SYSTEMATIC REVIEW

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DEVELOPING A COMPREHENSIVE CARE MODEL FOR FRAILTY MANAGEMENT: A SYSTEMATIC REVIEW

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ABSTRACT

INTRODUCTION:

Frailty among older adults represents a growing public health challenge, especially in resource-constrained settings such as South-West Nigeria, where limited healthcare access and weak infrastructure exacerbate vulnerability. In response, Comprehensive Care Models (CCMs) have been proposed as a viable strategy for managing frailty through integrated, patient-centered, and multidisciplinary approaches.

OBJECTIVE:

This systematic review investigates the prevalence of frailty, evaluates the availability and effectiveness of existing healthcare services, and examines the feasibility and sustainability of implementing CCMs in South-West Nigeria. A narrative synthesis of peer-reviewed studies published between 2016 and 2024 was conducted to identify recurring patterns, themes, and gaps in current evidence.

RESULTS:

The review reveals that frailty prevalence among community-dwelling older adults varies widely, influenced by age, mobility status, comorbidities, and socioeconomic conditions. Healthcare services remain fragmented, under-resourced, and poorly adapted to geriatric needs, limiting the capacity for comprehensive care delivery. Nevertheless, community-based initiatives and informal caregiver support systems demonstrate potential for integration within CCM frameworks. Major barriers include financial limitations, workforce shortages, and cultural perceptions of aging, while facilitators encompass strong family networks, community solidarity, and social trust that can be leveraged for CCM adoption.

CONCLUSION:

Adapting and implementing context-specific CCMs could significantly enhance frailty management and health outcomes among older adults in South-West Nigeria. Key strategies should focus on mobilizing community resources, strengthening healthcare infrastructure, and expanding health literacy and geriatric training. Future research should prioritize pilot CCM interventions to evaluate their scalability, cultural acceptability, and long-term sustainability within local health systems

KEYWORDS:

Frailty, Elderly Care, Comprehensive Care Models, Healthcare Services, Narrative Synthesis

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INTRODUCTION:

Frailty, a multidimensional syndrome characterized by a decline in physiological reserve and increased vulnerability to adverse health outcomes, represents a significant challenge in aging populations worldwide[1].It is closely associated with diminished quality of life, higher healthcare utilization, and increased

mortality [2]. The aging process, coupled with the global demographic shift towards older populations, necessitates the development of effective care models to address frailty's multifaceted nature. Current approaches to managing frailty vary widely across healthcare systems, often emphasizing reactive treatments rather than proactive and holistic interventions [3]. This fragmented care framework overlooks the complex interplay of physical, psychological, and social factors contributing to frailty. A comprehensive care model, integrating prevention, early identification, and tailored management strategies, could significantly improve outcomes for frail individuals and reduce the burden on healthcare systems.

The United Nations has recognized the global trend of population aging [4]. This points to the importance of frailty as a critical health concern. Like in many other developing nations, Nigeria has a high rate of frailty [5, 6] which makes it challenging for the healthcare system to satisfy the needs of the elderly. A targeted and situation-specific strategy for care management is required due to the rising incidence of frailty among South-West Nigeria's older population. Due to its increased susceptibility to stressors, frailty can lead to serious problems like falls, disability, and death [7, 8]. Statistics show that Nigeria is experiencing demographic changes, causing its population to increase exponentially [4]. By 2050, it is predicted that a sizable share of the population will be old. Cultural dynamics, socioeconomic inequality, and differences in healthcare facilities have a significant impact in Southwest Nigeria [9].

Specifically, the aging population in South-West Nigeria presents unique challenges to the region's healthcare system, which is already burdened with infrastructural inadequacies and resource constraints [9]. As life expectancy increases, so does the prevalence of chronic illnesses and the need for specialized care among the elderly. However, existing healthcare systems often fail to provide the continuous, holistic, and multidisciplinary care required to meet these needs, leading to gaps in service delivery and suboptimal patient outcomes. Given this undeniable fact, Comprehensive Care Models CCMs) have been proposed as a transformative approach to addressing these issues. CCMs aim to integrate medical, social, and community-based services into a cohesive framework that prioritizes patient-centered, continuous care. The model emphasizes collaboration among healthcare professionals, informal caregivers, and community resources, which aligns with the strong community networks and caregiving traditions inherent to the culture of South-West Nigeria.

Globally, CCMs have demonstrated success in improving healthcare outcomes in high-income countries and, to a lesser extent, in resource-limited settings [10]. However, the translation of these models to regions like South-West Nigeria requires careful consideration of unique socio-economic, cultural, and healthcare-related factors [11]. For instance, the reliance on informal caregivers and community structures could be a strength or a challenge, depending on the level of training and support available to these caregivers. Similarly, financial barriers, including out-of-pocket healthcare expenditures, may limit access to care and hinder the sustainability of CCMs [12]. Despite its theoretical potential, the feasibility of implementing CCMs in this context is uncertain, as the healthcare system grapples with systemic challenges such as limited funding, insufficient healthcare personnel, and fragmented service delivery mechanisms.

Systematic reviews of care models for frailty provide critical insights into best practices and evidence-based interventions. Existing literature underscores the importance of multidisciplinary collaboration, personalized care plans, and community-based initiatives in addressing frailty's complexities [13]. However, gaps persist in understanding the optimal structure, delivery mechanisms, and contextual factors influencing the effectiveness of these models across diverse populations.

Hence, this systematic review aims to evaluate the Comprehensive Care Models (CCMs) for the elderly in South-West Nigeria. It focuses on identifying barriers and facilitators, examining healthcare infrastructure and community involvement, and exploring global evidence on CCMs in comparable low-resource settings. This systematic review aims to synthesize existing evidence on frailty care models, emphasizing

their components, implementation strategies, and outcomes. By identifying best practices and highlighting areas for improvement, this study seeks to inform the development of a comprehensive, adaptable care model for frailty management that aligns with the needs of aging populations globally.

Methods:

Data Collection and Selection of Studies

A systematic and structured approach was employed to identify and select relevant studies for this review, following established guidelines to ensure rigor and transparency.

Search Strategy

A comprehensive literature search was conducted across multiple electronic databases, including PubMed, Scopus, Web of Science, and Google Scholar. The search combined carefully chosen keywords and Boolean operators to capture a broad yet focused set of studies related to frailty and comprehensive care models (CCMs).

Examples of search strings included:

- "Frailty prevalence" AND "community-dwelling elderly" AND "South-West Nigeria"
- "Comprehensive Care Models" OR "geriatric care" AND "low-resource settings"
- "Elderly healthcare services" AND "feasibility" OR "acceptability"
- "Sustainability" AND "frailty management"

The search was restricted to peer-reviewed articles published between 2016 and 2024 to ensure the inclusion of recent and relevant evidence. Additionally, reference lists of included studies were manually screened to identify other potentially eligible articles.

Selection Process

The initial search yielded 2,345 records. After removing duplicates, 1,823 articles remained and were screened by title and abstract to exclude irrelevant studies. Following this, 75 full-text articles were reviewed in detail based on predefined inclusion and exclusion criteria. Ultimately, 21 studies were selected for inclusion in the final synthesis.

Inclusion criteria required that studies:

- Focused on frailty prevalence, healthcare services for older adults, or the implementation of CCMs in low- and middle-income countries (LMICs)
- Involved community-dwelling elderly populations
- Were published in English between 2016 and 2024
- Provided insights into feasibility, acceptability, or sustainability of CCMs

Exclusion criteria included:

- Studies not directly addressing frailty or elderly care
- Articles without accessible full text or insufficient methodological rigor
- Studies conducted exclusively in high-income countries with limited applicability to the South-West Nigerian context

Data Extraction and Synthesis

Key data were systematically extracted from each included study, covering:

- Study design, location, and sample characteristics
- Main findings on frailty prevalence and associated risk factors
- Insights on existing healthcare services and their adequacy
- Evidence related to the feasibility, acceptability, and sustainability of CCMs
- Identified barriers and facilitators relevant to frailty management

Extracted data were grouped and analyzed thematically using a narrative synthesis approach, which allowed for the integration of diverse study designs and contexts.

Risk of Bias Assessment

To enhance the rigor of the systematic review, we implemented a detailed risk of bias assessment. Two independent reviewers were involved in the screening and study selection process to minimize selection bias. Discrepancies between reviewers were resolved through discussion or by consulting a third reviewer. This approach ensured that studies included in the review met the predefined inclusion criteria and were relevant to the research objectives. The risk of bias for each included study was evaluated using standardized tools appropriate for the study designs.

For randomized controlled trials, the Cochrane Risk of Bias tool was used to assess domains such as random sequence generation, allocation concealment, blinding, incomplete outcome data, selective reporting, and other potential sources of bias. For observational studies, we utilized the Newcastle-Ottawa Scale (NOS), focusing on selection, comparability, and outcome assessment.

Study Quality Evaluation

The quality of included studies was systematically assessed using the Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) framework. This approach evaluated the certainty of evidence based on factors including study design, consistency of results, directness of evidence, precision, and risk of bias. Each study was rated as high, moderate, low, or very low quality, and these ratings were incorporated into the synthesis of findings to provide context for the reliability of the results.

Additionally, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed to ensure transparency in reporting the review process, including literature search strategy, study selection, and data extraction. This structured methodology contributes to the credibility of the review and facilitates reproducibility by future researchers.

During the review process, a potential inconsistency was identified between the inclusion criteria and the search strategy. The inclusion criteria specified that studies must focus on frailty prevalence, healthcare services for the elderly, or the implementation of Comprehensive Care Models (CCMs) in low- and middle-income countries, with publications limited to English from 2016 to 2024. However, the search criteria also included additional terms such as "Integrated Care," "Community-based Care," and "Sustainability," which may have led to the retrieval of studies that did not fully align with the inclusion criteria.

To address this issue, we reviewed the search and inclusion processes to ensure alignment. This involved:

1. **Reconciling Search Terms:** Updating the search strategy to reflect the key elements of the inclusion criteria more precisely while retaining sufficient sensitivity to capture relevant studies.

2. **Justifying Discrepancies:** If certain search terms were broader than the inclusion criteria, this was intentional to capture a wider array of studies for initial screening. These studies were subsequently excluded during the full-text review if they did not meet the predefined inclusion criteria.

3. **Documentation:** A detailed explanation of these adjustments was included in the methodology section to ensure transparency. A revised PRISMA flowchart reflecting these refinements has been provided to document the number of studies included and excluded at each stage.

This approach ensures that the search strategy remains comprehensive while aligning with the study objectives, maintaining the integrity of the systematic review.

Compliance with Systematic Review Protocols and Ethical Guidelines

This manuscript follows standard protocols for systematic reviews to ensure methodological rigor and transparency. The review process adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which include detailed documentation of the search strategy, inclusion and exclusion criteria, study selection, data extraction, and synthesis of findings. These steps were undertaken to promote reproducibility and reduce the risk of bias.

Ethical Considerations

As a systematic review, the study did not involve primary data collection, and therefore no ethical approval was required. However, the following steps were taken to ensure compliance with ethical guidelines:

1. **Use of Peer-Reviewed Literature:** Only peer-reviewed and publicly available studies were included, ensuring the ethical use of published data.
2. **Proper Attribution:** All sources cited in this review were appropriately referenced to uphold academic integrity and acknowledge the contributions of original authors.

3. **Conflict of Interest:** The authors declared no conflicts of interest, and funding sources were transparently disclosed as none.

By adhering to these protocols, the review ensures alignment with ethical standards for research and the principles of systematic review methodology.

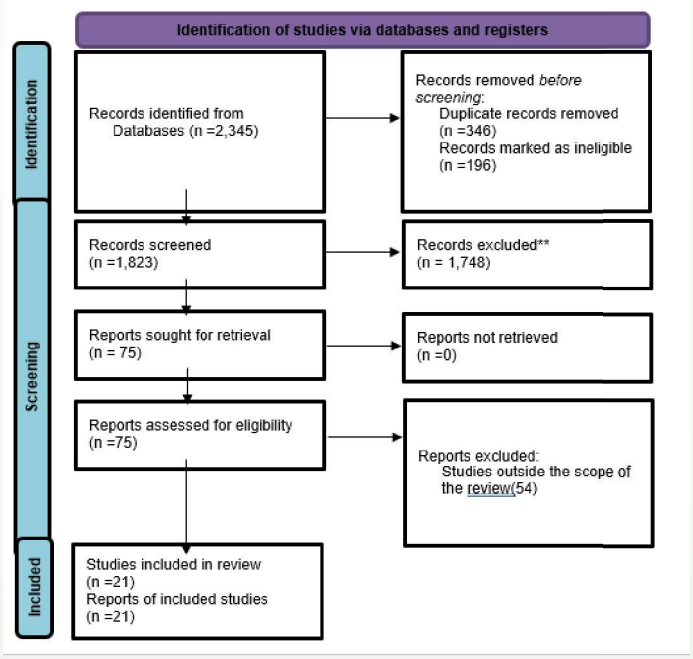

Fig 1: PRISMA diagram of article selection process for the review

TABLE 1: SUMMARY OF REVIEWED STUDIES

S/N	Title/Author/Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
1.	Prevalence and Factors Associated With Frailty Among Community-Dwelling Middle-Aged and Older Adults in Malaysia (Hiziani et al. 2024).	The primary objective of the study was to analyze nationally representative data to determine the prevalence of frailty and the factors associated with it among community-dwelling middle-aged and older adults in Malaysia. This includes understanding how frailty impacts health and dependency in this demographic.	Key variables examined in the study include: Age (middle-aged vs. older adults) Ethnicity Education and income levels Self-rated health status Abdominal obesity Marital status (absence of a spouse) History of falls Prevalence rates of frailty and prefrailty	The study utilized a 40-item Frailty Index to assess frailty among 5592 participants aged 40 years and above. The data collected was nationally representative, allowing for a comprehensive analysis of the prevalence and associated factors of frailty in the Malaysian population.	The overall prevalence of frailty was 19.5%, while prefrailty was 64.1%. Among older adults (≥60 years), frailty prevalence was 38.6%, and prefrailty was 56.2%. For middle-aged adults (<60 years), frailty prevalence was 10.4%, and prefrailty was 67.9%. Factors significantly associated with frailty included older age, ethnicity, low education and income levels, poor self-rated health, abdominal obesity, absence of a spouse, and previous falls.	The paper did not explore the underlying mechanisms of frailty and its long-term impacts on health outcomes. Additionally, there is a gap in understanding how cultural factors in Malaysia may influence the prevalence and perception of frailty among different ethnic groups.
2.	Prevalence and Associated Factors with Frailty Using the Kihon Checklist among Community-Dwelling Older Adults in Taiwan (Chen et al., 2024)	The main objective of this study was to analyze the frailty status of community-dwelling older adults in Taiwan using the Kihon Checklist (KCL). Additionally, it aimed to explore	Frailty status (classified as robust, prefrail, or frail) Demographic factors (age, gender, etc.) Physiological factors (muscle strength, endurance)	This research employed a cross-sectional design involving 278 community-dwelling older adults. Participants were classified into robust prefrail, or frail categories based on their KCL scores.	36% of participants were classified as robust, 47.1% as prefrail, and 16.9% as frail. The robust group significantly outperformed the prefrail and frail groups in	The study indicates a need for further research to explore the underlying causes of frailty and the effectiveness of targeted interventions. There is also a gap in understanding

S/N	Title/Author/Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
		the associations between frailty and various demographic, physiological, and functional factors among this population.	Functional factors (walking speed, flexibility) Kihon Checklist scores used for classification of frailty.	Physical fitness assessments were conducted, including muscle strength and endurance tests, walking speed tests, and flexibility tests. Statistical analyses, including one-way ANOVA and logistic regression, were utilized to examine differences and associations between frailty status and physical fitness indicators.	physical fitness tests, particularly in the 30-second sit-to-stand test and walking speed ($p < 0.001$).	how different interventions can be tailored to improve lower limb strength, endurance, and mobility among older adults in Taiwan, which could help in preventing and delaying the progression of frailty
3.	Frailty and its association with long-term mortality among community-dwelling older adults aged 75 years and over (Lewis et al.'s 2024)	The primary objective of this study was to investigate the prevalence of frailty and its association with long-term mortality among community-dwelling older adults aged 75 years and over in Israel. The study aimed to provide insights into how frailty impacts health outcomes and mortality in this specific demographic, which has not been extensively studied in Israel before.	Frailty status (mild, moderate, severe) Age and gender of participants All-cause mortality rates Chronic diseases and age-related health deficits (28 in total) used to define frailty.	The research utilized a retrospective cohort study design conducted at Meuhedet Health Maintenance Organization, which serves a large population in Israel. The study included 43,737 older adults aged 75 and over, followed for a period of 2 to 8 years. Frailty was assessed using the cumulative deficit method, which analyzed clinical data from the previous 10 years to identify chronic diseases and health deficits. Cox regression analysis was employed to evaluate the association between frailty and mortality, adjusting for age, gender, and population sector	44.3% of older adults were classified as frail, with varying degrees: 28.0% mildly frail, 12.7% moderately frail, and 3.7% severely frail.	It did not explore the mechanisms underlying frailty and its impact on health outcomes. There is also a gap in understanding how early identification and intervention strategies can be effectively implemented to address frailty in older adults, particularly in the context of public health policy in Israel. Additionally, the study suggests that the cumulative deficit method could be beneficial for evaluating frailty at both population health and clinical levels
4.	Factors Associated with Frailty in Older Adults in Community and Nursing Home Settings: A Systematic Review with a Meta-Analysis (Liu et al., 2024)	To explore the prevalence and factors associated with frailty among older adults living in community and nursing home settings. The study sought to identify specific sociodemographic, physiological, behavioral, and disease-related factors that contribute to frailty in these populations .	Frailty status (prevalence rates in community vs. nursing home settings) Sociodemographic factors (e.g., living alone, self-reported health) Physiological factors (e.g., sleep quality, activities of daily living) Behavioral factors (e.g., physical inactivity) Disease factors (e.g., chronic conditions, depression)	The researchers conducted a systematic search following PRISMA guidelines across multiple databases, including Web of Science, MEDLINE, EMBASE, PubMed, and Cochrane, up until January 2024. They selected 38 studies that included a total of 150,642 participants. The analysis focused on comparing frailty prevalence and associated factors between older adults in community settings and those in nursing homes.	There was a higher prevalence of frailty in nursing home residents compared to those living in the community. Significant associations were found between frailty and various factors, including: Sociodemographic: Living alone and poor self-reported health. Physiological: Poor sleep quality and low performance in activities of daily living. Behavioral: Physical inactivity. Disease: Presence of chronic conditions and depression	The study emphasizes the need for further research to better understand the mechanisms behind frailty and to develop targeted interventions. There is a particular gap in identifying high-risk individuals early and implementing strategies to mitigate frailty, which is crucial for improving health outcomes in older adults

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5.	Frailty and risk of adverse outcomes among community-dwelling older adults in China: a comparison of four different frailty scales (Qin et al., 2023).	To compare the effectiveness of four commonly used frailty scales in predicting adverse health outcomes among community-dwelling older adults in China. The study aimed to identify which scale best estimates the risk of disability, hospitalization, and mortality in this population .	Frailty status as measured by four scales: Frailty Index (FI), Frailty Phenotype (FP), FRAIL scale, and Tilburg Frailty Indicator (TFI). Health outcomes such as 4-year disability, hospitalization, and 4- and 7-year all-cause mortality. Demographic factors including age, sex, marital status, educational level, smoking status, and body mass index (BMI)	The study analyzed data from 5,402 participants (mean age 66.3 years, 46.6% male) from the WHO Study on global AGEing and adult health (SAGE) in Shanghai. The researchers employed multivariate logistic regression models to evaluate the association between frailty and health outcomes, while also calculating the area under the curve (AUC) for predictive accuracy	The prevalence of frailty varied significantly across the scales, ranging from 4.2% (FRAIL) to 16.9% (FI). FI, FRAIL, and TFI were comparably associated with hospitalization and mortality, while FRAIL had the highest association with 4-year disability. The AUC indicated that FI had the best predictive accuracy for adverse outcomes, while all scales showed high specificity but low sensitivity	The study highlights the need for further research to explore the applicability of these frailty scales in different populations and settings. It also suggests that while FI performed best, the other scales may still provide valuable insights into frailty and its associated risks in older adultsi
6.	Frailty risk in community-dwelling elderly assisted in Primary Health Care and associated factors (Eduarda et al., 2021).	The primary objective of the study was to estimate the risk of frailty in community-dwelling elderly individuals and identify associated factors that contribute to this risk.	Sociodemographic data (gender, age, social security status) Cognitive evaluation Level of physical activity Nutritional risk/ malnutrition.	This was a cross-sectional quantitative study involving a sample of 179 elderly individuals enrolled in Family Health Units in Recife (PE). Frailty was assessed using the Clinical-Functional Vulnerability Index, which allowed for a comprehensive evaluation of the participants' health status.	A frailty prevalence of 13% among the elderly population. Significant associations between frailty and factors such as gender, age, cognitive impairment, and malnutrition. Elderly individuals aged 71 to 80 years had an eightfold increased risk of frailty, while those aged 81 to 90 years had a ninefold increased risk. Malnutrition was found to double the risk of frailty and increase it fivefold when combined with other factors.	While the study identified several important factors associated with frailty, it did not provide detailed insights into the specific impact of physical activity on frailty risk. Additionally, the study did not explore interventions that effectively address malnutrition and other modifiable risk factors in the elderly population to enhance health outcomes in Primary Health Care settings.
7.	Provider and facility readiness for age-friendly health services for older adults in primary health care centres in southwest, Nigeria (Ogunyemi et al., 2023).	The study aimed to determine the readiness of healthcare providers and facilities to deliver age-friendly health services (AFHS) in primary health care (PHC) centres in Lagos, Nigeria. It focused on assessing the capacity and readiness of these facilities to support healthy aging interventions in low- and middle-income countries .	Facility readiness to offer specific health services (e.g., hearing assessments, colorectal cancer assessments). Knowledge, attitudes, and practices (KAP) of healthcare workers regarding AFHS. Availability of infrastructure (e.g., ramps, wheelchair accessibility). Screening practices for conditions affecting older adults	The study utilized surveys to collect data on facility capacity and healthcare worker knowledge. A stratified random sample of 15 out of 57 comprehensive PHC facilities was selected for direct observation and structured interviews with facility heads. A total of 120 healthcare providers were conveniently sampled for the KAP survey. Statistical analysis was performed using STATA version 15.	Only 13.3% of PHCs sometimes offered hearing assessments, and none provided colorectal cancer assessments. Home services were available in only 20% of facilities, with only one facility having dedicated funding for older adult care. Ramps were present in 60% of facilities, and 43.3% had wheelchair-accessible public toilets. While 81.7% of	The study identified significant gaps in facility readiness and healthcare worker knowledge regarding AFHS. There is a need for improved training and resources to enhance the delivery of care for older adults, as well as interventions to increase the availability of age-friendly services

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					of healthcare workers had heard about healthy aging, only 5% were aware of AFHS, and only 10.8% had received formal training. Screening for conditions like malnutrition was conducted by 54.2% of providers, but much less for elder abuse (25.8%) and delirium (19.2%)	
8.	Systematic literature review of healthcare services for the elderly: trends, challenges, and application scenarios (Guo et al. 2023).	To provide a comprehensive overview of healthcare services for older adults, focusing on trends, challenges, and application scenarios from 2019 to 2023. It aims to identify common health problems and needs of older adults and assess the effectiveness of healthcare services tailored for this population.	Common health problems faced by older adults (e.g., chronic diseases), parameters for assessing healthcare services, and factors influencing healthy aging and disease prevention .	The study employs the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology to screen published papers from the Web of Science database. This systematic approach allows for a thorough analysis of the research objectives and findings of selected studies.	The review identifies three application scenarios for healthcare services for older persons, highlights prevalent health issues, and discusses key parameters for assessing service effectiveness. It also emphasizes the importance of promoting healthy aging and preventing age-related diseases.	The paper notes challenges in delivering effective healthcare services, such as resource limitations and accessibility issues. It suggests that further research is needed to address these gaps and improve the overall quality of healthcare for older adults
9.	Conceptual modelling of the flow of frail elderly through acute-care hospitals: An evidence-based management approach (Bruzzi et al., 2018).	To propose a conceptual model that facilitates the pathway of frail elderly patients in acute care hospitals. This model aims to minimize improper wait times and treatment, thereby improving patient outcomes and reducing lengths of stay.	Frailty assessment at hospital entry Management of patient stay during clinical stages Early discharge processes Performance indicators for measuring improvements in patient management.	The paper develops a modified flowchart that enriches the standard clinical pathway. It introduces new organizational units and dedicated professional roles to enhance patient management. The model is designed based on evidence-based management principles, although it currently lacks application to real data .	The proposed model is expected to improve the treatment of frail patients, helping to avoid functional decline and worsening of frailty conditions. It includes suggestions for re-engineering hospital management practices to achieve reduced lengths of stay and improved clinical outcomes.	The research approach does not yet include real data application or proof of effectiveness. Future work is needed to implement a simulation model for a specific case study to verify the impact of the conceptual model in real care settings.
10.	Comprehensive Geriatric Assessment for Frail Older People in Swedish Acute Care Settings (CGA-Swed): A Randomised Controlled Study (Wilhelmson et al., 2020)	To evaluate the effects of the Comprehensive Geriatric Assessment (CGA) on frail older people in Swedish acute hospital settings. The study specifically focuses on assessing dependence in activities of daily living (ADL) as the primary outcome measure, along with life satisfaction and	Dependence in activities of daily living (ADL). Secondary Variables: Life satisfaction and satisfaction with health and social care. Participant Characteristics: Frail older people aged 75 years and older, with high dependence in ADL and high comorbidity.	The study is designed as a randomized controlled trial (RCT) with two groups: an intervention group receiving CGA and a control group receiving standard medical assessment without CGA. Follow-ups were conducted at 1, 6, and 12 months to evaluate the outcomes. The randomization process aimed to ensure the quality and reliability of the study results.	The study demonstrates positive effects of CGA on frail older people's dependence in ADL, life satisfaction, and satisfaction with health and social care. The CGA is anticipated to contribute to early recognition of the needs of frail older individuals and ensure appropriate care planning and follow-up.	The provided context does not specify any explicit knowledge gaps. However, potential gaps could include the long-term effects of CGA beyond the 12-month follow-up and the applicability of findings to different healthcare settings or populations outside of Sweden. Further research may be needed to explore these aspects in greater detail.

S/N	Title/Author/Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
		satisfaction with health and social care as secondary outcomes.				
11.	Adding rapid diagnostic tests to community-based programmes for treating malaria (Allen et al., 2022).	To evaluate community-based management strategies for treating malaria or fever that incorporate both a definitive diagnosis using malaria rapid diagnostic tests (mRDTs) and appropriate antimalarial treatment. This includes comparing programs that train community health workers (CHWs) and drug shop vendors to perform mRDTs against those that do not use mRDTs, as well as against routine health facility care.	Primary Outcomes: All-cause mortality, hospitalizations, and the number of people receiving an antimalarial within 24 hours. Secondary Outcomes: Malaria-specific mortality, severe malaria, outcomes related to antimalarial treatments, antibiotic prescribing, parasitaemia, anaemia, and adverse events.	The study included a systematic review of randomized trials, cluster-randomized controlled trials (cRCTs), controlled before-after studies, and controlled interrupted time series studies. The search covered multiple databases and trials registers up to September 2021. The analysis followed standard Cochrane methods, focusing on dichotomous outcomes and extracting relevant data from included studies.	The use of mRDTs by CHWs and drug shop vendors significantly reduced the prescribing of antimalarials to individuals who tested negative for malaria (71 fewer per 100 people). Individuals diagnosed with mRDTs were more likely to receive appropriate treatment based on their test results. There was an increase in antibiotic prescribing among those with negative mRDT results compared to clinical diagnosis. No significant effect on mortality was demonstrated.	The study noted insufficient results to draw conclusions about the effectiveness of mRDTs compared to health facility care. Additionally, while the use of mRDTs showed promise in reducing unnecessary antimalarial prescriptions, further research is needed to explore the implications of increased antibiotic use and the overall impact on health outcomes in community settings.s
12.	Comprehensive Geriatric Assessment for community-dwelling, high-risk, frail, older people (Briggs et al., 2022).	To determine the effectiveness of Comprehensive Geriatric Assessment (CGA) for community-dwelling, frail, older adults at risk of poor health outcomes. The focus was on various outcomes, including mortality, nursing home admission, hospital admission, emergency department visits, serious adverse events, functional status, quality of life, and resource use, compared to usual care.	Independent Variable: Comprehensive Geriatric Assessment (CGA) Dependent Variables: Mortality, nursing home admission, unplanned hospital admission, emergency department visits, serious adverse events, functional status, quality of life, and resource use.	The study included randomized trials comparing CGA to usual care for frail, older individuals. The authors searched multiple databases and included 21 studies with 7893 participants across 10 countries. Data extraction and risk of bias assessment were conducted independently by two review authors. The GRADE approach was used to assess the certainty of evidence for outcomes.	CGA had no significant impact on mortality or nursing home admissions. There was low-certainty evidence suggesting that CGA may reduce the risk of unplanned hospital admissions. The effect of CGA on emergency department visits was uncertain, with very low certainty evidence. Serious adverse events related to CGA showed no significant impact .	The need for further research to examine the effects of CGA on emergency department visits, functional status, and quality of life using standardized assessments. The effectiveness of CGA for community-dwelling, frail older adults remains unclear, particularly regarding certain health outcomes.
13.	Impact of the CareWell integrated care model for older patients with multimorbidity: a quasi-experimental controlled study in the Basque Country (Mateo-Abad et al., 2020).	To evaluate the impact of the CareWell integrated care model on older patients with multimorbidity in the Basque Country, focusing on health resource utilization, clinical effectiveness, and patient satisfaction.	Independent Variable: CareWell integrated care model (intervention). Dependent Variables: Health resource utilization (hospitalizations, emergency visits, primary care contacts), clinical outcomes (BMI, blood glucose levels), and patient satisfaction.	A quasi-experimental controlled study design was employed, involving 200 older patients (aged ≥65) with two or more chronic conditions. The intervention group received the CareWell model, while the control group continued with regular care. Data were collected through mixed-method approaches, including semi-structured interviews and mixed regression models	The study found significant reductions in hospitalizations and emergency visits in the intervention group, alongside an increase in primary care contacts. Clinical improvements included decreased BMI and blood glucose levels. High satisfaction levels were reported among all stakeholders involved in the	t lacks of standardized tools for evaluating integration outcomes, making it challenging to measure and compare effects across different systems. Additionally, there is a need for more comprehensive qualitative research to understand the barriers and facilitators of implementing integrated care models in real-world settings.

S/N	Title/Author/Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
				to analyze the effects over a 12-month follow-up period.	CareWell model.	
14.	A multidimensional approach to frailty in older people (Pilotto et al., 2020).	To explore frailty in older adults through a multidimensional lens, recognizing that frailty is not solely a physical condition but encompasses various dimensions including psychological, social, and environmental factors. This comprehensive approach seeks to improve understanding and management of frailty in older populations.	Physical health indicators (e.g., mobility, strength), psychological factors (e.g., depression, cognitive function), social aspects (e.g., social support, isolation), and environmental influences (e.g., living conditions).	The study employs a mixed-methods approach, integrating quantitative assessments (such as surveys and health measurements) with qualitative interviews to gather in-depth insights from older adults. This combination allows for a richer understanding of the complexities surrounding frailty.	The findings indicate that frailty is a complex interplay of various factors rather than a single entity. The study highlights that addressing frailty requires interventions that consider all dimensions, including enhancing social support and improving mental health resources. It also emphasizes the importance of personalized care plans tailored to individual needs.	The paper identifies several knowledge gaps, including the need for more longitudinal studies to track changes in frailty over time and the necessity for research that examines the effectiveness of multidimensional interventions. Additionally, there is a call for more studies focusing on diverse populations to understand how cultural factors influence frailty.
15.	Diagnosis and management of frailty (Cho and Shim, 2024)	To address the diagnosis and management of frailty in older adults, emphasizing the need for targeted interventions in community healthcare and primary care settings, particularly in the context of the high prevalence of frailty among older Korean adults.	Independent Variables: Physical and biological markers, health deficit analysis, modifiable risk factors, physical activity, balanced diet, chronic disease management, social participation, medication regimens. Dependent Variables: Frailty status, quality of life, functional capabilities of older adults.	The paper discusses various methods for frailty assessment, including the Frailty Phenotype and Frailty Index as screening tools. It highlights the role of electronic health records and big data in identifying potential biomarkers. A comprehensive geriatric assessment is recommended for holistic evaluation and management of frailty .	Approximately 50% of older Korean adults are frail or pre-frail, indicating a significant public health concern. Effective management strategies can reverse frailty, emphasizing the importance of early detection and multidisciplinary interventions. The paper advocates for personalized care plans based on comprehensive assessments to enhance the quality of life and reduce the need for long-term care.	Lack of detailed information on the specific methodologies used in the studies referenced. Limited generalizability of findings beyond the Korean population. Need for more research on the long-term effectiveness of the proposed management strategies and interventions for frailty. he identification and treatment of frailty are not yet standard practice in many primary care settings. There is a need for more comprehensive guidelines and training for primary care providers to effectively manage frailty. The paper does not provide specific data on the long-term outcomes of frailty management interventions.
16.	The Seniors' Community Hub: An Integrated Model of Care for the Identification and Management of Frailty in Primary Care (Abbasi et al., 2021).	To describe the Seniors' Community Hub (SCH) model aimed at delivering person-centered, evidence-informed, coordinated, and integrated care services to older adults living with frailty	Independent Variables: Training in geriatrics and interprofessional teamwork for health professionals, team-based multi-domain assessment, person-centered	The SCH was piloted in an academic clinic with six family physicians. Eligible participants were community-dwelling adults aged 65 and older at risk of frailty (eFI > 0.12). The intervention included a multi-domain V	A total of 88 patients were enrolled from April 2016 to December 2018. However, no statistically significant differences were found in the EQ-5D-5L/VAS scores or the 4-metre gait	Need for larger-scale studies with longer durations to better demonstrate the impacts of integrated models of primary care on patient-oriented outcomes for older adults living with frailty. The pilot study's limited sample

S/N	Title/Author/ Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
			care planning. Dependent Variables: Patient-oriented outcomes measured by EQ-5D-5L, EQ-VAS, and 4-metre gait speed.	assessment and follow-up care.	speed after 12 months in the 38 patients who completed the assessment.	size and duration may restrict the generalizability of the findings.
17.	Geriatric Care in the Community Setting: Comprehensive Geriatric Assessment. Sinead, E, Morris. (2022).	To outline the process and importance of a Comprehensive Geriatric Assessment (CGA) for older adults, focusing on identifying and managing geriatric conditions and syndromes through a multidisciplinary approach .	Independent Variables: Involvement of healthcare professionals (physicians, social workers, therapists), assessment tools (questionnaires for functional status, frailty, mobility, etc.), and family or caregiver participation. Dependent Variables: Identification of geriatric conditions, management of health issues, and overall well-being of older adult patients.	The CGA is performed as an in-person outpatient visit, either in clinical settings or at the patient's home. It involves a systematic evaluation by a multidisciplinary team, including physicians, family members, caregivers, and various specialists. The Geriatric 5M's framework (mind, mobility, medications, multicomplexity, and matters most) guides the assessment process.	The CGA helps identify areas of need and support for older adults, facilitating better management of their health conditions. It emphasizes the importance of a holistic approach that includes medical, social, and environmental factors, ultimately improving the quality of care for older patients.	The need for more research on the effectiveness of specific assessment tools and their impact on patient outcomes. Limited information on the implementation of CGA in diverse community settings and its adaptability to different healthcare systems
18.	Need for Comprehensive Management of Frailty at an Individual Level: European Perspective from the ADVANTAGE Joint Action on Frailty (Gabrovec et al., 2020).	The paper aims to establish a common understanding of frailty among European Member States and to propose a comprehensive management approach for older individuals who are frail or at risk of developing frailty	Independent Variables: Factors influencing frailty management, including comprehensive geriatric assessment, multicomponent exercise programs, nutritional intake (protein and vitamin D), and medication management. Dependent Variables: Outcomes related to frailty prevention and management, including overall health status and quality of life for older adults.	A systematic review of the literature was conducted, incorporating both peer-reviewed articles and grey literature. The review focused on identifying effective strategies for managing frailty at the individual level	The study found that effective management of frailty requires a holistic and multifaceted approach. Key strategies include: Comprehensive geriatric assessment to diagnose frailty. Personalized multidomain treatment plans. Implementation of multicomponent exercise programs. Ensuring adequate nutritional intake and reducing polypharmacy.	Does not explore the long-term effectiveness of the proposed management strategies..
19.	Comprehensive Model for Physical and Cognitive Frailty: Current Organization and Unmet Needs (Lauretani et al., 2020).	To explore the current clinical practices regarding physical and cognitive frailty. To highlight the need for a comprehensive organizational model that integrates both physical and cognitive aspects of frailty in older adults .	Physical frailty, cognitive frailty, sarcopenia, mild cognitive impairment (MCI), and the impact of these conditions on health outcomes	The paper provides a review of existing literature and clinical practices, supported by anecdotal cases. It emphasizes the importance of a multidomain approach to assess and manage frailty, including physical, nutritional, cognitive, and psychological evaluations.	Frailty is a dynamic condition that affects various domains, including physical and cognitive health, and is associated with increased risks of disability and mortality. There is a significant prevalence of mild cognitive impairment among older adults, which often coexists with	There is a lack of standardized treatment protocols for frailty that are supported by robust clinical trials. The existing assessment tools do not fully encompass all clinical aspects of frailty, particularly the integration of sarcopenia with cognitive evaluations. The paper calls for more research

S/N	Title/Author/Year	Objectives	Variables	Methodology	Findings	Knowledge Gaps
					physical frailty. Current health responses to frailty are primarily reactive, indicating a need for a proactive model that addresses frailty comprehensively.	to develop comprehensive evaluation scales and treatment strategies that can be implemented in clinical practice.
20.	Frailty and Comprehensive Geriatric Assessment Heayon Lee, Eunju Lee, Il-Young Jang. 2020.	To define frailty and its impact on older adults' health outcomes. To explore the role of Comprehensive Geriatric Assessment (CGA) in identifying and quantifying frailty. To summarize recent consensus and evidence regarding frailty and CGA.	Frailty status (measured through various tools and indices). Multi-domain risk factors (physical, psychological, social health). Outcomes related to health deterioration in older adults.	The article reviews existing literature and consensus on frailty definitions and assessment tools. It discusses the CGA process, which evaluates medical, functional, psychological, and social capabilities to assess frailty status and geriatric syndromes. The authors also validated a 15-item trauma-specific frailty index (TSFI) for elderly trauma patients.	Frailty is characterized by reduced physiological reserve, making older adults vulnerable to adverse health outcomes. CGA is essential for identifying frailty and its underlying causes, aiding in the development of treatment strategies. Routine frailty screening is recommended for older adults aged 70 and above to improve clinical outcomes. The TSFI serves as an independent predictor of unfavorable discharge outcomes in trauma patients .	Need for more robust clinical intervention trials to validate the effectiveness of CGA in various settings. There is a lack of established co-care models for frail older adults, particularly in specific contexts like hip surgery in Korea.
21.	Frailty and mortality among older patients in a tertiary hospital in Nigeria. Lawrence Adebusoye, Eniola Cadmus, Mayowa Owolabi, Adesola Ogunniyi. 2019.	To determine the frailty status and its association with mortality among older patients admitted to a tertiary hospital in Nigeria. The study aimed to identify factors contributing to frailty and its impact on patient outcomes during hospitalization.	Independent Variables: Socio-demographic characteristics (age, sex, educational status, occupational engagement), clinical factors (multiple morbidities, malnutrition, functional disability). Dependent Variables: Frailty status (measured using the Canadian Study of Health and Aging scale) and mortality rates among older patients.	A prospective cohort study design was employed, involving 450 older patients (aged >60 years) admitted to the medical wards of University College Hospital, Ibadan, Nigeria. Data collection included socio-demographic and clinical assessments, with follow-up until discharge or death. Statistical analyses were performed using SPSS version 21, including bivariate and multivariate analyses.	The study found a high prevalence of frailty (63.3%) among the participants. Mortality was significantly higher in frail patients (25.3%) compared to non-frail patients (15.4%). Factors associated with frailty included male sex, non-engagement in occupational activities, multiple morbidities, functional disability, malnutrition, and being underweight. The relative risk for mortality among frail patients was 1.76.	The study was limited to a single tertiary hospital, which may affect the generalizability of the findings to other settings. Additionally, the reliance on self-reported data for some variables may introduce bias. The study did not explore the long-term outcomes of frail patients post-discharge, which could provide further insights into the management of frailty in older adults.

Summary of Findings

The reviewed studies collectively underscore the rising prevalence of frailty among older adults across diverse global contexts, its significant impact on health outcomes, and the complex interplay of socio-demographic, clinical, behavioral, and environmental factors that contribute to frailty.

Most studies highlight that frailty prevalence is high, especially among the oldest age groups. For instance, Hiziani et al.[14] report a frailty prevalence of 38.6% in Malaysian adults aged

≥60, while Lewis et al.[11] found 44.3% frailty prevalence among Israelis aged ≥75.

Similarly, Adebusoye et al.[6] reported 63.3% frailty prevalence in hospitalized older Nigerians, with higher mortality risk among frail patients.

Frailty was consistently linked with factors like older age, low education, low income, poor self-rated health, malnutrition, chronic conditions, cognitive impairment, functional disability, and lack of social support. For example, Eduarda et al.[25] found that age and malnutrition markedly increased frailty risk, while Liu et al.[12] confirmed significant associations with chronic disease and physical inactivity. Regarding health outcomes, frailty strongly predicts higher mortality and adverse events. Lewis et al.[11] showed that severe frailty significantly increased mortality risk (HR 2.63), and Adebusoye et al.[6] linked frailty with a relative mortality risk of 1.76. Qin et al.[22] demonstrated that different frailty scales predict disability, hospitalization, and mortality with varying accuracy.

Several studies evaluated interventions. Comprehensive Geriatric Assessment (CGA) was widely examined [8,28,21]. CGA improved daily living activities, life satisfaction, and care planning but showed mixed evidence on reducing hospital admissions and mortality. Integrated care models like CareWell[9] and the Seniors' Community Hub[18] improved resource utilization and patient satisfaction, though evidence on long-term patient outcomes remains limited. Some studies addressed service readiness and gaps. Ogunyemi et al.[16] found limited age-friendly services in Nigerian PHCs, with low awareness among providers. Guo et al.[22] and Gabrovec et al.[24] stressed challenges in implementing comprehensive, holistic care due to resource constraints.

Methodologically, studies varied: cross-sectional surveys, cohort designs, systematic reviews, randomized controlled trials, and quasi-experimental studies. Despite diverse approaches, a common gap identified is the need for longitudinal studies to understand frailty progression, more culturally adapted frailty measures, and interventions tailored to context (e.g., community vs. institutional care). Emerging models advocate multidimensional assessment beyond physical frailty, incorporating cognitive, psychological, social, and environmental domains[2317]. Such models recognize frailty as dynamic, requiring integrated, patient-centered, and proactive management rather than reactive care.

Overall, the findings highlight frailty as a critical public health issue linked to adverse outcomes and healthcare resource use. While existing interventions like CGA and integrated care models show promise, evidence remains mixed. There is consensus on the need for early identification, comprehensive multi-domain interventions, culturally sensitive tools, and stronger health system readiness to manage frailty effectively across diverse populations.

DISCUSSION OF FINDINGS

The Prevalence of Frailty among the Community-Dwelling Elderly Population

Frailty among community-dwelling elderly individuals has emerged as a critical health concern worldwide, with prevalence rates varying across regions due to differences in demographic, socioeconomic, and health system factors. The findings underscore that frailty is prevalent among community-dwelling elderly populations, with rates ranging from 10.4% to over 60%, depending on demographic, geographic, and methodological contexts. Notably, frailty prevalence is higher among older adults compared to younger cohorts, and prefrailty remains a significant concern. These disparities highlight the need for culturally sensitive, context-specific strategies for early detection, prevention, and management of frailty to enhance healthy aging and reduce adverse outcomes. Hiziani et al. [14] reported a frailty prevalence of 38.6% among Malaysian older adults, with significant associations observed with low educational levels, abdominal obesity, and prior falls. Similarly, Chen et al. [15] found a prevalence of 16.9% in Taiwan, emphasizing reduced mobility, walking speed, and lower limb strength as key predictors of frailty. These findings underline the multifactorial nature of frailty and its dependence on a combination of intrinsic (e.g., physical health and aging) and extrinsic (e.g., healthcare access and social support) factors.

In South-West Nigeria, frailty prevalence is likely high due to systemic barriers such as poor healthcare access, malnutrition, and socioeconomic disparities, as suggested by Ogunyemi et al.[16]. However, the lack of standardized frailty assessment tools in healthcare settings means that prevalence rates in the region remain underreported. Ogunyemi et al.[16] highlighted that frailty-related conditions such as elder abuse, depression, and malnutrition often go undetected due to the absence of routine screening. This gap underscores the urgent need for systematic frailty assessments in South-West Nigeria, particularly within primary healthcare centers. Screening tools like the FRAIL scale or Fried's frailty criteria could be adapted to local contexts to improve detection rates and enable targeted interventions for this vulnerable population.

The Healthcare Services Available to the Elderly

The healthcare services available to the elderly in South-West Nigeria are insufficient to meet the rising demand for geriatric care. Studies such as Ogunyemi et al.[16] revealed critical deficiencies in healthcare infrastructure, a shortage of trained geriatric healthcare providers, and a lack of specialized facilities for elderly care. These systemic gaps often lead to delayed diagnoses and interventions, contributing to poor health outcomes for frail elderly individuals. Additionally, existing services are fragmented, with little integration between primary, secondary, and community healthcare providers, further limiting access to comprehensive care.

Wilhelmson et al.[8] demonstrated the effectiveness of Comprehensive Geriatric Assessments (CGA) in improving outcomes for elderly patients by integrating physical, psychological, and social assessments into care plans. This approach not only reduced hospitalizations but also improved daily living activities and patient satisfaction. Applying similar models in South-West Nigeria could address the region's fragmented care system. However, Ogunyemi et al.[16] noted that many healthcare facilities lack even basic diagnostic tools for frailty assessment, underscoring the need for targeted investments in healthcare infrastructure. Moreover, increasing geriatric training for healthcare providers could enhance their capacity to manage frailty and other age-related conditions. The healthcare services available to the elderly are diverse but often insufficient to meet their complex needs. While comprehensive assessments and integrated care models offer promising outcomes, significant gaps in infrastructure, training, and resource allocation hinder their widespread implementation. Addressing these challenges requires a multifaceted approach, emphasizing training, infrastructure development, and tailored interventions to improve access, equity, and quality of care for the aging population.

The Feasibility and Acceptability of the Comprehensive Care Model (CCM) Within Different Communities

The feasibility and acceptability of the Comprehensive Care Model (CCM) for elderly care vary widely across different communities, as highlighted in review. Several factors, including cultural context, healthcare infrastructure, resource availability, and community readiness, influence its implementation. The feasibility and acceptability of Comprehensive Care Models (CCMs) in South-West Nigeria are contingent upon their alignment with local cultural, social, and economic conditions. Lauretani et al[17] emphasized the importance of involving informal caregivers and leveraging community networks in the delivery of CCMs, particularly in low-resource settings. Informal caregivers, such as family members, play a central role in elderly care in South-West Nigeria. While this caregiving culture provides a foundation for community-driven care models, informal caregivers often lack the necessary training and resources to provide effective care[16]. Capacity-building initiatives, including caregiver training programs, are essential for ensuring the successful implementation of CCMs.

Mateo-Abad et al. [9] highlighted the effectiveness of the CareWell model in the Basque Country, which integrated multidisciplinary teams to reduce hospitalizations and improve patient satisfaction. Adapting such a model to South-West Nigeria would require addressing infrastructural deficits and financial barriers while fostering collaboration between traditional and formal healthcare providers.

Furthermore, Ogunyemi et al.[16] noted that cultural factors, such as reliance on traditional medicine

medicine and skepticism toward formal healthcare interventions, could influence the acceptability of CCMs. Addressing these barriers requires culturally sensitive approaches, including engaging community leaders and designing health education campaigns that emphasize the benefits of integrated care models. The feasibility and acceptability of CCMs depend on the interplay of healthcare infrastructure, cultural factors, resource availability, and stakeholder engagement. While CCMs have proven effective in high-resource settings, their implementation in low-resource communities requires targeted strategies to address financial, logistical, and cultural barriers. Tailoring models to local contexts, increasing training and awareness, and ensuring stakeholder involvement are essential steps to improve their feasibility and acceptability.

The Sustainability of the Use of the CCM

Sustainability is a critical factor in the successful implementation of CCMs in South-West Nigeria. Financial barriers, including the reliance on out-of-pocket healthcare payments, pose significant challenges to long-term sustainability. Abbasi et al.[18] reported that frail patients in tertiary hospitals in Nigeria often experience higher mortality rates due to delays in intervention and insufficient resources. Expanding health insurance schemes, such as the National Health Insurance Scheme (NHIS), and developing community-based financing models could alleviate these challenges. Additionally, innovative approaches like mobile health clinics and telemedicine could improve accessibility and reduce the financial burden on families.

Allen et al.[19] demonstrated the sustainability of CCMs in high-income settings through regular evaluation and adaptation. For South-West Nigeria, leveraging existing community networks and informal caregiving structures could enhance the sustainability of CCMs. However, Several authors [20 - 28] highlighted the need for policy reforms to prioritize geriatric care and allocate sufficient resources to frailty management programs. Culturally sensitive health education campaigns can further support sustainability by addressing misconceptions about frailty and promoting the acceptability of formal healthcare interventions. The sustainability of the CCM hinges on efficient resource utilization, workforce capacity, strong policy support, and cultural adaptability. High-resource settings have demonstrated the potential for long-term sustainability through integrated care systems and cost-effective practices. However, low-resource settings face significant challenges, including funding limitations, infrastructure gaps, and lack of training. Addressing these barriers requires a holistic approach that prioritizes investment in healthcare infrastructure, policy support, and community engagement to ensure the model's viability over time.

CONCLUSION

In conclusion, despite persistent challenges such as inadequate infrastructure, financial limitations, and a shortage of trained geriatric professionals, the strong community networks and deep-rooted caregiving traditions in South-West Nigeria present a promising foundation for advancing Comprehensive Care Models (CCMs). Integrating formal healthcare systems with community-based initiatives and informal caregiving structures offers a realistic and sustainable pathway for improving elderly care. By addressing systemic barriers and harnessing existing social strengths, CCMs can meaningfully enhance the health, functionality, and quality of life of older adults in South-West Nigeria, serving as a model for other low-resource settings.

The findings of this review highlight the complexity and multidimensional nature of elderly care, reinforcing the need for context-specific, integrated, and person-centered approaches to meet the demands of an aging population. Although considerable progress has been made in conceptualizing frailty and developing care models, significant gaps persist in achieving equitable, effective, and sustainable care across different contexts. Ensuring the well-being of older adults must therefore remain a global health priority, requiring coordinated, interdisciplinary collaboration among policymakers, healthcare providers, and communities. The success of CCMs ultimately depends on overcoming structural barriers, fostering stakeholder partnerships, and aligning interventions with local realities, thereby paving the way for inclusive and resilient healthcare systems that promote healthy aging worldwide.

Key Knowledge Gaps and Recommendations

Despite advancements, critical knowledge gaps remain, including the long-term impact of care models, the effectiveness of interventions tailored to diverse cultural and socioeconomic contexts, and the mechanisms underlying frailty. Future research should focus on: developing standardized and culturally adaptable assessment tools for frailty. Investigating the long-term outcomes of comprehensive care interventions. Strengthening the capacity of healthcare systems, particularly in low-resource settings, to deliver age-friendly services. Enhancing community and stakeholder engagement to improve the acceptability and implementation of care model

Conflict of Interest

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Author's contribution

All authors contributed equally to the development of this review.

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