Accordingly, this scoping review aimed to address three questions: (1) the status of dementia screening practices in primary healthcare in Africa (2) , the implementation of dementia risk-reduction strategies in the African context, and (3) barriers to the uptake of evidence-based dementia care in primary healthcare in Africa.

This review maps existing evidence, highlights key knowledge gaps, and provides preliminary insights to inform future research and interventions. The findings are expected to support researchers, academic institutions, and other stakeholders in strengthening dementia detection, prevention, and care, and in informing public health policy in Africa.

Methods

Protocol and registration

The Open Science Framework (OSF) registration number for this scoping review is https://doi.org/10.17605/OSF.IO/ADH5N. We conducted a preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews, and the Joanna Briggs Institute (JBI) Evidence Synthesis to ensure that no current or prior systematic or scoping reviews on the topic had been carried out. This scoping review was conducted in accordance with the JBI

guidelines and methodology for scoping reviews [16]. In addition, the JBI scoping review framework was used for the development of this review protocol. We followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) reporting standard for writing the final report of the scoping review.

Eligibility criteria

Eligibility criteria were based on the Participant, Concept, and Context (PCC) framework to ensure alignment with the study objectives. Studies meeting the following criteria were included: Participants: Studies examining patients screened for dementia or healthcare providers administering cognitive screening tools in primary healthcare (PHC) settings in Africa. Concept: Studies focusing on screening practices, risk reduction strategies, and barriers to the uptake of evidence-based dementia care. Context: Research conducted in PHC settings in Africa. Types of sources were peer-reviewed articles, conference proceedings, and grey literature published in English before January 10, 2024. Articles without full-text access, conference abstracts, non-research publications (editorials, commentaries), and articles published before 2000 were not considered.

Search strategy

We employed a three-step search strategy for the scoping review. First, studies were searched online using EndNote X8 software and manually from PubMed Central (PMC) and Cochrane. This was followed by an analysis of the text words, keywords, MeSH terms, and index terms in the titles and abstracts of the retrieved papers. A second search was conducted using these identified terms in various databases such as PubMed/Medline, Google Scholar, African Online Journals, Science Direct, SCOPUS, and Web of Science. Finally, grey literature was searched through OpenGrey and the Gray Literature Report. The third step of the search involved including additional sources from reference lists, unpublished theses, and grey literature. Article DOIs were used for manual online searches of journals to detect papers missed by EndNote software.

The search was conducted from October 15, 2024, to January 10, 2025. Collected references were screened using inclusion and exclusion criteria. MeSH terms were generated from PubMed/Medline, PubMed/PMC, and Cochrane databases, as well as MeSH term analysers. Search terms were used independently and/ or in combination with "OR" or "AND" operators, including: (dementia OR "Alzheimer Disease" OR "Mild Cognitive Impairment") AND (screening OR "risk reduction" OR prevention OR "healthcare delivery" OR "primary health care" OR "primary care" OR barrier* OR implementation OR uptake) AND (Africa OR "Sub-Saharan Africa" OR "Africa South of the Sahara" OR "Eastern Africa" OR "Western Africa" OR "Central Africa" OR "Northern Africa" OR "Southern Africa" OR specific country names such as South Africa OR Ethiopia OR Nigeria OR Kenya OR Mozambique OR Namibia).

Selection of publications and data extraction

After the search, citations were collated and uploaded into EndNote X8.2.1 software, with duplicates removed. Three independent reviewers (MBD, DZ, and TA) screened titles and abstracts against the inclusion criteria, followed by full-text retrieval and citation importation. The selected full texts were assessed in detail by the reviewers. Reasons for exclusion were documented, and any disagreements were resolved through discussion. The final results, including the study inclusion process, were reported in the scoping review and presented in a PRISMA-ScR flow diagram.

We developed the data charting form in an Excel spread sheet by the review team, which included all required variables. Data was extracted from the papers included in the scoping review by three independent reviewers (MBD, DZ, and TA) using a data extraction tool adapted from the JBI manual format and guidelines for scoping reviews. The extracted data included specific details about the author, year of publication, participants, concept, context, study methods (i.e., study design, tools, and sample size), and key findings relevant to the scoping review questions. After adaptation, the three reviewers piloted the draft of the data extraction form on three articles, which were selected independently before the actual review. Based on the pilot results, the draft data extraction tool was modified and revised. Any disagreements between the reviewers were resolved through discussion.

Data analysis and presentation

Data from the included sources were extracted, charted, and synthesized using a descriptive and narrative approach. Descriptive numerical summaries were used to present the characteristics of included studies, including publication year, study design, geographical distribution, study settings, and participant characteristics. A narrative synthesis was conducted to summarize findings related to dementia screening practices, risk reduction strategies, and barriers to evidence-based dementia care. Extracted data were organized into thematic categories based on the review objectives and the Participant, Concept, and Context (PCC) framework. Evidence gaps and areas requiring further research were identified through comparison of findings across studies. The synthesized results were presented using tables, figures, and descriptive summaries to provide an overview of the current evidence landscape.

Results

The search yielded a total of 3,102 papers, including those identified from the reference lists of the selected articles ($n = 57$). The evidence primarily consisted of peer-reviewed research articles, covering studies that examined screening practices, barriers to the uptake of dementia care, and dementia risk reduction strategies, with varying levels of detail and methodological rigor.

After eliminating 2,729 duplicates, three independent reviewers screened a total of 373 articles, with 291 excluded based on predefined criteria. Full-text screening was conducted on the remaining 82 articles, of which 68 were excluded, with reasons provided. Ultimately, 16 articles met all inclusion criteria and were included in the final synthesis (Fig. 1).

In this scoping review, a variety of study designs were reported in the included studies. Twelve studies employed a cross-sectional study design [14, 15, 17–23], one study used a descriptive cross-sectional study design [24], two studies utilized a mixed-methods design [17, 25], and one study was based on randomized contriled trail (RCT) design [26]. Most of the studies focused on persons with dementia, while others targeted caregivers, community health workers, and healthcare providers. Additionally, some studies focused on key stakeholders, including policymakers, researchers, and individuals with dementia. The studies primarily recruited older participants (aged 65 years and older), with sample sizes ranging from 20 to 4,128 participants. One study reported a sample size of 20 participants aged 70 years and older, and one study did not report its sample size (Table 1).

The status of dementia screening practices

Among the nine included studies [14, 15, 17–23], Among the nine included studies, dementia screening was reported using a range of screening tools across different populations and settings. Most studies described screening within research projects rather than routine primary healthcare services, suggesting limited evidence on standardized or integrated screening pathways in the included settings (Table 1).

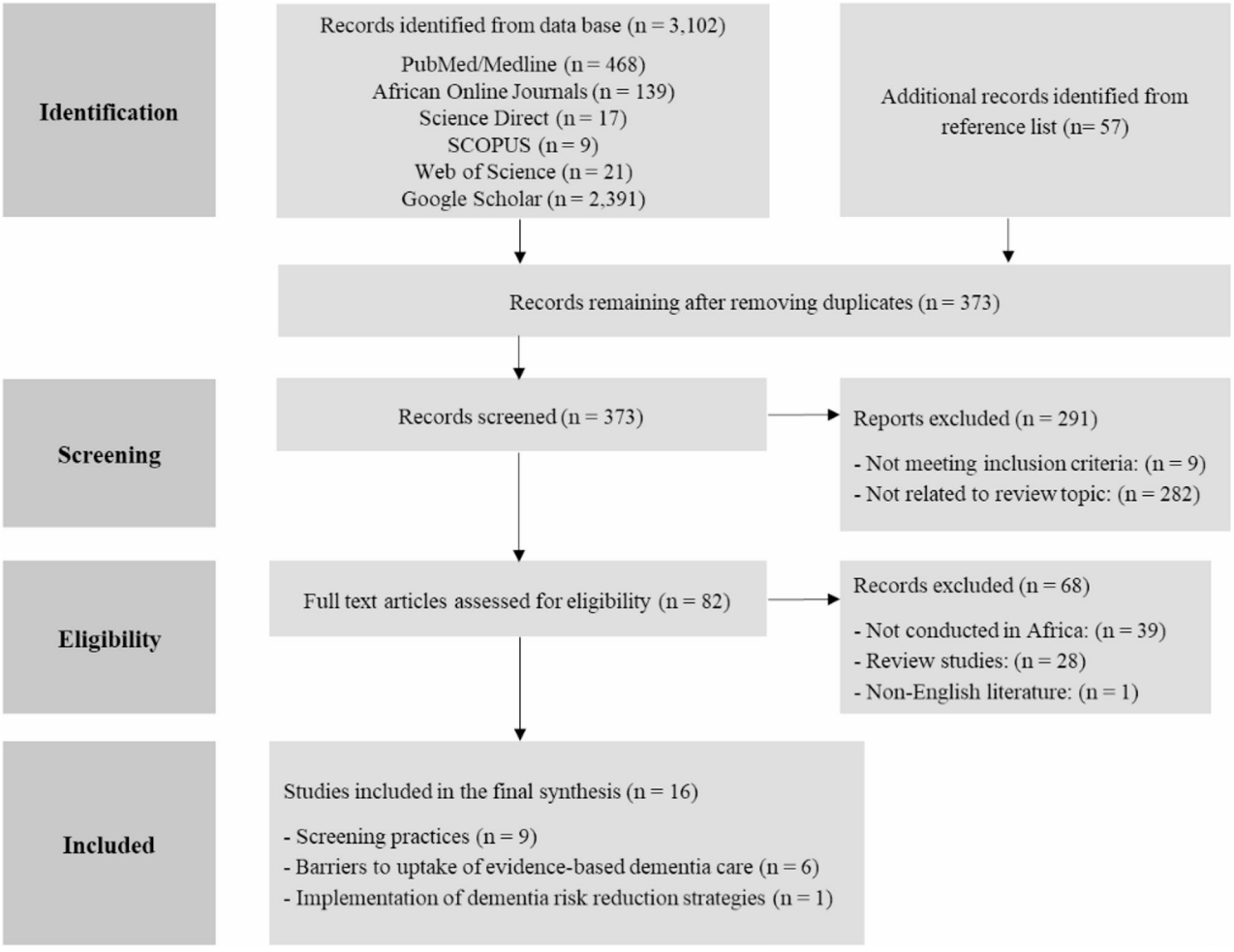


Fig. 1 Flow diagram (based on PRISMA-ScR)

Table 1 Characteristics of studies on dementia screening practices in Africa, 2024

Authors, Year	Design	Sample size	Screening tool/ data collection tools	Participants	Concept	Context (country)	Key findings
Muyela A, et al., 2023 [15]	Cross-sectional	672	Community Screening Instrument for Dementia (CSID)	Older persons aged ≥ 60 years	Dementia screening practices	Kenya	Among 672 older adults screened using CSID for dementia, 209 participants screened positive, representing 31.1% (95% CI: 27.6% to 34.8%).
Gela YY, et al.,2020 [18]	Community-based cross-sectional study	403	Standardized Mini-mental State Examination (SMMSE) tool	Older persons aged ≥ 60 years	Cognitive impairment screening	Ethiopia	Screened positive for dementia via SMMSE: 43.8% • Male: 57.5% • Female: 44.8%
Parisian MN, et al.,2011 [21]	Cross-sectional community-based study	1,162	Community Screening Interview and the Five-Word Test	Older persons aged ≥ 60 years	Estimating dementia burden via screening	Benin	About 3.7% (95% CI: 2.6–4.8) of the study participants screened positive for dementia. The burden increased with age and was higher among women than men.
Musyimi CW, et al., 2024 [14]	Cross-sectional community-based study	3,546	Community Screening Instrument for Dementia (CSI-D)	Older persons ≥ 60 years	Dementia Screening practices in Rural Kenya	Kenya	Of the participants, 652 screened positive for dementia (PR = 18.4, 95% CI: 17.1–19.7). Older age was strongly linked to a higher likelihood of screening positive, with those aged 100 + being 5.31 times more likely than those aged 60–64.
Alinatiwe R, et al., 2023 [17]	Sequential explanatory mixed methods study	385	Alzheimer's Disease scale 8 (AD8) and Mini Mental State Examination (MMSE)	Community Health Workers (CHWs), and Primary Care Officers (PCOs)	Feasibility of screening for cognitive impairment	Uganda	The study included 12 Community Health Workers (CHWs), 75% of whom were female, and having at least a secondary education (66.7%). There was a 96.4% agreement between Primary Care Officers (PCOs) and CHWs in identifying cognitive impairment. PCOs identified 14% of older adults with cognitive impairment, while CHWs identified 15%. Of those identified by CHWs, 93.1% were referred for care.
Vander J, et al., 2006 [23]	Cross-sectional	54 men and 12 Women	Questionnaire based test and Clock test method	Older persons aged ≥ 60 years	Screening for dementia practices	Nigeria	Dementia screening practices was done to compare the results of two tools used in the investigation. Discrepancy between the results of Questionnaire based test and Clock test method in screening of dementia.
Gray WK et al. ,2021 [19]	Cross-sectional	4,128	Consortium to Establish a Registry for Alzheimer's Disease (CERAD) 10-word list &IDEA cognitive screen	Older persons aged ≥ 60 years	Cognitive screening tool	Sub-Saharan Africa	A total of 3,011 people in Tanzania (i.e., 57.3% females and 26.4% uneducated) and 1,117 in Nigeria (i.e., 60.3% females and 64.5% uneducated) were screened. Individuals with higher age, lower education, and female gender obtained lower scores.
Robbins R, et al., 2018 [27]	Cross-sectional study	102	NeuroScreen and a gold standard neuropsychological test battery	HIV-positive black South African adults, aged 18 to 56 years	Neurocognitive impairment	South Africa	About 13 out of 102 study participants were dementia screen positive (13 of 102). About 26.5% (27/102) were screened using the gold-standard test battery. The sex-adjusted NeuroScreen scores were 81.48% and 74.67%, respectively. NeuroScreen is a highly automated, easy-to-use, tablet-based screening test designed to detect NCI.
Mfene XP, et al., 2024 [20]	Cross-sectional, one-phased, household study	302	Mini-Mental Status Exam, Ascertain Dementia Eight-item questionnaire and Instrumental Activities of Daily Living Scale.	Older adults aged ≥ 60 years	Screening for dementia and associated factors.	South Africa	Dementia screen positive: 13.4%. Risk factors: aged 80 years and above; single participants showed an almost seven-fold increase in dementia, and having a history of depression

Despite variation in tools and settings, a consistent pattern across studies was the absence of standardized or integrated screening pathways, with most activities occurring within research contexts rather than routine primary healthcare services. Reported prevalence of positive screening outcomes varied widely (approximately 3.7% to 43.8%), reflecting differences in tools, populations, and study designs [18, 21]. However, across studies, older age, lower educational attainment, and female sex were consistently associated with higher likelihood of cognitive impairment or lower screening scores [19, 21] (Table 1).

In addition, one study highlighted inconsistencies between different screening tools applied within the same populations, suggesting variability in diagnostic performance and limited harmonization of approaches [23]. Emerging evidence from task-shifting models showed promising results, with community health workers demonstrating high agreement with clinical officers in identifying cognitive impairment and supporting referrals, indicating potential for scalable screening approaches in resource-limited settings [17]. Overall, the included studies suggest that dementia screening practices vary considerably across the reported settings, with limited evidence of routine implementation within primary healthcare services (Table 1).

Barriers to the uptake of evidence-based dementia screening and care

Six included studies reported barriers to the uptake of evidence-based dementia screening and care in primary healthcare settings across Africa. Health system and resource-related barriers included shortages of financial and trained human resources, infrastructural limitations, lack of time, and the impact of external pressures such as the COVID-19 pandemic [28, 24, 30]. Workforce and training-related barriers were also frequently reported, including understaffing for prolonged time, lack of trained mental health specialists, insufficient skills and knowledge among healthcare providers, limited involvement of primary healthcare workers in dementia care, and inadequate awareness of screening practices [29, 31]. Sociocultural barriers were similarly identified across studies, including stigma and misconceptions about dementia, caregiver burden and readiness challenges, absence of caregivers, and broader cultural dynamics affecting help-seeking behavior [28, 29, 25]. In addition, policy and governance-related barriers were reported, including lack of political will, weak policy implementation and dissemination, insufficient inter-sectoral collaboration, absence of regulatory frameworks, and limited availability of practical or locally adapted guidelines [30, 25, 31] (Table 2).

In short, the findings across studies consistently highlight a combination of structural, workforce, sociocultural, and policy-level barriers affecting the uptake of evidence-based dementia screening and care in primary healthcare settings in Africa (Table 2).

The state of implementation of dementia risk reduction strategies

To the best of our searching, only one included study [32] evaluated the implementation of dementia risk reduction strategies in an African context. Conducted in Kenya and Nigeria, the study described a co-designed, multimodal lifestyle intervention targeting both cognitive and physical health among individuals at increased risk of dementia. The intervention emphasized stakeholder engagement, culturally appropriate adaptation, and health education. Given that only one eligible study was identified, the available evidence is insufficient to draw broader conclusions regarding the implementation of dementia risk reduction strategies across Africa and highlights an important evidence gap requiring further implementation research(Table 3).

Discussion

Despite the growing concern over dementia in many parts of Africa [33–37], particularly as the continent observes an aging population as many other parts of the world as well, Our scoping review identified only a limited number of studies reporting dementia screening practices in African primary healthcare settings. While lthough consideble number of studies used standardized tools such as the Mini-Mental State Examination (MMSE) and the Brief Community Screening Instrument for Dementia (CSID), the available evidence suggests that dementia screening is not yet routinely integrated into primary healthcare in the reported settings. Most screening activities were conducted within research contexts rather than routine health services, highlighting important evidence gaps regarding standardized screening pathways and national implementation.

Moreover, included studies employed a range of tests and evaluations to identify people at risk for dementia. Largely, our results implies that there is a lack of systematic implementation and reliable, comprehensive, culture-adapted screening tools, and only a limited number of studies are available highlighting significant gaps in dementia screening practices across the continent. However, it must be noted that there are also great opportunities for further investigation and action for dementia screening practices in primary healthcare units in Africa. The current low amount of research on dementia screening practices might be due to different factors, including but not limited to the absence of standardized approach or consensus, limited information on screening

Table 2 Characteristics of studies on barriers to the uptake of evidence-based dementia screening and care in Africa, 2024

Authors, Year	Design	Sample size	Screening tool/ data collection tools	Participants	Concept	Context (country)	Key findings
Oyinlola O., et al., 2024 [28].	Cross-sectional, study		NA	NA	Addressing the challenges of dementia care	Nigeria	Identified barriers: Resource constraints, infrastructural limitations, and cultural barriers, and familiar caregivers' challenges.
Muwanguzi M, et al., 2023[29]	Cross-sectional study	20 in-depth interviews	Capacity, Opportunity, Motivation Behavioral change (COM-B) model	Clinical officers, enrolled nurses, and a psychiatric nurse	Barriers of routine cognitive impairment screening in a primary healthcare setting	Uganda	Identified barriers to uptake of evidence-based dementia care include: chronic understaffing, primary healthcare provider non-involvement, lack of training/skills, lack of knowledge and awareness in screening, absence of caretakers, lack of patient awareness of cognitive problems.
Awenva AD, et al.,2009 [30]	Cross-sectional study	122 respondents participated in semi-structured interviews (SSIs) and 6 FGDs	n-depth interviews and FGD, WHO Mental Health Policy and Plan Checklist	Key stakeholders in mental health at the macro, meso and micro levels	Barriers of evidence based mental health implementation	Ghana	Identified barriers include: low priority and lack of political commitment to mental health; limited human and financial resources; lack of inter-sectoral collaboration and consultation; inadequate policy dissemination; and an absence of research-based evidence.
Koeuth, S, et al., 2023 [24]	Descriptive study	HCP ($n=15$) and administrators ($n=14$)	Semi-structured interview guide	Healthcare professionals' and administrators' perspectives	Barriers of completing training and implementing dementia care	Sudan	Barriers identified include: lack of time, staff shortages, caregiver readiness and the Coronavirus-19 (COVID-19) pandemic challenges as perceived challenges
Anyebe EE, et al., 2023 [25]	Convergent mixed method	191	Questionnaires and in-depth interviews	Primary healthcare workers from the 47 selected primary healthcare centres	Barriers to the provision of community-based mental health service	Nigeria	Identified barriers to community based mental health services include: stigma and misconceptions, fallouts of policy failure and lack of political will at Federal, State and Local government levels and socio-cultural dynamics.
Wakida EK, et al., 2018 [31]	Cross-sectional study	20 in-depth interviews	Semi-structured qualitative interview guide	Primary care providers (PCPs)	Barriers and facilitators to the integration of mental health services into primary healthcare	Uganda	Identified barriers include: inadequacy in knowledge about mental disorders; no senior cadre to consultations in mental health, limited supply of hard copies of guidelines and not practical for local setting. lack of trained mental health specialists; conflicting priorities; and no regulatory measures to encourage screening for mental health.

tools for early detection that are adapted to the African context or regional culture, a lack of trained healthcare professionals, limited resources, the fact that dementia is often overlooked or misdiagnosed due to cultural stigma, low awareness, and competing health priorities. In this regard, our findings were consistent with previous studies [38–41], and these findings highlight the need for additional research on culturally appropriate screening tools and implementation approaches in African primary healthcare settings.

Primary healthcare units are often the first point of contact for individuals with dementia symptoms [42–44]. However, due to limited resources, inadequate training among healthcare providers or other system-related challenges, diagnoses may not be made or delayed, particularly in early disease stages; early diagnosis and intervention are critical for improving the quality of life for individuals with dementia [45, 46]. It will thus be important to address current challenges related to dementia screening in primary healthcare units in Africa, e.g., through adequate resource allocation, training, development of culturally appropriate and loacly validated tools, and widespread public health initiatives.

Furthermore, based on the evidences identified through our search, only six articles were included that identified barriers to the uptake of evidence-based dementia care in primary healthcare settings across Africa. These studies highlight a variety of barriers that may significantly impact the adoption of dementia care. Those barriers include but are not limited to resource constraints which may affect the availability or shortage of diagnostic tools and trained personnel such as primary healthcare

Table 3 Characteristics of studies on barriers to the uptake of evidence-based dementia screening and care in Africa, 2024

Authors, Year	Design	Sample size	Screening tool/ data collection tools	Participants	Concept	Context (country)	Key findings
Udeh-Momoh CT, et al., 2024 [26]	Randomized control trial (RCT)	600	Community-based participatory research (CBPR) approach	600 at-risk adults (aged ≥ 50 years)	Dementia risk reduction in the African context: Multi-national implementation of multimodal strategies to promote healthy brain aging in Africa	Nigeria and Kenya	Program addresses cognitive and physical health concerns and has significant potential to alleviate the effects of other age-related chronic conditions at both the community and societal levels, through the co-designed comprehensive multimodal lifestyle-based prevention protocol tailored for individuals at elevated risk of dementia in an African setting. Moreover, the inclusive engagement of stakeholders, with a deliberate focus on empowering female candidates in science, technology, engineering, and mathematics roles and offering health education on CI and dementia, is poised to catalyse future collaborations in research the region.

providers or mental health specialists, infrastructural limitations such as reduced healthcare access or limited knowledge and awareness of screening, cultural barriers also related to stigma or misconceptions that may discourage individuals and families from seeking help or acknowledge cognitive impairment, and challenges faced by family caregivers or absence of caregivers [47–49]. Additional barriers mentioned in studies that may hinder the uptake of evidence-based dementia care and screening, were insufficient political commitment to mental health, lack of inter-sectoral collaboration, inadequate policy dissemination, the absence of research-based evidence significantly [50–52]. The identified barriers suggest that strengthening workforce capacity, improving policy implementation, increasing public awareness, and enhancing health system support may facilitate the integration of dementia care into primary healthcare, and will be essential to improve dementia care and ensure individuals receive timely and appropriate support [53–55].

Our scoping review findings indicate that the implementation of dementia risk reduction strategies in Africa is limited. Existing strategies are often not context-specific and do not fully consider the unique socio-cultural, economic, and healthcare challenges in African countries [56–58]. There are only a few programs targeting dementia risk reduction, and they lack extensive evidence or widespread application [44, 59]. Lifestyle interventions and public health campaigns focused on managing chronic conditions (like hypertension, diabetes, and cardiovascular disease) are sometimes part of the broader public health strategies, but they do not typically focus on dementia prevention or risk reduction in a tailored manner for the African context [60, 61]. The adapted cognitive stimulation therapy intervention was found to be feasible and acceptable for participants and carers. Key adaptations included adjusting treatments for illiteracy, sensory impairments, and cultural differences, as well as using locally available materials to ensure sustainability. It was successfully tailored for use in sub-Saharan Africa [62].

Despite dementia risk reduction being a global health priority and despite a projected rise of dementia cases due to population aging [63, 64], our search identified very few study in Africa contexts that investigated the implementation status of WHO-recommended dementia risk strategies. This lack of comprehensive implementation of recommended strategies and targeted interventions or programs may be attributed to several factors, including limited awareness, insufficient healthcare resources, cultural stigma, and limited government support [65–68]. Addressing these challenges requires a comprehensive, multifaceted approach, including but not limited to raising awareness, improving healthcare infrastructure, providing education and training, addressing cultural barriers, increasing funding for research, and integrating dementia prevention into broader public health policies [69–71]. We also noted that gaps exist between academic research, clinical practice, and public policy related to dementia risk reduction implementation.

Regarding clinical implication, our scoping review results highlighted that the need to integrate simple dementia screening tools into primary healthcare to

support early screening, referral pathways and can improve access, continuity of care, and support for patients and caregivers. Strengthening training for healthcare workers is essential to improve diagnosis and basic dementia care. Clinical practice should also emphasize prevention by addressing modifiable risk factors such as hypertension, diabetes, and lifestyle behaviors. Additionaly, implications for clinical practice and stakeholders derived from this scoping review include a call for more systematic and widespread integration of basic dementia care into all health tier systems which may address the shortage of specialists and improve accessibility for patients and their families [72–74]. The findings suggest that integrating simple, culturally appropriate dementia screening approaches into primary healthcare may improve opportunities for early detection, referral, and continuity of care. However, further implementation research is needed to evaluate the feasibility, acceptability, and effectiveness of these approaches in different African contexts [75–77]. Feasible, low-cost interventions to promote risk reduction or decrease symptoms in patients should be developed for low-resource settings. Finally, increased funding for dementia care infrastructure and partnerships with dementia research organizations are essential for early detection, management and scaling up care initiatives.

Future implementation research should prioritize the co-development and evaluation of culturally appropriate dementia screening, risk reduction, and care strategies, while assessing their feasibility, acceptability, effectiveness, and sustainability within African primary healthcare systems. It should involve engaging with communities to understand perceptions of dementia and address barriers to screening and care, and there is a need for low-cost, culturally appropriate screening tools, as well as an exploration of healthcare providers' attitudes toward dementia. Research should also examine how training and policy reforms can improve care and integrate dementia care into existing health systems, addressing barriers like workforce training and funding limitations.

Strengths and limitations of the review

Strengths

This scoping review findings highlighted important gaps that may inform regional policy revisions based on the local context and the development of localy and culturally appropriate, context-specific interventions. The review underscores the need to comprehensively and consistently integrate early dementia screening and care into primary health care systems and provides a foundation for future research, including the development of culturally adapted screening tools and evaluation of risk reduction strategies tailored to African settings.

Limitations

This scoping review has considerable limitations. As a scoping review, its primary aim was to map the available evidence rather than assess intervention effectiveness or establish causal relationships. In accordance with scoping review methodology, no formal quality appraisal or risk-of-bias assessment was conducted. The review was limited to English-language publications and studies published up to January 2025. As the literature search was not updated before publication, more recent studies published thereafter were not included, which may affect the timeliness and completeness of the evidence. In addition, the included studies varied in their designs, settings, populations, and reported outcomes, limiting direct comparisons across studies. Therefore, the findings should be interpreted as a descriptive overview of the available evidence rather than a comprehensive summary of the most recent literature on dementia screening, risk reduction, and evidence-based dementia care in Africa.

Conclusions

Our scoping reviewe mapped the available evidence on dementia screening practices, risk reduction strategies, and barriers to evidence-based dementia care in primary healthcare across Africa. The findings indicate important evidence gaps and suggest that dementia services remain limited in many African settings, with reported challenges related to health systems, workforce capacity, infrastructure, funding, and sociocultural factors. Future implementation research should prioritize the development and evaluation of culturally appropriate strategies for dementia risk reduction, early detection, and integration of dementia services into primary healthcare to strengthen the evidence base for policy and practice across Africa.

Acknowledgements

The authors express gratitude to English language professionals for their assistance in correcting grammatical errors, tenses, and punctuation.

Author contributions

All authors participated in data extraction, critical appraisal, analysis, drafting, or revising the article, approved the final version for publication, and agreed to be accountable for the work. Conceptualization: MBD, JKR, and YEG. Data curation: MBD, KB, and DZ. Formal analysis: MBD, TA, and KB. Investigation: MBD, KB and DZ. Methodology: MBD, YEG, and LO. Software: MBD and TA. Validation: DZ and TA. Visualization: MBD, AT, and JKR. Writing original draft: MBD, TA and DZ. Writing - review and editing: MBD, JKR, YEG, AT and KB.

Funding

This review project did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate
No ethical approval was needed because the data was collected and analysed from previously reported research where informed consent had been obtained from participants.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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Received: 27 February 2025 / Accepted: 11 August 2026
Published online: 19 August 2026

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