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Doctors' and Pharmacists' knowledge, skills, and perception of mental frailty in older adults: a scoping review

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Abstract

Background Population ageing is associated with an increasing prevalence of frailty, representing a major public health challenge due to its association with decreased independence, higher morbidity, increased hospitalizations and institutionalization, and premature mortality. Frailty is understood as a multidimensional phenomenon encompassing physical, mental and social components. However, the mental dimension remains insufficiently addressed in primary care practice.

Objective This scoping review aims to analyze existing research on the knowledge and skills of family physicians and pharmacists in recognizing mental frailty in older adults and to identify gaps and needs related to its management.

Methods A scoping review was conducted in accordance with PRISMA-ScR guidelines, following the population–concept–context framework. A systematic search was performed across multiple databases, supplemented by a manual search of references. Publications in English and Slovenian from 2014 to 2024, with an additional relevant source from 2025, were included. Data were charted in a standardised table and analysed thematically.

Results Twenty sources were included. Three main themes were identified: (i) understanding and recognition of mental frailty, (ii) addressing mental frailty in practice, and (iii) systemic barriers, challenges, and educational needs. Knowledge gaps exist among physicians and pharmacists in recognizing mental frailty. The findings revealed inconsistent terminology, variable definitions, and a lack of validated tools for identifying mental frailty in primary care. Relevant clinical competencies and educational approaches are poorly documented in the existing literature.

Conclusion Early identification of mental frailty and the use of holistic, interdisciplinary approaches in primary care are essential. Systematic training of healthcare professionals and consistent integration of the biopsychosocial model are crucial to improve recognition and management of mental frailty in older adults.

Keywords Psychological frailty, Family physicians, Pharmacists, Primary health care, Biopsychosocial model, Health professionals

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Background

Modern society is becoming longer-lived, with a growing proportion of older adults [1, 2]. Aging is often accompanied by a decline in physical and psychological capacities and reduced independence, placing substantial demands on the health and social care systems and their staff [3, 4]. Frailty, a multidimensional and dynamic state characterized by increased vulnerability and reduced physiological reserve [4, 5], has emerged as a key concept in understanding these age-related challenges, where primary care is essential in its management.

The clinical relevance of frailty lies in its association with adverse outcomes and its potential for prevention, particularly in primary care settings. Frailty reduces the ability to cope with daily activities and acute stressors and increases the risk of falls, fractures, reduced mobility, disability, and mortality, increasing the burden on health and social care systems through more frequent hospitalizations and greater demand for long-term care [4, 6–8].

Moreover, frailty is increasingly understood as a multidimensional phenomenon encompassing not only physical but also cognitive, mental, and social components [9–11], and thus aligns with the biopsychosocial model of health [12–14]. However, research and clinical practice continue to emphasize the physical dimension of frailty, while the other dimensions are often neglected or addressed separately and with less emphasis. Cognitive frailty is commonly defined as a decline in cognitive function in the absence of dementia, occurring in the presence of physical frailty [15, 16]. Psychological frailty includes psychological factors such as depression, anxiety, and reduced psychological resilience [17, 18], and is often used interchangeably with the term mental frailty [7, 19–21]. Social frailty is associated with loneliness, lack of social support, and reduced social inclusion [22, 23]. Terminology in this area remains inconsistent, as the terms mental or psychological, social, and cognitive frailty often overlap in the literature or are used with partial differences in meaning [7, 8, 20].

Given this conceptual variability, a pragmatic working definition was adopted for the purposes of this review. Because mental frailty lacks a consistent definition, it is sometimes deemed as a synonym to psychological frailty (relating to mood) or as a hypernym, encompassing also cognitive frailty. For the sake of this review, we decided to use the latter, as we believe they share a common pathway of vulnerability in later life. In this study, mental frailty is used as an umbrella concept referring to age-related vulnerability in psychological and cognitive domains that may affect emotional well-being, resilience, cognitive functioning, and the ability to cope with everyday stressors in older adults. This conceptualization acknowledges the overlap between psychological frailty and cognitive frailty, which are often discussed separately. The broader

term mental frailty was therefore used pragmatically to capture studies addressing psychological and cognitive aspects of frailty relevant to the knowledge and perceptions of primary care professionals.

Importantly, frailty often manifests in multiple ways within the same individual. The literature indicates that depressive symptoms and loneliness are among the most frequently identified psychological components of frailty and are significantly associated with lower quality of life and reduced psychological resilience [24]. Although depressive symptoms do not always co-occur with physical frailty, they are closely associated with its development and progression in more severe cases and constitute an integral part of a comprehensive frailty assessment. Unrecognized or untreated mental frailty may increase psychological vulnerability, accelerate functional decline, and contribute to poorer health outcomes, including more frequent hospitalizations, transfers to institutional care, and higher mortality [7, 25–28]. Despite its clinical significance, mental frailty is often under-recognized and inadequately addressed, leaving vulnerable older adults without sufficient support.

Addressing these challenges requires early identification of vulnerable individuals within a primary care setting, which is particularly relevant for two reasons. Firstly, frailty develops gradually, and its progress can be slowed or partially reversed, particularly in the early stages [29–31]. Accordingly, timely recognition and intervention are essential. Full-blown frailty is often preceded by a phase of pre-frailty, an early subclinical state with initial signs of increased vulnerability and reduced physiological reserve. Pre-frailty is often a transitional state in which individuals may move toward frailty or back toward non-frailty [32–34]. This highlights the crucial importance of early detection, before severe functional decline occurs [1, 29, 30, 32, 35–37].

Secondly, primary care professionals are uniquely positioned to assess the multiple dimensions of frailty, including physical, mental, and social components, owing to their ongoing, comprehensive contact with patients. Family medicine clinics are often the first and most common point of contact with the health system for older adults, enabling continuous monitoring of health status and social circumstances [38, 39]. Despite this strategic position, the limited education and skills in frailty limit primary care professionals' ability to take on a more proactive role.

Moreover, as the healthcare system evolves, the role of primary care professionals extends beyond family medicine physicians, highlighting pharmacists as equally important contributors to the identification and management of frailty. The digitalization of healthcare, especially electronic prescribing, is significantly changing the dynamics among healthcare stakeholders, as the direct

contact between the patient and the family doctor is decreasing, whereas direct, personal interaction between the patient and the pharmacist is increasing. Pharmacists can help preserve older adults' independence and quality of life through early identification of individuals at risk, optimization of pharmacotherapy, and lifestyle counseling [40, 41]. Adequate knowledge and training for both doctors and pharmacists, including in mental and social frailty, are therefore essential for effective early detection [42].

Despite growing awareness of frailty, systematic research on the knowledge and training of primary care professionals regarding mental frailty is scarce. To address this gap, the present study aims to map the existing literature and identify educational and practical needs, thereby guiding the development of interventions, informing future research, and enhancing care for older adults in primary care.

Methods

Research design

We conducted a scoping review, which is a form of knowledge synthesis that aims to systematically identify, map, and summarize available evidence on an unexplained or poorly defined area, concept, or research question, regardless of the type of research or data source [43, 44]. It typically does not include an assessment of the quality or strength of the included sources [45, 46]. Since we found that the field of mental frailty is overlooked, and systematic research on this topic is scarce or non-existent, we decided that a scoping review is an appropriate method for mapping the knowledge and training needs of doctors and pharmacists on mental frailty. The protocol for this scoping review was not prepared or registered, and the review was conducted in accordance with standard methodological guidelines for scoping reviews. In preparing the review, we followed the PRISMA-ScR guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses – Extension for Scoping Reviews), which ensure transparency, reproducibility, and methodological rigor throughout all phases of the review [43]. The corresponding checklist is available in Supplementary Material 1.

Research question identification

In formulating the research question, we used the population, concept, and context (PCC) framework, which the Joanna Briggs Institute recommends as a fundamental approach for structuring a scoping review and clearly defining inclusion criteria [47]. The PCC framework has been established in scoping reviews as a guide for formulating clear and meaningful research objectives, as it allows for the precise definition of the studied

population, the central concept, and the context within which the research problem arises [44].

The research question was: “What is the knowledge (CONC) of family physicians (P) and pharmacists (P) about mental frailty (CONC) in older adults (CONT)?”

Relevant literature identification

We used several international databases to conduct the literature review: PubMed, Wiley Online Library, CINAHL, ScienceDirect, and Google Scholar. To ensure the comprehensiveness of the review, we also performed a manual search, reviewing the literature of the retrieved sources to identify additional relevant sources not included in the search string.

The search strategy was based on a combination of controlled terms (MeSH) and free keywords in English related to: (i) knowledge and clinical practice of health professionals (knowledge, awareness, attitudes, practice, competence, perception), (ii) cognitive and psychological aspects of frailty (including the terms “cognitive frailty”, “psychological frailty”, and “mental frailty”), reflecting the conceptual overlap between these constructs in the existing literature, and (iii) primary health care (family practice, primary health care, family physician, general practitioner, pharmacist). To ensure comprehensive identification of relevant studies, regarding knowledge, skills and perception, the search strategy included terms related to knowledge as well as closely related constructs such as attitudes, awareness, perceptions, and competence. These terms were included because studies examining healthcare professionals' knowledge often operationalize this concept through related aspects of professional understanding and clinical practice.

The Boolean operators AND and OR were used to structure the search. We created two content-comparable search strings that we used when searching the databases: (“health knowledge” OR “attitudes” OR “practice” OR “awareness” OR “perception” OR “competence”) AND (“cognitive frailty” OR “psychological frailty” OR “mental frailty”) AND (“family physician” OR “family practice” OR “primary health care” OR “family physician*”) OR (“pharmacist*”) and (“cognitive frailty” OR “psychological frailty” OR “mental frailty”) AND (“family doctors” OR “general practitioner” OR pharmacist). The most recent literature search was conducted on December 22, 2025, and all relevant electronic databases were reviewed.

Database-specific search strategies, total hits, screening results, and the number of included studies are presented in Supplementary Material 2, ensuring transparency and reproducibility of the review. Due to the broad and unstructured nature of Google Scholar, we implemented a structured screening procedure to minimize selection bias. Only the first 150 search results sorted by relevance according to the Google Scholar algorithm were

considered, as these typically represent the most pertinent and widely cited studies.

Age-related descriptors (e.g., “aged”, “elderly”, “older adults”, “geriatric”) were not included in the search strategy because of the assumption that frailty is predominantly studied in older populations; however, titles and abstracts were manually screened to ensure relevance to older adults.

Study selection

When searching for literature, we considered the following inclusion criteria in the final set of sources included in the review: (i) sources that directly and indirectly focus on mental frailty in the analysis, (ii) sources that include diagnostic criteria or intervention approaches for addressing mental frailty to contribute to the knowledge of professionals at the primary level, (iii) publications from the last ten years (2014–2024) (due to content relevance, we also included one source published in 2025, which we identified using an ascending search of sources), (iv) sources in English or Slovenian (for feasibility and to ensure accurate interpretation and analysis of the sources by the research team), (v) freely accessible articles in full text (as this approach aligns with open science principles), (vi) all sources regardless of the research methodology used. The exclusion criteria were: (i) sources that focus solely on physical frailty, without any connection to the cognitive/mental/psychological component, (ii) sources that only include other health professionals (e.g., nurses) and cannot be relevantly linked to our research question, (iii) sources that are not scientific.

Data synthesis and analysis

The entire literature review, including the search, selection, and thematic analysis, was conducted by two independent researchers, thereby ensuring objectivity and reducing the risk of bias. The initial set of sources was prepared independently and then they jointly consulted on the final set. For sources identified by only one of the two researchers during the literature search, the researchers discussed their relevance in the final Excel table and reached a consensus on inclusion or exclusion. Discrepancies were resolved through discussion with a third researcher to reach consensus. All included sources used were uploaded to Zotero, which provided systematic reference management, consistent citation, and a transparent organization of the literature. For greater transparency and consistency, we organized all selected sources into a table in which we recorded key data from individual studies, such as: author, year of publication, country, type of research, purpose of the research, sample, key findings and, for our internal use, additional notes that we assumed would help us in the later analysis of sources included in the literature review. This initial

preparation served as a basis for further analysis. We then conducted a thematic analysis, focusing on topics that were directly related to our research question. The thematic analysis followed established procedures [48]. This means that we first organized the data relevant to our question, then coded it, and finally combined similar codes into meaningful subthemes and themes. In this way, we gained a clearer and more comprehensive picture of the research area.

Results

Characteristics of the included publications

A total of 389 sources were found in the search of PubMed ($n=3$), Wiley Online Library ($n=50$), CINAHL ($n=0$), Science Direct ($n=36$), and Google Scholar ($n=300$) databases. The process of searching and selecting sources is shown in the PRISMA diagram (Fig. 1). After an initial rough review of titles and abstracts, 286 sources were excluded, leaving 103 sources. These 103 sources were reviewed in full text, and 93 of them were excluded due to content inadequacy. We included 10 sources in the shortlist for further work. In addition, we included 10 additional sources based on a descendant (further search of references in cited articles) and an ascending search (search of articles that cited the included sources). In the final literature review, we included 20 sources from the initial set of all sources obtained either through search strings in databases or through descending and ascending search methods.

The included studies were conducted in different countries, covered different types of research (qualitative, quantitative, mixed methods, and literature reviews), and focused on different aspects of knowledge, recognition, and treatment of mental frailty in primary health care. Of the 20 sources included in our literature review, we ranked them by the relevance of their research content. 7 sources were directly relevant and answered our research question: Saudi et al. [49], Petridou et al. [50], Woo et al. [51], Baumgartner et al. [52], Kravvariti et al. [53], Ibrahim et al. [54], Lameirinhas et al. [55]. These sources were key to our analysis and provided a solid foundation for further findings. Indirectly relevant sources ($n=13$), which do not directly answer the research question but provide important information that helps clarify the broader context of mental frailty and the education and training of doctors and pharmacists, were: Yaman et al. [56], Muscedere et al. [57], Alharbi et al. [58], Abbasi et al. [59], Avgerinou et al. [60], Kennedy et al. [61], Seeley et al. [62], La Grouw et al. [63], Paraskevopoulos et al. [64], dos Reis Mesquita et al. [65], Kotsani et al. [66], Faulkner et al. [67], Dent et al. [68]. The characteristics of the included sources are shown in Table 1. Most of the included sources ($n=13$) were published in the last five years.

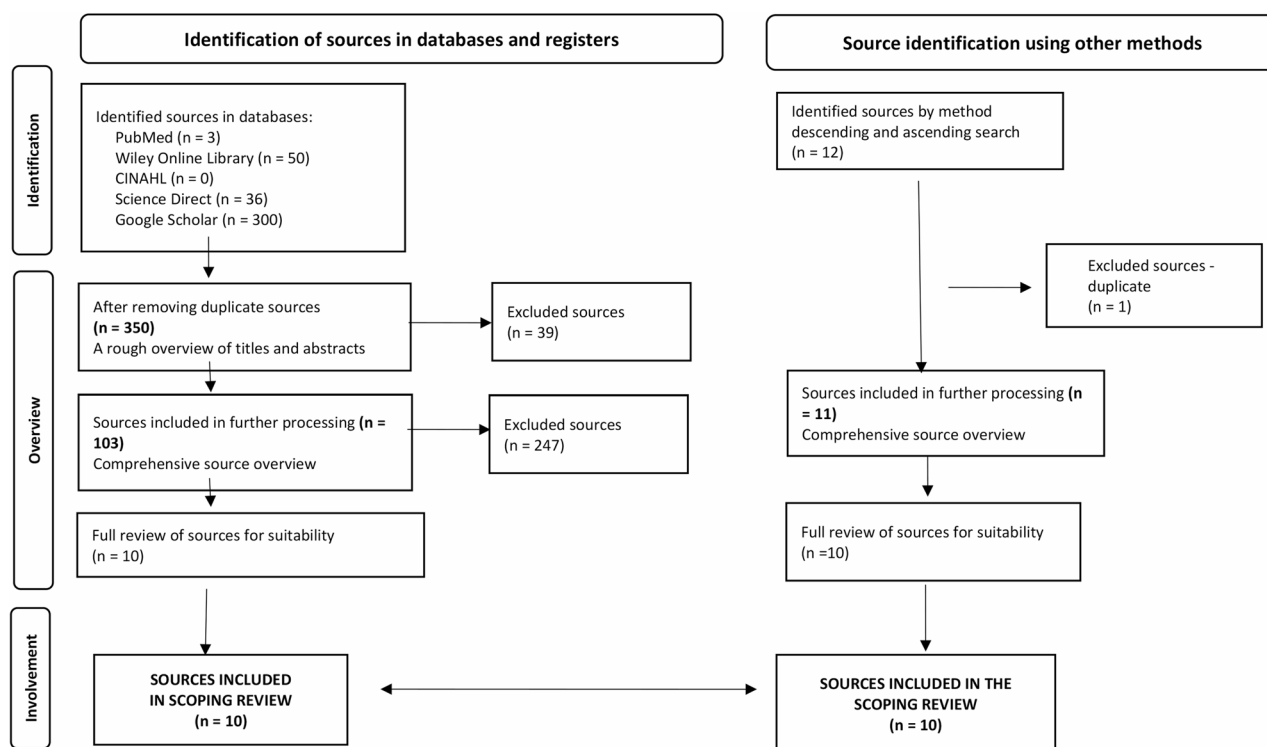


Fig. 1 PRISMA-ScR flow chart for the study selection process

Thematic analysis

Through thematic analysis, we identified three main themes with seven subthemes, which explained the research question (Table 2).

The first main theme, “Understanding and Recognizing Mental Frailty,” encompasses three topics: (1) Conceptualization and definitions of frailty, (2) Identifying and assessing frailty, and (3) Biopsychosocial aspects of frailty.

Conceptualization and definitions of frailty

Frailty is generally poorly understood by healthcare professionals, who often view it simply as physical weakness, manifested by difficulty walking, loss of strength, and mobility [50, 61, 67]. Even most primary care professionals are unfamiliar with the definition, diagnostic approaches, and treatment options, which can affect the quality of medical care [65]. Mental frailty is strongly linked to physical frailty [51], which indicates a complex phenomenon [57] that family doctors must also address [56]. Saudi and colleagues [49] emphasize that a comprehensive geriatric assessment, including physical, psychological, and cognitive dimensions, is essential even in family medicine clinics, with the simultaneous need for longitudinal follow-up. Fragmentation in definitions leads to inconsistent recognition and treatment practices.

Identifying and assessing frailty

Experience from England shows that family medicine clinics are key to systematically identifying frailty [58], because family doctors see their patients holistically and are connected to them throughout their lives [59, 68]. A comprehensive assessment includes the physical, psychological, cognitive, and social elements of the patient’s health. Frailty screening tools should be pragmatic, validated, and easy to use, such as the Clinical Frailty Scale [59]. Monitoring older people for frailty also means identifying social isolation, malnutrition, and other factors [56]. Existing tools often combine cognitive and affective variables, which reduces the accuracy of the assessment, so they recommend a separate assessment of these two dimensions [55]. Effective identification of mental frailty in family medicine requires validated tools, a multidisciplinary and holistic approach, trained health care providers, and systemic conditions that enable the feasibility of screening. For this reason, family doctors are a central professional group that can significantly contribute to maintaining the functionality and quality of life of older adults through timely detection and monitoring of mental aspects of frailty [58, 59].

Biopsychosocial aspect of frailty

The biopsychosocial perspective of frailty emphasizes that physical, cognitive, psychological, and social vulnerability in older adults are intertwined. There is a strong

Table 1 Characteristics of included articles

Authors Country (year)	Research design (sample size)	Aim / Purpose	Key Findings
Saudi et al. [49] Egypt (2021)	Cross-sectional study ($n=404$; elderly ≥ 60 years)	Assess the prevalence of frailty in older adults and the association between physical frailty and cognitive functioning.	Individuals with frailty have significantly worse cognitive functioning. Verbal fluency, orientation, calculation, abstraction, memory, naming, and attention are significantly negatively correlated with frailty status.
Yemen [56] Turkey (2019)	Narrative review	Review the concept of frailty.	Family doctors are key in the early identification of frailty due to their continuous contact with patients. Holistic treatment includes physical, nutritional, and social aspects and integrated treatment.
Petridou [50] Greece (2019)	Narrative review	Review different definitions of frailty and explore the connec- tion between physical and cognitive frailty.	Early identification of cognitive frailty is key. Multi-domain interventions that include physical exercise, nutrition, and cognitive activities have been effective in preventing and reversing cognitive frailty in older adults.
Muscudere et al. [57] Canada (2016)	Non-systematic literature review	Assess the importance of frailty screening and the development of integrated models of care	Health policy changes and the development of an integrated, systemic approach to frailty are needed. Primary health care will require different treatment strategies, screening, and assessment tools.
Alharbi et al. [58] United Kingdom (2020)	Qualitative re- search ($n=22$)	Investigate the implemen- tation of a national frailty management policy.	There is a lack of resources and evidence of effectiveness for address- ing frailty. Staff feel an additional burden, there is a risk of bureaucratic implementation without real benefit for patients. The need for support and training is highlighted.
Ibrahim et al. [54] Malaysia (2024)	Qualitative research ($n=16$; ≥ 60 years)	Assess medication manage- ment in individuals with cognitive frailty	Participants were mostly able to take their medications independently. Misconceptions about medications, access problems, reduced mobility, and deteriorating health status were identified as barriers. Trust in doctors is important in managing medications. Motivation: trust in doctors.
Baumgartner et al. [52] Switzerland (2021)	Secondary analysis of the randomized EFFORT study ($n=881$ patients ≥ 80 years)	Examine the effect of indi- vidualized hospital nutritional support on mortality in frail elderly people.	Individualized nutritional support significantly reduced 30-day mortality ($> 50\%$) and improved long-term functional outcomes and quality of life. Early screening for nutritional risk, followed by nutritional assessment and implementation of individualized nutritional interventions are urgently needed.
Kravvariti et al. [53] Greece (2021)	Narrative review	Examine the relationship between the placebo effect and dimensions of frailty.	The placebo effect is strongly linked to mental frailty - vulnerable elderly people are more susceptible to negative beliefs about medications.
Woo et al. [51] China (2015)	Longitudinal quantitative study ($n=816$, over 65 years old)	Assess the feasibility of screening the elderly with the FRAIL questionnaire.	The FRAIL scale has proven to be a useful tool for early detection of frailty and allows for targeted interventions to slow deterioration.
Dent et al. [68] Australia (2017)	Development of guidelines using the GRADE method	Improve frailty recognition and management among the elderly.	Recommendations to improve the management of frailty: use a validated tool for identifying and prescribing physical activity and reducing poly- pharmacy. The guidelines do not directly address mental frailty.
Seeley et al. [62] United Kingdom (2024)	Qualitative study ($n=31$)	Explore the opinions of primary level professionals on addressing frailty.	Managing frailty is complex; optimizing medication is a key challenge. A multidisciplinary approach has potential. Building trust with patients is key.
La Grouw et al. [63] Netherlands (2020)	Qualitative study ($n=9$)	Explore the views of older people and healthcare profes- sionals on the management of frailty.	Doctors view frailty as a "case for management" with a focus on the future and risk prevention; the elderly as a state of loss of past abilities, indepen- dence, and lifestyle.
Abbasi et al. [59] Canada (2018)	Literature review	Assess the importance of early identification and inte- grated management of frailty.	Primary care is best suited for screening with validated tools. Effective treatment includes physical activity, nutrition, medication review, social support, and a multidisciplinary approach. Various obstacles and the need for additional education and training were identified.
Paraskevopoulos et al. [64] Greece (2025)	Qualitative study ($n=30$)	Examine factors influencing deprescribing in frail elderly people.	Barriers include a lack of time, knowledge, motivation, communication skills, national guidelines, and the influence of pharmaceutical representa- tives. Factors that facilitate deprescribing include communication, patient engagement, care coordination, and non-pharmacological approaches.

Table 1 (continued)

Authors Country (year)	Research design (sample size)	Aim / Purpose	Key Findings
Kennedy et al. [61] Ireland (2021)	Qualitative research ($n = 17$ healthcare pro- fessionals; $n = 3$ patients)	Explore perspectives on frailty and its management in primary care.	Different definitions and understandings lead to inconsistent treatment. They suggest training, strengthening the primary level, and developing uniform treatment pathways.
Faulkner et al. [67] United Kingdom (2024)	Qualitative re- search ($n = 15$)	Investigate the knowledge and role of pharmacists in optimizing medication in frail individuals.	Pharmacists have limited knowledge about frailty, recognizing mainly physical aspects. They see an important role in communication, patient support, resolving medication problems, and want a broader role in care. They lack time, access to data, and training.
Avgerinou et al. [60] United Kingdom (2021)	Qualitative re- search ($n = 31$)	To explore the views and needs of primary-level professionals.	Key challenges include time constraints, fragmented care, the lack of multidisciplinary teams, inadequate communication across care levels, and gaps in education. Frailty is also associated with psychological factors, such as loneliness and depression, highlighting the need for validated assessment tools and practical training for healthcare professionals.
Kotsani et al. [66] Greece (2021)	Quantitative research ($n = 31$)	To examine the effectiveness of the educational program.	After three months, more participants were using screening methods, had better knowledge and more self-confidence, and were less convinced that frailty was an inevitable part of aging. Time remains the main barrier.
dos Reis Mesquita et al. [65] Brazil (2022)	Cross-sectional survey ($n = 485$)	To assess the knowledge of frailty among primary-level professionals.	A very low level of knowledge about frailty syndrome has been found: lack of knowledge about its definition, diagnosis, and treatment. Poor knowledge affects the quality of care for the elderly.
Lameirinhas et al. [55] Spain (2024)	Scoping review (16 sources)	Identify psychological variables in frailty assessment tools and conceptualize psychological frailty.	Psychological variables are largely neglected in existing tools. They most often include cognitive and affective vulnerability. The authors recommend assessing both dimensions separately.

Table 2 Thematic analysis of sources included in the literature review

Main Theme	Subthemes	Summary / Key Points
Under- standing and re- cognizing mental frailty	Conceptualization and definitions of frailty	Frailty is often understood too narrowly – as a physical phenomenon; the mental and social dimensions are neglected; definitions are inconsistent.
	Identifying and assessing frailty	Screening tools are rarely used; cognitive and psychological assessment is not included in the routine; lack of time and knowledge for effective identification.
	Biopsychosocial aspect of frailty	Frailty is a multidimensional phenomenon that requires a holistic approach.
Ad- dressing mental frailty in practice	Holistic health treatment and interventions	Recommendations for integrated care and multidisciplinary approach; rarely implemented in practice; the biomedical model dominates.
	Pharmacist role and medication management	Pharmacists are recognized as key in deprescribing and the safe use of medications, but are often insufficiently involved in teamwork.
Systemic barriers, chal- lenges, and edu- cational needs	Obstacles and challenges in treatment	Lack of teams, guidelines, and coordination; fragmented care; insufficient communication between levels of the health system.
	Knowledge, skills, and educational needs	Knowledge about mental frailty is lacking; interdisciplinary education and development of clinical guidelines are needed.

correlation between physical and cognitive frailty, and early interventions such as physical activity, adequate nutrition, and social support can significantly slow the progression of both forms of frailty [50, 52]. Frail individuals are more often burdened with chronic diseases, polypharmacotherapy, falls, depressive symptoms, sarcopenia, cognitive impairment, and limitations in daily activities, which indicates the multidimensional nature of frailty and also confirms the necessity of a biopsychosocial model of treatment [51, 54, 69]. A biopsychosocial approach to treatment is key to successful outcomes [53], where we should not ignore the active role of older people, as it has a significant impact on the acceptance and effectiveness of interventions [63].

The second main theme, “Treatment of mental frailty in practice,” includes two topics: (1) Comprehensive health care treatment and interventions, and (2) Pharmacist role and medication management.

Holistic health care and interventions

Treatment of mental frailty is most effective when it is holistic, integrated, and patient-centered, involving multiple disciplines [56]. The management of frailty as a whole is based on interdisciplinary interventions, including care planning that takes into account the person's wishes, promotion of physical activity, nutritional interventions (e.g., increasing protein intake) [70],

regular medication reviews to reduce polypharmacy, and strengthening social networks. Such an approach to the management of frailty should become part of the routine practice of a multidisciplinary team at the primary level, with team members working in coordination and having the appropriate knowledge [52, 59, 62]. Effective treatment also requires a confidential dialogue with the person, which connects the past, present, and future and enables better alignment of professional recommendations with the actual needs of the elderly [62, 63].

Pharmacist role and medication management

Pharmacists accept frailty as an inevitable part of old age, and they lack the skills and knowledge to distinguish between frail and non-frail individuals. They generally report poor knowledge of frailty. Better recognition of frailty could support a more tailored medication counselling and management, which may contribute to safer medication use [67]. They perceive many potential problems in the treatment of frail persons related to medications, especially overprescribing, and therefore increasingly see their role in the process of deprescribing, which can only be meaningful with the cooperation of doctors [64]. Pharmacists are recognizing new roles in home visits to people who need assistance with the delivery, administration, and distribution of medications [67]. In individuals with mental frailty, medication management is made more difficult by poor memory and concentration. Adherence is also affected by mobility, accessibility, and misconceptions about medications – the placebo effect. In mentally frail individuals, trust in the doctor, patient motivation, and appropriate and tailored communication are key to solving medication-related problems as they contribute to better cooperation and more consistent adherence to prescribed treatment. Pharmacists emphasize the development of strategies for safer self-monitoring of medication management and systematic management of polypharmacy [53, 54, 64].

The third main theme, “Systemic barriers, challenges and educational needs,” is divided into two topics: (1) Barriers and challenges in treatment, and (2) Knowledge, competence, and educational needs.

Obstacles and challenges in the treatment

Primary care professionals face numerous barriers to identifying and managing frailty, including time constraints, insufficient focus on prescribing medication, fragmented care, and a lack of interdisciplinary teams, appropriate communication skills, and clinical guidelines [60, 62]. In England, a key challenge is a lack of human resources and evidence-based data on the effectiveness of interventions. Experts warn that without concrete systemic support, frailty can become overlooked [58]. Furthermore, variation in the understanding of frailty among

healthcare professionals leads to inconsistent treatment of older people. In a Brazilian study of primary care professionals, only 29.1% correctly cited a frailty assessment, underscoring that formal assessment of frailty is underused [66]. Moreover, another issue is that many frailty assessment instruments do not evaluate the psychological domain at all, and those that do typically include a limited number of psychological items [55]. What is more, these items vary considerably across different measurement tools, likely due to the absence of a clear definition of psychological frailty and its underlying components [55].

Pharmacists show gaps in frailty recognition [67], and doctors are often unaware of the definition, diagnostic approaches, and scientific evidence on treatment options, which collectively compromise the quality and consistency of care [50, 61, 65].

Knowledge, skills, and educational needs

The knowledge and experience of experts working with older adults need to be enhanced by developing additional educational programs for recognizing and addressing frailty [65, 71]. Short, targeted workshops significantly improve the use of screening strategies, knowledge, self-confidence in dealing with frailty, and change attitudes — frailty is no longer seen as an inevitable part of aging [66]. Pharmacists particularly highlight the need for continuous professional development, as they have gaps in knowledge and competencies [67]. Although only a few of them identified social or cognitive aspects without prompting [68] many described actively engaging with older adults experiencing loneliness or social isolation, positioning themselves as key points of contact and sources of support [68]. This suggests they might play a vital role in mitigating social risks in older adults, so targeted interventions are of great importance to equip them with proper skills to carry out their supportive roles they are already performing more effectively. Research shows that education can be effective in improving knowledge and recognition of frailty, especially when it includes practical strategies and a combination of online and face-to-face demonstrations or mentoring [60, 66]. In addition, the literature recommends systemic investments in primary health care, the development of pathways/guidelines for managing frailty, and the establishment of connecting services that would enable more integrated and effective treatment of older people [61].

Discussion

The present literature review has shown that the field of mental frailty is often overlooked in primary health care. Although only a limited number of studies directly addressed physicians’ and pharmacists’ knowledge of mental frailty, this finding likely reflects both the

emerging nature of the concept and the broader focus of existing research on physical frailty. While our search strategy intentionally included related constructs to capture the multidimensional nature of frailty, the limited number of directly relevant studies suggests that the knowledge of mental frailty in primary care remains insufficiently explored in the literature. Consequently, the findings of this review must be interpreted in light of this scarcity, recognizing that evidence on mental frailty in primary care remains limited.

The analysis and synthesis of all sources reviewed indicate that deficiencies in the knowledge and skills of health professionals can significantly affect the timely recognition and appropriate treatment of mental frailty. These findings highlight the need for improved education and training of health professionals to ensure more comprehensive care.

Despite increasing attention in geriatric medicine, the multidimensional nature of frailty is still poorly understood by healthcare professionals in primary care settings. The focus is predominantly on the physical (weakness, falls, muscle strength) [50, 61], followed by cognitive (memory, thought processes) decline [49], while the mental dimension (depression, anxiety) remains unaddressed or inconsistently taken into account [72–75]. The heterogeneous understanding of frailty is reflected in everyday primary care clinical practice; there are no uniform definitions, validated tools, or clinical guidelines. Without a common framework, it is difficult to establish a unified approach to early recognition and timely treatment of mental frailty. These findings are consistent with international views that the mental dimension remains the weakest part of the frailty syndrome [15, 21, 76], which can significantly affect the quality of treatment. The biopsychosocial aspect of frailty suggests that frailty has physical, mental, and social dimensions, which should never be considered in isolation [77] because many studies show that they often predict each other [78, 79].

Family doctors remain key in early detection of frailty [58, 59]. This is also confirmed by international guidelines that emphasize primary care as the central setting for frailty screening (British Geriatrics Society [80], European Geriatric Medicine Society [81]). Early recognition of frailty in family medicine is crucial, as frailty is reversible to a certain extent. With appropriate interventions (e.g., physical exercise, modified diet, reduction of medication, active community involvement, etc.), older adults can transition from a state of frailty to a state of pre-frailty, or at least maintain a stable state [82–85]. Family doctors have the opportunity to provide the most comprehensive and holistic view of each person's functioning [82–84]. In addition, multidisciplinary teams operate in family medicine clinics, which allows frailty to be treated

as a biopsychosocial phenomenon [86, 87] and distributes the work appropriately [71, 88]. While doctors and pharmacists have been identified as focal points in the current study, the role of other healthcare professionals should not be overlooked. For example, nurses play an important role in frailty screening and in supporting the multidisciplinary management of patients [65, 88].

Despite this central role, family doctors often do not recognize frailty as a separate clinical entity, but rather address it indirectly through the management of individual conditions or problems. This leads to fragmented treatment and unintegrated management of frail older people [33]. Failure to recognize frailty as a holistic phenomenon leads to a more rapid decline in the functional, cognitive, affective, and social abilities of older people and, consequently, to a greater burden on the healthcare system [89]. However, other barriers to recognizing mental frailty also arise. Due to time constraints, lack of resources, and insufficient and often inconsistent training, especially in pharmacological treatment, family doctors often fail to recognize and diagnose mental disorders, and pay insufficient attention to optimal medication prescription [90–92].

In addition to doctors, pharmacists also play a central role in the management of frail older people. Contact with older people is common in pharmacies, where they seek information about their symptoms and medications, and seek advice on treatment and appropriate therapy. Polypharmacy, defined as the simultaneous use of five or more medications, is common in frail people with multiple chronic conditions and is associated with an increased risk of adverse effects, clinically significant interactions, and impairment of functional abilities, which can lead to a state of frailty [93–96]. Our findings on the crucial, yet underutilized role of pharmacists [64, 67] are in line with international trends that recognize pharmacists as important actors in deprescribing and optimizing polypharmacy [97–99]. Due to frequent and continuous contact with older people, they also represent an important resource for identifying mental frailty and implementing brief, structured interventions.

Despite guidelines already adopted in some countries [100], frailty is still treated inconsistently and, as a result, poorly. Reasons for this include the lack of an accepted universal definition of frailty [50, 65], and there are numerous screening tools that too often only capture physical frailty [101]. Training should therefore include pragmatic and validated frailty screening tools that systematically assess mental frailty, too [20, 55]. Among the recommended approaches, a comprehensive geriatric assessment is particularly highlighted, as it is cited as an early diagnostic tool and can be performed by a multidisciplinary team [102]. A comprehensive geriatric assessment provides a comprehensive evaluation of physical

health, functional abilities, social and environmental context, safety, and mental health, including cognitive functioning, mood, and behavioral and mood symptoms. It also includes the older person's preferences, values, wishes for medical treatment, and advanced decisions, such as an advance directive regarding treatment [103]. However, a major drawback of this assessment tool is that it is time- and staff-intensive. It requires extensive multidisciplinary coordination, making it unsuitable for routine or mass screening in busy primary care settings [103, 104]. The tool is more recommended for use in already identified high-risk or frail elderly people [105]. Although newer screening tools already include the aspect of mental frailty, the depth of mental health assessment remains lacking [101, 106].

To date, theoretical explanations for the underrecognition of mental frailty in primary care remain limited, and no widely adopted framework specifically addresses this issue. However, several theoretical perspectives can help to understand this phenomenon. One relevant perspective is Role Identity Theory, which suggests that professional roles shape how individuals understand their responsibilities and priorities within their work environment [107]. In primary care, professional identity has traditionally been influenced by the Biomedical Model, where physical diagnoses, medication dispensing, and disease management have been the focus. This may reinforce an identity in line with the biomedical approach rather than a holistic care identity that includes mental and social dimensions. In addition, broader social factors may also play a role. Ageism can influence how symptoms in older adults are interpreted, leading clinicians to attribute psychological frailty symptoms to "normal aging," as inevitable consequences of physical illness or life circumstances rather than to potentially treatable conditions. A major challenge in effectively addressing frailty, of which mental frailty is an integral and integrated part, is a multilevel approach that goes beyond classical biomedical treatment and includes systemic, organizational, and individual measures.

At the systemic level, many authors emphasize the necessity of establishing integrated models of care that enable continuity of treatment, reduce fragmentation of services, and promote the integration of social and health sectors [56–61, 108, 109]. At the organizational level, the implementation of interdisciplinary teams, clear clinical guidelines, and tailored interventions, is proven effective in improving early recognition of frailty, reducing unnecessary hospitalizations and promoting coordinated and integrated care for older people [56, 59, 61, 62, 64, 73]. Strengthening the skills of health professionals is essential, especially in the areas of communication, clinical decision-making, methods of identification and treatment, and comprehensive assessment of the elderly.

Professionals must therefore be adequately educated about the concept of frailty, not only its physical aspect but also, among other things, the mental aspect, as this enables timely identification of risks for deterioration of health and quality care for frail persons. This is confirmed by our reviewed sources [59–62, 64, 66], as well as the wider international context.

This all points to the contradiction between the coexistence of increasing policy-level recognition of frailty and the limited operationalization of this concept in everyday primary care practice, particularly in the case of mental frailty. This discrepancy suggests that recognition of frailty at the policy and conceptual level has progressed more rapidly than its practical integration into clinical settings. As a result, mental frailty continues to be insufficiently addressed in routine primary care. This suggests that existing policy initiatives have not yet been effectively operationalized or communicated to frontline practitioners. Consequently, the responsibility lies not only with healthcare professionals but also with policy-makers, researchers, and other stakeholders to ensure that conceptual and policy advances are more effectively translated into clearer guidance regarding practical frameworks and implementable strategies.

Finally, if we want to address frailty management comprehensively, we must also consider it from the perspective of frail people themselves, as it is only their experiences and views that reveal how professional approaches are implemented in everyday life. There are divergences between the perspectives of health professionals and older people: the former understand frailty through future-oriented practices of risk management and prevention of future losses, while the latter understand frailty as a process imbued with experiences of past losses, concerned with maintaining identity, independence, and quality of life in the present [63]. The importance of establishing a dialogue between frail elderly people and health professionals has been repeatedly emphasized in the literature – person-centered health care, based on the inclusion of the frail person and shared decision-making, increases the sense of autonomy and improves treatment outcomes [77, 110–113]. Older people are also often more concerned about the social and emotional challenges of frailty than about physical symptoms alone, which again highlights the need for comprehensive and personalized care that considers all dimensions of a person's health [37, 111, 114].

The findings of this review highlight gaps in the knowledge of primary health professionals about mental frailty, underscoring the need for systematic education and training in these areas. This will equip professionals to recognize and appropriately address the mental and social dimensions of frailty, which is an important step towards a holistic approach to frailty and contributes to

improving older adults' quality of life and maintaining their independence. Brief, skills-based education can significantly improve knowledge, perception, and clinical practice on frailty, including its mental aspects [60, 66]. This would therefore not only support primary care professionals, but would ensure older adults receive quality person-centered care.

Limitations of the study

The literature review showed that the field of mental frailty is under-researched, as there is no uniform definition, no validated tools, and at the same time, there is a lack of training for healthcare professionals. Sources indicating the knowledge and competencies of doctors and pharmacists to recognize and treat mental frailty are rare. This posed a significant limitation of this study, as we had to include other sources that did not explicitly address mental frailty, but were deemed helpful in answering our research question. This broader inclusion reflects the current state of the literature, where mental frailty remains relatively underexplored and often insufficiently defined. Moreover, the scoping review does not include an assessment of the quality of the included studies, so the findings are mainly descriptive, and the methodological heterogeneity of the studies makes it difficult to comprehensively synthesize and form solid conclusions.

In addition to limitations regarding availability of literature and the nature of scoping reviews, several methodological limitations from our side should be acknowledged. Firstly, the reviewed sources were limited to our keywords, so we may have lost relevant sources. Moreover, the scope of the review may also be limited by language bias due to the exclusion of non-English publications. We acknowledge that restricting sources by language may limit the inclusion of some relevant studies. We opted for excluding literature in languages not spoken by the research team to avoid losing or misinterpreting nuanced meanings during the translation process. We also included only research and review articles in the literature review, but did not include other literature that could broaden the scope of relevant content. Additionally, limiting the search to openly accessible articles may have excluded relevant studies behind paywalls, potentially introducing selection bias. However, this approach enhances transparency and reproducibility, in line with open science practices. Lastly, there is also a risk of author bias due to the interpretive nature of thematic coding.

Implications for future research

Future research should focus on developing a unified definition of mental frailty and its related constructs and empirically examining the knowledge and competencies of health professionals at the primary level, where early detection and intervention are the most feasible.

Longitudinal studies of the consequences of unrecognized mental frailty are needed to guide practice. In addition, there is a need to develop and validate brief, clinically useful screening tools that would enable early identification and timely comprehensive treatment of mental frailty.

Conclusion

Due to the aging population, managing frailty presents a significant public health challenge, necessitating the development of strategies that support the health, independence, and well-being of older adults. An important, yet often overlooked, component of frailty is its mental dimension. While this scoping review maps existing literature on the mental aspect of frailty, it does not establish causal relationships or evaluate intervention effectiveness. However, the evidence suggests that addressing mental frailty could contribute to mitigating functional decline and improving overall health outcomes.

The implementation of comprehensive, interdisciplinary approaches are critical for improving care quality. It is important to approach recommendations for policy and education cautiously, ensuring that they are clearly linked to the identified knowledge gaps in primary care, with a focus on the biopsychosocial model of frailty. This approach would help integrate the mental dimension of frailty into practice, leading to more holistic and effective care for older adults.

Supplementary Information

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Supplementary Material 1.

Supplementary Material 2.

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Authors' contributions

BB and TB contributed equally as first authors to the conception and design of the study, data collection, analysis and also drafted the initial manuscript. MV, KV, MFI, PMB, and SO provided input on study design and critically revised the manuscript. All authors reviewed and approved the final version of the manuscript.

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Data availability

This study is a scoping review; all data were obtained from publicly available sources cited in the references.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

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Competing interests

The authors declare no competing interests.

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