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Physiotherapeutic interventions in the management of low back pain in the elderly: an integrative review

Physiotherapeutic interventions in the management of low back pain in the elderly: an integrative review

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SUMMARY

The aging population has increased the diagnosis of chronic low back pain (CLBP) in the elderly, making it one of the main public health problems due to functional limitations and the negative impact on quality of life. Physiotherapy emerges as a central and safe approach in the care of this condition, offering diverse resources that go beyond the physical dimension, also reaching emotional and social aspects. The following study aimed to analyze recent scientific evidence on physiotherapy interventions for elderly people with CLBP. **Methodology:** This is an integrative literature review conducted between January and September 2025, encompassing materials published between 2023 and 2025 in the PubMed/ MEDLINE, Scopus, Web of Science, SciELO, and PEDro databases. Forty-eight studies were identified, of which 14 fully met the inclusion criteria. The interventions analyzed included individualized therapeutic exercises, Pilates, hydrotherapy, combined electrotherapy, manual therapy, Tai Chi, Cognitive-Functional Therapy (CFT), group exercises, and telerehabilitation, in addition to the use of technologies such as biofeedback and motion sensors. **Results:** The findings reinforce the superiority of multimodal, personalized therapeutic plans aligned with the biopsychosocial model, with a positive impact on pain, functionality, balance, and engagement. However, gaps persist related to the absence of specific guidelines for the elderly, heterogeneity of protocols, and limitations in access to technological and structural resources. **Conclusion:** This study contributes to a paradigm shift in the treatment of low back pain in the elderly, highlighting that the integration of physical, psychosocial, and digital interventions constitutes the most promising approach for the management of low back pain in older adults.

Keywords: Chronic low back pain; Geriatric physiotherapy; Multimodal intervention; Functional rehabilitation.

ABSTRACT

Population aging has increased the prevalence of chronic low back pain (CLBP) among older adults, making it one of the major public health challenges due to its functional limitations and negative impact on quality of life. Physiotherapy stands out as a central and safe approach in managing this condition, offering diverse resources that extend beyond the physical dimension to include emotional and social aspects. **Objective:** This study aimed to analyze recent scientific evidence on physiotherapeutic interventions for older adults with CLBP. **Methodology:** An integrative literature review was conducted between January and September 2025, covering articles published in 2023, 2024, and 2025, in PubMed/MEDLINE, Scopus, Web of Science, SciELO, and PEDro databases. A total of 48 studies were identified, of which 14 fully met the inclusion criteria. The interventions analyzed included individualized therapeutic exercises, Pilates, hydrotherapy, electrotherapy, manual therapy, Tai Chi, Cognitive Functional Therapy (CFT), group exercise, and telerehabilitation, in addition to the use of technologies such as biofeedback and motion sensors. **Results:** Findings reinforce the superiority of multimodal and personalized treatment plans aligned with the biopsychosocial model, with positive effects on pain, functionality, balance, and engagement.

However, gaps remain regarding the lack of elderly-specific guidelines, protocol heterogeneity, and limited access to technological and structural resources. **Conclusion:** This study contributes to a paradigm shift in the management of CLBP in older adults, highlighting that the integration of physical, psychosocial, and digital interventions represents the most promising approach for treatment.

Keywords: Chronic low back pain; Geriatric physiotherapy; Multimodal intervention; functional

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rehabilitation.

1. INTRODUCTION

Population aging is a global and irreversible phenomenon that has had an impact
directly impact healthcare systems by increasing the incidence of chronic diseases and conditions.
disabling conditions. Among these conditions, chronic low back pain (CLBP) stands out as one of the
main causes of functional limitation in individuals aged 60 or older, compromising the
Mobility, autonomy, and quality of life. It is estimated that millions of elderly people worldwide...
live with persistent symptoms of lower back pain, the management of which requires therapeutic strategies.
safe, effective and adapted to the specific needs of this age group (Baroncini et al., 2024).

Physical therapy has emerged as one of the main non-pharmacological strategies.
for the treatment of chronic low back pain in the elderly, offering alternatives that include therapeutic exercises,
Pilates, hydrotherapy, electrotherapy, manual therapy, and mind-body modalities such as Tai Chi. In addition
In addition to conventional resources, innovative approaches are being developed based on the biopsychosocial model, such as...
Cognitive-Functional Therapy, and the increasing use of digital technologies, such as telerehabilitation,
Biofeedback and motion sensors expand the possibilities for care and promote greater...
Adherence to treatment (Silva et al., 2024).

However, despite the progress, important gaps still persist, such as the absence of
specific clinical guidelines for elderly patients with chronic low back pain, the heterogeneity of the protocols applied, and the
Inequalities in access to therapeutic resources, especially in public health systems.
In this context, it becomes relevant to critically analyze the most recent evidence on interventions.
Physiotherapeutic approaches focused on the elderly population, identifying benefits, limitations, and opportunities.
for the qualification of clinical practice (Tikhile; Patil, 2024).

Therefore, this study aims to conduct an integrative literature review.
about the physiotherapeutic strategies applied to the management of chronic low back pain in the elderly, seeking
to highlight the most effective resources, their functional and psychosocial impacts, as well as the gaps
which still need to be overcome to ensure safer, more equitable and patient-centered care.
elderly.

2. THEORETICAL FRAMEWORK

2.1 Aging and lower back pain

Population aging is a global phenomenon that has driven change.
significant in public health profiles, especially in relation to chronic diseases and
Degenerative diseases. Chronic low back pain (CLBP) is among the main problems faced by this group.
population, being one of the main causes of functional limitation in individuals aged 60 or older.
Furthermore, the condition compromises the mobility, autonomy, and quality of life of millions of elderly people.

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worldwide (Baroncini et al., 2024).

Common changes associated with aging, such as joint degeneration and loss of strength. muscular, reduced bone mineral density, and shortening of fundamental chains and Important for postural alignment, these are factors that favor the onset and chronicity of... Lower back pain (Tikhile; Patil, 2024). In addition, it is common for older adults to present with other Associated comorbidities, which may limit the choice and intensity of therapeutic interventions.

However, lower back pain cannot be understood solely from an anatomical point of view. or biomechanical. Several emotional and social factors, such as the fear of feeling pain when... movement, anxiety about the possibility of falling, and social isolation are elements that They directly influence pain perception and treatment outcomes (Baroncini et al., 2024; Silva et al., 2024). This broader perspective, which considers the individual in their entirety, has gained ground in contemporary approaches to caring for elderly people with chronic pain.

For this reason, the management of chronic low back pain in the elderly should consider both physiological aspects. as well as emotional and social contexts, promoting individualized strategies that respect the functional limitations and encourage the elderly person to take a leading role in the therapeutic process.

2.2 Physiotherapy in chronic low back pain

Currently, physiotherapy has proven to be highly recognized as one of the forms Safer and more effective non-pharmacological treatments for chronic low back pain in the elderly. This approach offers various resources that contribute to pain reduction and improved well-being. mobility, balance and overall functionality, as well as presenting fewer risks of side effects. adverse effects when compared to continuous use of medications (Baroncini et al., 2024)

Among the physiotherapy resources with the strongest scientific evidence, exercises stand out. Personalized therapeutic methods, adapted Pilates, motor control exercises, hydrotherapy, Electrotherapy combined with active exercises and manual therapy (Tikhile; Patil, 2024; Narenthiran et al., 2025). In addition to these traditional strategies, modalities such as Tai Chi have been increasingly used. incorporated into rehabilitation protocols for the elderly, as they promote postural stability, Body awareness and improved motor control.

In a recent meta-analysis, Zhao et al. (2025) identified that Tai Chi, being a A low-impact activity, performed slowly and focusing on breathing and balance. It has proven effective in reducing chronic low back pain in the elderly. The authors suggest that sessions Regular sessions of 15 to 30 minutes, three times a week, over 16 weeks, can yield benefits. significant.

In addition to Tai Chi, group exercise programs have also shown results. positive. In a study conducted in Brazil, Silva et al. (2024) reported that carrying out activities

Year V, v.2 2025 | Submission: 06/11/2025 | Accepted: 08/11/2025 | Publication: 10/11/2025

Physical activity in group settings not only promotes physical gains, but also fosters other aspects psychosocial factors, such as motivation, sense of belonging, and adherence to treatment. According to According to the authors, social interaction during sessions can be a determining factor for success. therapeutic, especially among elderly people who live alone or in situations of social vulnerability.

On the other hand, there is evidence that the combination of manual therapy techniques and Active therapeutic exercises enhance the effects of treatment. A recent review indicated that Combined interventions are more effective than those applied in isolation. These The results reinforce the importance of individualized treatment plans, developed by qualified professionals, based on the clinical and functional conditions of each patient (Narenthiran) et al., 2025).

2.3 Biopsychosocial approach and the role of technologies in rehabilitation

Currently, the biopsychosocial model is widely adopted as a conceptual basis in Interventions for chronic pain, especially in the elderly. This model proposes that pain should be... understood as a multifactorial phenomenon, influenced by physical, cognitive, and other components. behavioral and social aspects. In this scenario, physiotherapy is not just about prescribing exercises, but... It also includes educational activities, motivational strategies, and emotional support (Tliveos et al., 2024).

An example of this is Cognitive-Functional Therapy (CFT), which integrates exercises. progressive cognitive techniques for restructuring dysfunctional thoughts about pain. According to Thiveos et al. (2024), this type of approach has shown good results in older adults. primarily by reducing the fear of movement, improving posture, and promoting coping skills. Dealing with pain in a more active and confident way.

At the same time, digital technologies are being incorporated as allies in care. Physiotherapy for the elderly. The use of telerehabilitation, through online platforms and tutorial videos. Remote monitoring by physiotherapists has allowed treatment to continue even in contexts of isolation or difficulty in movement (Sivertsson et al., 2024). This resource is This becomes even more relevant in light of the physical and social limitations faced by a portion of the population. elderly woman.

According to Baroncini et al. (2024), features such as biofeedback, motion sensors and Pain management apps are already being integrated into physiotherapy practice in several countries. providing real-time data on exercise execution, posture, and progress. Clinical tools. These tools do not replace the in-person work of the physiotherapist, but function as a substitute. Support for continuity of care at home.

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2.4 Previous reviews and gaps in the literature

Despite the progress and evidence supporting the implementation of interventions

Regarding physiotherapy techniques in the treatment of lower back pain in the elderly, there are still important challenges to be addressed.
Challenges overcome in clinical practice. One of the main challenges relates to the absence of clinical guidelines.
specific approaches aimed at the elderly population, which makes standardizing treatments difficult (Baroncini).
et al., 2024).

Another critical point is the lack of training for physiotherapists in geriatrics, which can...
compromising the safety and effectiveness of interventions. As Tikhile and Patil (2024) point out, many
professionals still apply general protocols, disregarding important aspects of
aging, such as sarcopenia, the risk of falls, and bone fragility. Interventions such as
Rhythmic stabilization and core exercises, for example, have proven superior in
Compared to traditional techniques, they require technical expertise and specific knowledge of...
physiology of the elderly.

Furthermore, limited access to resources such as therapeutic pools, equipment,
Electro-stimulation and digital platforms may restrict the applicability of some interventions in
public contexts or in regions with less developed health infrastructure. In this sense, the formulation of
Public policies focused on geriatric physiotherapy become essential to expand access and...
Equity in care for the elderly population with low back pain.

3. MATERIALS AND METHODS

This study is characterized as an integrative literature review, a method that
It makes it possible to gather, analyze, and synthesize research results on a specific topic, thus facilitating...
A broader understanding of the phenomenon being studied and the identification of gaps in knowledge.

The search for studies was conducted between March and September 2025, encompassing publications.
dated from 2023 to 2025. The searches were conducted in the PubMed/MEDLINE, Scopus, and Web databases.
of Science, SciELO, and PEDro. The descriptors were defined using the DeCS and MeSH vocabularies.
and combined using the Boolean operators AND and OR. Among the main terms used
Key terms highlighted included: lower back pain, chronic lower back pain, elderly, older adults, aging.
Physiotherapy, physical therapy and rehabilitation.

To identify the studies included in this review, a rigorous process was carried out.
The selection process involved several stages. Initially, 48 studies were identified in the databases.
selected. After reading and screening the titles, 18 publications were excluded for not being
related to the proposed theme, resulting in 30 works for analysis of the abstracts. In this stage, 11
Publications were discarded for not meeting the inclusion criteria, especially because

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addressing mixed populations or exclusively pharmacological interventions.

A full reading was conducted on 19 publications, of which 5 were excluded due to non-compliance. either presenting chronic low back pain as the primary outcome or not describing interventions. specific physiotherapy techniques for the elderly. Therefore, the final sample consisted of 14 publications that fully met the established eligibility criteria. These numbers The criteria are detailed in Table 1, which presents the complete workflow for study selection. included.

Table 1 - Selection process for studies included in the review

Selection Process Stage: Studies initially	**Number of Studies**
identified; Excluded in title screening; Publications	48
for abstract analysis; Excluded in abstract	18
analysis; Publications for full reading; Excluded in	30
full reading; Final sample included . **Source:**	11
data from the search and screening conducted	19
by the author between January and	5
September 2025.	14

Only studies published in Portuguese or English and available in full were included. involving elderly individuals aged 60 or older, diagnosed with lower back pain. chronic conditions that presented physiotherapy interventions or non-pharmacological strategies were included. excluding studies with populations that did not specify the elderly age range, research focused in surgical or drug treatments and non-scientific works, such as theses, dissertations and event abstracts. The resulting selection is detailed in the Table, which It presents the included publications, their objectives, applied interventions, and main results.

The selected publications were organized into a matrix containing author, year, The objective, intervention applied, and main results are presented in Table 1. The analysis The analysis was conducted in a descriptive and comparative manner, grouping the evidence into thematic categories. related to the main physiotherapeutic strategies, such as therapeutic exercises, approaches Group activities, the use of digital technologies, and interventions based on the biopsychosocial model. This The synthesis allowed us to highlight not only the most consistent results, but also the gaps that These aspects still need to be explored in clinical practice focused on the elderly population with chronic low back pain.

4. RESULTS AND DISCUSSION

The analysis of the selected literature, comprising 14 studies published between 2023 and 2025, It highlighted a variety of effective physiotherapy interventions in the care of lower back pain. Chronic conditions in the elderly. Among the most frequent approaches, therapeutic exercises stood out. Individualized treatments, adapted Pilates, hydrotherapy, electrotherapy combined with active exercises,

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Manual therapies and strategies based on the biopsychosocial model, including digital resources. and group programs. Table 2 presents a summary of the publications included in this review. integrative approach, highlighting the objectives, the interventions applied, and the main results found.

Table 2 - Comparative Analysis of Physiotherapeutic Interventions in the Management of Low Back Pain.

Author (Year)	**Objective Intervention Main Results**	**Applied**	
Who (2023)	Global guidelines for the management of chronic low back pain	Non-surgical interventions, pain education, multidisciplinary approach	It recommends an evidence-based approach, prioritizing safe interventions adapted to the elderly population.
Baroncini et al. (2024)	Reviewing physiotherapeutic and non-conventional approaches to chronic low back pain in the elderly.	Therapeutic exercises, biofeedback, telerehabilitation, multidisciplinary techniques	They highlight the effectiveness of combining adapted exercises with digital with technologies for pain reduction and functional improvement, with a biopsychosocial focus.
Tikhile; Patil (2024)	Evaluating physiotherapy strategies for chronic low back pain in the elderly.	Personalized therapeutic exercises, Pilates, hydrotherapy, electrotherapy	Rhythmic stabilization and core exercises proved superior; significant need for personalized professional training. and
Silva et al. (2024)	Evaluating group exercise programs for older adults with lower back pain.	Group exercises in a group	Group exercise programs promote physical and psychosocial benefits, increase motivation, and improve adherence to treatment.
Thiveos et al. (2024)	Evaluate the effectiveness of the therapy. Cognitive-Functional Therapy (CFT) for chronic low back pain	TCF (progressive exercises + cognitive restructuring)	Reducing fear of movement and improving postural control, promoting active participation in treatment.
Sivertsson et al. (2024)	Describe use telerehabilitation in elderly people with low back pain	Telerehabilitation, monitoring remote	Ensuring continuity of treatment for elderly people with mobility difficulties, integrating digital technologies into physiotherapy.
Baghaei et al. (2024)	To evaluate the effectiveness of core stabilization exercises on pain and disability in elderly individuals with chronic low back pain.	Lumbar stabilization and strengthening training core	Significant reduction in pain and functional disability, with maintenance of gains after 12 weeks of follow-up.
Martínez-García et al. (2024)	To analyze the effect of telerehabilitation cognitive-behavioral physiotherapy in elderly individuals with with chronic low back pain.	Cognitive-functional intervention + telerehabilitation	The association between TCF and remote service increased self-efficacy, reduced pain, and optimized therapeutic adherence.
Kim et al. (2024)	Compare the effectiveness of Tai Chi and Yoga in elderly people with chronic low back pain.	Tai Chi and Yoga	Both reduced pain, but Tai Chi proved more effective in improving balance and motor self-confidence in frail elderly individuals.
Pereira et al. (2025)	To evaluate the effectiveness from the of home-based and telerehabilitation physiotherapy in elderly individuals with chronic low back pain.	Telerehabilitation and home-based physiotherapy	Results comparable to in-person physiotherapy, with greater reach and lower healthcare costs, especially within the Brazilian public health system (SUS).
Zhao et al. (2025)	Meta-analysis on exercises for chronic low back pain in the elderly	Tai Chi	Tai Chi promotes significant pain reduction, improved posture and balance; recommended 15-30 minutes, 3 times a week for 16 days. weeks.

Year V, v.2 2025 | Submission: 06/11/2025 | Accepted: 08/11/2025 | Publication: 10/11/2025

Narenthiran et al. (2025)	Review of the effects of manual therapy combination of manual therapy exercises with therapeutic exercises therapeutic		Combined interventions are more effective for pain reduction and functional improvement than isolated techniques.
Dabbour et al. (2025)	Comparing the effects of hydrotherapy and land-based exercises on pain and kinesiophobia in the elderly.	Hydrotherapy vs. land-based exercises	Hydrotherapy promoted a faster reduction in pain and fear of movement, with greater adherence from participants.
Liu et al. (2025)	To investigate the impact of Pilates on pain, balance, and physical function in elderly individuals with chronic low back pain.	Pilates	Pilates reduced lower back pain and improved balance and functional strength, demonstrating high acceptance among the elderly.

Source: Author, 2025.

In addition to the individual analysis of the studies presented in Table 2, it becomes relevant to organize The main physiotherapy strategies are organized into thematic categories to facilitate understanding. integrated with the available evidence. This systematization allows us to visualize not only the types of The intervention employed, but also its predominant benefits and the most significant observations. recurring issues regarding clinical applicability, especially in the context of elderly patients with low back pain. chronic.

Table 3 below summarizes these interventions into four main areas: exercises, therapies combined, digital technologies and psychosocial approaches.

Table 3 - Thematic summary of the main physiotherapy interventions.

Category	Interventions	Main Benefits	Evidence and Observations
Exercises	Personalized exercises, Pilates, Tai Chi, Yoga, core stabilization, group exercises in group	Significant pain reduction, improved posture, balance, lumbar stability and function; increased motivation and adherence in group settings.	Studies (BAGHAEI et al., 2024; LIU et al., 2025; ZHAO et al., 2025; KIM et al., 2024; SILVA et al., 2024) indicate that Tai Chi (15–30 min, 3x/week, 16 weeks) and Pilates increase strength and proprioception; core stabilization exercises are effective for pain and disability; therapeutic groups stimulate psychosocial engagement.
Therapies Combined	Manual therapy combined with therapeutic exercises, stabilization techniques, and active mobilization.	Greater effectiveness in pain reduction, functional improvement, and prevention of recurrences; promotes postural re-education and better exercise tolerance.	Results from NARENTHIRAN et al. (2025) and DABBOUR et al. (2025) support the superiority of combined protocols; manual therapy preceding exercise facilitates pain modulation and amplifies motor and functional gains.
Technologies Digital	Telerehabilitation, biofeedback, remote monitoring, digital home physiotherapy	It maintains continuity of care, treatment, expands access and adherence, reduces costs and overcomes mobility barriers.	Evidence from SIVERTSSON et al. (2024), MARTÍNEZ-GARCÍA et al. (2024) and PEREIRA et al. (2025) show that telerehabilitation produces results similar to face-to-face physiotherapy; the use of sensors and real-time feedback improves postural control and allows continuous personalization.

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Approaches Psychosocial	Cognitive-al Therapy. (2024) and MARTINEZ-GARCIA et al. (2024) Functional cognitive-behavioral therapy (FCT), cognitive intervention physiotherapy and telerehabilitation, efficacy, and	Reduces fear of movement, anxiety, and catastrophizing; improves the management and postural control; increases therapeutic adherence.	THIVEOS et integrated behavioral education programs, combined with pain education and biopsychosocial, neuroscience component. promoting autonomy and self-control over pain.

Source: Author, based on Baroncini et al. (2024); TIKHILE; PATIL (2024); ZHAO et al. (2025). Meta-analysis on Tai Chi. V Magazine, v. Y, n. Z, p. xx-yy; SILVA et al. (2024), NARENTHIRAN et al. (2025), THIVEOS et al. (2024), SIVERTSSON et al. (2024); WHO (2023).

The summary presented in Table 3 shows that no single intervention is sufficient. to fully meet the multifaceted demands of chronic low back pain in the elderly. On the contrary, The results suggest that the combination of strategies — involving individualized exercises, Manual techniques, digital support, and psychosocial interventions offer greater effectiveness. This integrated approach is in line with the biopsychosocial model and with therapeutic principles. Recent international guidelines reinforce the importance of personalized treatment plans. progressive and sustained through the active engagement of the elderly.

A synthesis of studies published between 2023 and 2025, including the new findings (Table 3), confirms physiotherapy as a structuring axis in the management of chronic low back pain (CLBP) in the elderly. with consistent benefits regarding pain, functional capacity, balance, and therapy adherence. In Taken together, the evidence points to the superiority of multimodal and personalized plans, which They combine therapeutic exercises, mind-body interventions, manual therapy, and other components. educational/psychosocial and remote technological support, in accordance with international guidelines. for non-surgical and elderly-centered practices.

The findings of Tikhile and Patil (2024) reinforce the centrality of therapeutic exercise as The cornerstone of treatment, especially rhythmic stabilization and core strengthening, which have been surpassed Conventional techniques in clinical outcomes of pain and functionality. Complementarily, Baghaei et al. (2024) demonstrate that specific core stabilization exercises promote a reduction Significant reduction in pain and functional disability, with maintenance of gains after 12 weeks. Emphasis on personalization — adjusting intensity, progression, and exercise selection as needed. pain thresholds, physical capabilities (strength, mobility, endurance) and fall risk — converge with typical demands of aging (sarcopenia, osteoarthritis, frailty). In parallel, Narenthiran et al. (2025) and Dabbour et al. (2025) highlight that combinations of manual therapy with exercises Active ingredients and hydrotherapy tend to produce additive and faster effects in reducing pain. improving function and reducing fear of movement, respectively. This convergence supports protocols in which manual therapy is used as a "gateway" to reduce pain and allow More effective execution of progressive exercises.

Among the mind-body approaches, Zhao et al. (2025) and Kim et al. (2024) offered

Year V, v.2 2025 | Submission: 06/11/2025 | Accepted: 08/11/2025 | Publication: 10/11/2025

evidence regarding Tai Chi and Yoga, with particular emphasis on Tai Chi, which has clear practical parameters. (15–30 minutes, three times a week, for 16 weeks), showing pain reduction and improvement postural balance — a crucial component for fall prevention and maintaining autonomy. Pilates, according to Liu et al. (2025), also contributes to pain reduction and improved balance and Functional strength, revealing high acceptance among the elderly. Tai Chi appears to act on multiple pathways: Training in fine postural control, improving proprioception and coordination, as well as regulation. Emotional (mindfulness, breathing), which reduces catastrophizing and hypervigilance to pain. These The effects align with the biopsychosocial rationale and support the inclusion of these modalities as Low-impact, highly acceptable options for older adults with load restrictions and comorbidities.

The psychosocial dimension is a determining factor across the board. Thiveos et al. (2024) and Martínez-García et al. (2024) showed that Cognitive-Functional Therapy (CFT), associated with Telerehabilitation and pain education promotes a reduction in the fear of movement (kinesiophobia). Restructuring dysfunctional beliefs, improving postural control, and increasing self-efficacy. Silva et al. (2024) reinforce that group programs promote not only physical gains, but also Social motivation, belonging, and peer support are essential elements for increasing adherence. therapeutic. When combined, TCF and group exercises provide a promising path, Integrating pain education, fear reduction, and ongoing engagement increases the likelihood of recovery. maintaining gains in the medium term.

The incorporation of digital technologies plays a strategic role in access to and continuity of education. Careful. Sivertsson et al. (2024), Baroncini et al. (2024), Martínez-García et al. (2024) and Pereira et al. (2025) describe that telerehabilitation, biofeedback, remote monitoring and physiotherapy Digital homes allow people to overcome mobility and geographical barriers, maintaining contact. clinical practice and the technical correction of exercises, in addition to enhancing motor learning, adherence and Self-management. These resources function as a home extension of physiotherapy, increasing the dose. Therapeutic care and continuity of care — key aspects in the management of chronic conditions.

From a regulatory standpoint, the WHO guidelines (2023) consolidate this arrangement. recommending non-surgical interventions, pain education, and a multidisciplinary approach. adaptation to the conditions of the elderly. The set of studies analyzed is aligned with these recommendations, reinforcing that clinical practice should prioritize safety, gradual progression, and goals. Individualized and integrated physical, cognitive-emotional, and social domains.

In clinical practice, it is recommended that services and professionals adopt screening procedures. multidimensional (pain, function, risk of falls, beliefs/fears, social support); offer exercise Progressive training focused on motor stabilization/control, coupled with manual therapy when indicated; incorporate psychosocial components (CBT, pain education, SMART goals) and, when feasible, therapeutic groups; use technology in a hybrid way (in-person + remote) to support adherence;

Year V, v.2 2025 | Submission: 06/11/2025 | Accepted: 08/11/2025 | Publication: 10/11/2025

and monitor standardized outcomes (e.g., pain intensity, ODI/Roland-Morris, balance, TSK (quality of life measures) are used in periodic cycles to adjust the plan. For the research, these are... Priority trials with larger samples, follow-up ÿ 6–12 months, stratification by frailty/sarcopenia, adherence and safety reports, and cost-effectiveness analyses of models. multimodal and digital.

In conclusion, studies converge on an operational consensus: chronic low back pain in the elderly. Responds best to multifactorial and personalized interventions. The combination of exercise structured, manual therapy, psychosocial and educational components, mind-body strategies and Technological support promotes pain reduction, functional improvement, and greater autonomy, in alignment. in accordance with international guidelines. The next step is to standardize and scale these care packages with safety, feasibility, and equity criteria, ensuring that the benefits observed in the literature are achieved. translate into sustainable clinical impact in the care of older adults.

FINAL CONSIDERATIONS

This integrative review allowed us to gather and analyze the most recent evidence on Physiotherapeutic interventions in the management of chronic low back pain in the elderly, demonstrating that the Physical therapy offers safe, effective, and adaptable resources to meet the needs of this population. In general, it was found that programs based on individualized therapeutic exercises, Combined with complementary modalities such as Pilates, Tai Chi, and manual therapy, they present positive effects. positive effects include pain reduction, improved mobility and balance, promoting greater functional independence.

Additionally, group strategies, psychosocial components such as Cognitive Therapy-Functionality and the support of digital technologies, including telerehabilitation and biofeedback, have proven effective. capable of increasing adherence, reducing fear of movement, and promoting self-management of the condition. chronic. These results highlight that effective care must be structured in a multimodal way, integrating physical, emotional, and social dimensions, in accordance with the biopsychosocial model and in accordance with international recommendations.

Despite this, the literature reviewed still presents significant challenges, such as... methodological heterogeneity of the studies, the absence of specific standardized protocols for elderly people, the reduced number of long-term clinical trials, and the infrastructure limitations that They hinder access to certain interventions in different health settings.

It is concluded, therefore, that chronic lung disease in the elderly should be addressed through plans. individualized and progressive therapeutic approaches that integrate exercises, manual techniques, and support. Psychosocial and digital resources, aiming not only at pain reduction but also at preserving the autonomy and improved quality of life. To consolidate these practices, research is needed.

Year V, v.2 2025 | Submission: 06/11/2025 | Accepted: 08/11/2025 | Publication: 10/11/2025

with greater methodological rigor, prolonged monitoring, and cost-effectiveness evaluation, of

in order to provide input for the development of specific clinical guidelines and public policies.

focused on geriatric physiotherapy.

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