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A model used in the management of falls in institutionalized older people: an action-research study

Modelo em uso na gestão da queda nas pessoas idosas institucionalizadas: um estudo de investigação-ação

Modelo utilizado en el manejo de caídas en ancianos institucionalizados: un estudio de investigación-acción

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ABSTRACT

Objective: to analyze the model used in managing fall risk among institutionalized older individuals. **Method:** action research study. The participants were older individuals, family members, formal caregivers, and healthcare staff. Data were collected through observation, interviews, and consultation of documentation, and analyzed using qualitative analysis software. Protocol approved by an Ethics Committee. **Results:** the model in use focuses on the biomedical approach, emphasizing physical risk and targeted intervention aimed at restricting activity. Formal caregivers decide on preventive measures after identifying risks, and they are aware of and utilize the institution's resources for prevention, but these practices are not always maintained. Fear of falling influences the decisions, practices, and behaviors of both older adults and professionals. **Final considerations:** it is necessary to prepare for institutionalization, assess the risk, and implement strategies to prevent functional decline.
Descriptors: Accidental Falls; Homes for the Aged; Accident Prevention.

RESUMO

Objetivo: analisar o modelo em uso na gestão do risco de queda nos idosos institucionalizados. **Método:** estudo de investigação-ação. Os participantes foram idosos, familiares, cuidadores formais e equipe de saúde. Os dados foram coletados por observação, entrevistas, consulta a documentação e analisados com recurso de software de análise qualitativa. Protocolo aprovado por uma Comitê de Ética. **Resultados:** o modelo em uso centra-se no biomédico, valorizando o risco físico e intervenção direcionada para a restrição da atividade. Os cuidadores formais decidem as medidas de prevenção após a identificação dos riscos, conhecem e utilizam os recursos da instituição para a prevenção, mas as práticas nem sempre são mantidas. O medo de queda influencia a decisão, as práticas e os comportamentos dos idosos e profissionais. **Considerações finais:** é necessário preparar a institucionalização; avaliar o risco e implementar estratégias para prevenir o declínio de funcionalidade.
Descritores: Acidentes por Quedas; Instituição de Longa Permanência para Idosos; Prevenção de Acidentes.

RESUMEN

Objetivo: analizar el modelo utilizado para gestionar el riesgo de caídas en ancianos institucionalizados. **Método:** estudio de investigación-acción. Los participantes fueron ancianos, familiares, cuidadores profesionales y personal de salud. Los datos se recopilaron mediante observación, entrevistas y consulta de documentación, y se analizaron utilizando software de análisis cualitativo. Protocolo aprobado por un Comité de Ética. **Resultados:** el modelo utilizado se centra en el enfoque biomédico, valorando el riesgo físico y la intervención específica destinada a restringir la actividad. Los cuidadores formales deciden sobre las medidas preventivas tras identificar los riesgos, y conocen y utilizan los recursos de la institución para la prevención, pero estas prácticas no siempre se mantienen. El miedo a las caídas influye en las decisiones, las prácticas y los comportamientos tanto de los ancianos como de los profesionales. **Consideraciones finales:** es necesario prepararse para la institucionalización; evaluar el riesgo e implementar estrategias para prevenir el deterioro funcional.
Descriptores: Accidentes por Caídas; Hogares para Ancianos; Prevención de Accidentes.

INTRODUCTION

Falls are considered a public health problem[1]. Their consequences and secondary injuries, associated with the fear of falling and the caregivers' overprotection, increase the complexity of this syndrome in institutionalized older people. As they are more vulnerable and have a higher degree of dependence, they become more susceptible to functional decline, increased morbidity, fragility fractures, and reduced life expectancy[2].

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It is generally agreed that fall prevention is a complex challenge for older adults, caregivers, professionals, and healthcare systems, not only because its prevalence tends to increase with population aging, but also because its occurrence is rarely caused by a single risk factor[1-4]. The multidimensionality of risk involves factors from biophysiological, behavioral, and environmental domains, whose interaction contributes to falls. A review of the literature points the main risk factors: age, with estimates suggesting that 30% to 40% of people over 65 years of age experience at least one fall per year[5], a figure that increases by up to 50% among people over 80 years old[2,5,6]; the occurrence of previous falls, ptophobia; sensory alterations in vision and hearing; female gender; and chronic diseases and polypharmacy[1,5,7,8]. Additionally, there are also cognitive factors, such as dementia and depression[7]; behavioral factors, such as adopting risky behaviors (e.g., inappropriate footwear) and failing to anticipate dangers[3,6]; environmental factors, such as the presence of obstacles and architectural barriers[2,8] and the institutionalization itself[8].

The prevalence of falls in Long-Term Care Facilities for the Older People (LTC) is higher than in the general population. Some studies indicate a prevalence of 43%[8], justified by the greater fragility and vulnerability of this population[4]. Generally, residents in LTCs have a higher average age than older people in the community, are more dependent, take multiple medications, and have greater cognitive impairments[2,6,8].

A meta-analysis assessing the incidence and risk factors for falls in older residents of LTCs strongly correlates the following factors with all fall episodes: history of falls, impaired performance in Activities of Daily Living (ADL), insomnia, and depression. Factors with low to moderate correlation include: vertigo; need for walking assistance; poor balance; use of antidepressants, benzodiazepines, antipsychotics and anxiolytics; polypharmacy; dementia; unsteady gait; hearing problems; and male gender[8].

Following a fall, older adults have an increased risk of impairment in performing ADLs. This impairment can persist over time, impacting quality of life[3], and contribute progressively to a greater dependence on others[2,3]. It is critical that all older adults, particularly those at higher risk of functional decline following a fall, have access to comprehensive assessment and evidence-based preventive interventions to mitigate the negative impacts on their functionality[3].

The link between risk assessment and the implementation of preventive measures is a universal recommendation for controlling this phenomenon, through the elimination or mitigation of individual risk factors[1,2,4,6,8]. Specifically in the context of LTCs, the literature recommends assessing balance, mobility, medical conditions, and prescribed medication[8].

Preventive interventions include health education, aimed at increasing health literacy[1], the practice of physical exercise[1,9], monitoring of residents and the use of alarm/call systems, therapeutic reconciliation and vitamin D supplementation[10]. They also include adapting the environment by eliminating obstacles and removing architectural barriers[1,2,9] and the promotion of safe behaviors[1,2,6]. To prevent injuries, the suggested strategies include the use of protective equipment, such as hip protectors, and alarm/call systems[10]. Additionally, team training, as well as organizational initiatives and support, are crucial for the implementation of preventive measures[9-11].

A review of the literature allows us to affirm that research in this area has been fruitful, with several recent studies on the phenomenon. The global initiative *World Guidelines for Falls Prevention and Management for Older Adults*[1] systematizes the available evidence, with clear recommendations for risk assessment, intervention, and implementation of preventive measures. However, it is observed that older people and caregivers' practices for managing the risk of falls[2,6,10,11] in LTCs are not always evidence-based, and there are several obstacles to its introduction into clinical settings.

In light of the above, this study, supported by a participatory and co-construction methodology, aims to analyze the model used in managing fall risk among institutionalized older individuals in an LTC in Portugal.

METHOD

The nature of the phenomenon under study and the concern to analyze the models in use in LTCs led the research team to opt for a longitudinal action-research method, based on the interaction between research, action-reflection, and evaluation. The flexibility of the method allows for interaction between researchers and participants, that is, between formal and informal knowledge, theory and practice, leading to real changes in how people interact with each other[12].

This method also allows researchers and stakeholders to become aware of the problem and work together to find solutions, allowing a clear dialogue among 'ways of doing things', 'routines', and evidence-based practice, with the application of a set of interventions that identify and resolve problems in clinical practice[12]. Additionally, it encourages

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participants to cooperate in solving problems and facilitates the transfer of knowledge to clinical practice[12,13]. With the problem identified (the high prevalence of falls in LTCs, their consequences on the functionality and quality of life of the older person, and the impact on the teams)[1,2,9] and with the preventive measures studied, the focus is on understanding which model is used in LTCs to manage fall risk, the barriers and facilitators to the introduction of evidence, and the sustainability of change over time.

There are different methodological approaches to action research studies. This study followed the approach outlined by Kuhne and Quigley[13], whose protocol is organized into three phases and six steps: planning (problem definition, project definition, measurement), action (implementation and observation), and reflection (evaluation and verification of problem resolution)[13].

This article presents the results of the first stage – defining the problem through identifying the model in use – of the project on managing the risk of falls in institutionalized older people, which aims to promote the transfer of evidence to LTCs. The article was structured following the recommendations of *Report Guideline* COREQ (*Consolidated Criteria for Reporting Qualitative Research*)[14].

Given the need for a greater understanding of how fall risk is managed in real-world contexts, from its identification to the implementation of preventive measures, the following starting question was defined: "How is fall risk managed in older individuals after they become institutionalized?"

The study participants are older individuals, their respective family members, formal caregivers, and the healthcare team of an LTC in the region of Lisbon and Tagus Valley, in Portugal. The institution houses 101 older adults, 54.4% of whom have cognitive decline, and has 38 formal caregivers, three nurses, and two doctors.

Data were collected by the same researcher between April and December 2024 through observation, semi-structured interviews, and consultation of social and health records. Field notes were compiled, including data from team meetings, excerpts from conversations with the older people and professionals, and elements extracted from the processes that allowed for an understanding of the phenomenon under discussion.

In addition to data collection, several meetings were held with the participants. The same researcher is currently in the action phase for implementing the intervention co-designed with the participants. The reflection phase, which will focus on evaluating the intervention, is scheduled for the first half of 2027.

The interviews were recorded, transcribed, and inserted into the software of qualitative analysis N-Vivo®, as well as observation records and field notes. The analysis of the findings was carried out by the principal investigator, who was present weekly at the LTC, and subsequently validated by the team. Data sources were first analyzed individually and then triangulated to broaden the results and ensure understanding of the model in use. Triangulation allowed comparison and the search for similarities, which increased the validity of the findings[15]. The process of coding and validating the results involved transcription, reading, coding, defining categories, and returning the interpretation to the participants for validation of the analysis[13].

A code was assigned to each participant (Older person - IP, Family - F, Formal Caregiver - CF, Nurse - E, and Doctor - M) and to each source (Interview - E, Team Meeting - RE, Process - P, Observation - O). In defining the categories, representativeness, completeness, homogeneity, and relevance were ensured.

The research protocol was approved by a Research Ethics Committee and respected the ethical principles inherent to this type of research, namely informed consent, privacy, and confidentiality. Because this was an action research study, with a researcher regularly present at the LTC, there was an additional concern to ensure rigor and objectivity, not to impose values, to respect the participants and their individuality, to ensure constructive interpersonal relationships, and not to put the participants' integrity at risk under any circumstances.

RESULTS

Of the 101 older residents at the institution, 61.3% are female and 38.7% are male, with an average age of 81.9 years (± 6.9), ranging from a minimum of 65 to a maximum of 98 years. Of the total, 69.3% are at high risk of falling, and the prevalence of falls during the study period was 42.5%.

Formal caregivers and healthcare professionals have been practicing their professional activity for an average of 16 years (±9.7), with only 30.6% having training in the area of fall risk management in institutionalized older populations.

Data analysis allowed us to identify the following categories: Institutionalization; Risk management; Implementation of preventive measures and post-fall care, as well as the central theme, The fear of falling - the elephant in the LTC.

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Institutionalization

During the admission process, professionals state that their priority is to check if the older person has alterations in gait, muscle strength and/or balance, if they use a walking aid, and if they present cognitive decline. Difficulties sitting or standing and the need for assistance with bathing are understood to be secondary risk factors. The healthcare team assesses fall risk within the first 48 hours using a scale recorded in the clinical record; however, these results are not communicated to the entire team nor do they inform decision-making regarding preventive measures.

The residents themselves note that the main concern of formal caregivers, and even their own, is with people who are confused, have psychomotor agitation, or have difficulty walking. As an older person said:

> *It's normal for them to fall more often; they can no longer walk well, and some don't even know where they are. (PI-E7)*

Aware that risk assessment may not explore all individual factors, professionals believe that a meeting should take place prior to institutionalization. At this point, it would be possible, together with the older person and their family, to assess the risk of falls and adapt the necessary equipment for their prevention, especially since they find that:

> *Many older people fall during their first few days here. The home environment has fewer obstacles than those found in the house, and they wear their own shoes, but even so, we are surprised by many falls, which are neither easy to predict nor control, because some happen on our backs. The older person walks past us, looking fine, and then, two or three minutes later, collapses in the hallway, in the bedroom, in the bathroom, without any warning. (E-CF25)*

In the professionals' opinion, a central aspect of this preparation for institutionalization is the possibility of assisting the older person and their family in choosing footwear, clothing, and assistive devices to bring to the institution, which are not always suitable for ensuring safe walking. One of the family members notes that the lack of communication on this topic has been evident from the beginning, stating that:

> *My father fell countless times at home, he lived alone, and the last time he was on the floor of his room from 3 to 10 am because he couldn't get up, and none of the neighbors heard him calling for help. That's why he came here. On the second day, he fell at the LTC. They never talked to us about this, so we never informed the ladies that he fell frequently, but we also noticed that they don't always tell us that he falls; we end up finding out from him. (E-F16)*

It is concluded that, at the time of admission to the LTC, the risk assessment is carried out individually by each professional, based on their beliefs about what contributes to the risk. The team, including the older person and their family, does not value the occurrence of previous falls, nor does it identify the older person's practices for preventing them.

Risk Management

Throughout the institutionalization process, the professionals' concern focuses on individuals who are most dependent on others for ADLs, such as those with walking difficulties, decreased muscle strength, or balance problems. However, some older people believe that dependency contributes little to the occurrence of falls, stating in their accounts that:

> *Those who are unable to do things receive more help and, therefore, are less likely to fall. (E-PI42)*

Both professionals and the older person understand that they value different risk factors, as is clear in this statement:

> *The other day I fell and then they checked my blood pressure. They told me I had high blood pressure and that's why I fell. But there are many older people here, like me, who have high blood pressure, but those who fall the most are women with low blood pressure. (E-PI4)*

During the data collection period, observation (O) allowed us to verify that aspects related to the use of assistive products, including walking aids, are not valued as a risk or as a preventive measure. There are toilet seat risers that, because they are not always installed, make it difficult for people with mobility impairments to sit down and stand up, and these are the ones who would benefit from this feature. Sofas are not adjustable to the anthropometric characteristics of the older people, with most being too low, which prevents correct body alignment (hip and knee joints at 90°, feet supported and the ankle joint at a 90° angle). Many older people "slide" in seats because their body weight is not well distributed across the ischial region and thighs, reducing the body's support surface on the seat and making it difficult to stand up, which increases the likelihood of imbalance (O).

Walking aids are often not in proper working order, with damaged rubber supports or incorrectly adjusted to the height of the older person. Incorrect use is observed, especially when sitting and standing, with the biggest mistake being leaning on the cane/crutches themselves instead of on the side support of the chair/armchair. Walkers are held

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away from the body, implying a forward tilt, which reduces the base of support. The crutches are positioned improperly, away from the body, laterally and anteriorly, which forces abduction of the upper limbs and body forward tilting, altering the center of gravity and shifting it away from the base of support. The base of the crutch does not provide full support; a variable angle is observed between the support and the ground. If the protective rubber is damaged and/or the floor is wet, the risk of this aid slipping increases (O).

It was also found that many older people wear tight socks or shoes, which hinder venous return (as evidenced by the increased volume of edema in the middle third and in the tibiotarsal region) and can interfere with gait safety (O). Additionally, difficulties are observed in loosening and tightening trousers and belts, tasks performed with interference in body stability, since the older person assumes a pronounced dorsiflexion, with a short base of support and an elevated center of gravity (O).

One of the doctors interviewed expressed the urgent need for team training on risk assessment and understanding of the interaction of the different factors that contribute to falls:

> *Standardizing the assessment, and valuing everyone equally, is essential to prevent accidents and reduce their incidence, since the risk of falls is a reality associated with a significant number of older people. And despite being an almost daily reality, a constant in our daily practice, it continues to be undervalued. I think, deep down, we always assume it's going to happen, and that's why we tend to undervalue it. (M1)*

The apparent undervaluing of information about fall risk factors and the failure to communicate this information within teams point to its minimization, even when identified.

Implementation of Preventive Measures

There is an overemphasis on the use of bed rails and immobilization belts as a preventive measure (O), with clear consequences for the autonomy and independence of the older person. In the professionals and some older people's reports, these physical restriction measures emerge as preventive. An old man, referring to his roommate, describes the following:

> *{...] he no longer knows what he's doing and tries to get up many times. Now he's been strapped into bed and chair with that belt. It's a way of not breaking anything, but it's sad that we end up like this! (E-PI13)*

A nurse justifies this option with the high number of patients per caregiver and the difficulty in maintaining continuous monitoring (E-E2).

Assistive products, such as grab bars in the bathroom, are undervalued and sometimes left out of use by professionals themselves (to facilitate tasks such as cleaning), preventing their use by the older people (O).

The older adults themselves express doubts about how to stay safe and do not consistently adopt safe preventive practices, such as in the selection of footwear, sometimes due to economic constraints.

> *I brought these shoes 4 years ago. I can't ask my family for new shoes because it's already difficult for them to pay the monthly fee, the medication, and the supplies for my leg's dressings. (E-PI32)* [the leg injury was secondary to a near fall down the stairs].

It should be noted that footwear is often purchased by a family member, without the older person being present, and without considering the morphological characteristics of the foot or the possibility of changes caused by edema in the lower limbs and other alterations that would prevent the older person from continuing to use the footwear they brought to the institution. An assistant confirms the difficulty:

> *It's difficult, many only bring one pair of shoes when they enter the home, the families don't come and we have to provide the ones we have. (E-CF18)* [referring to other older people's shoes].

Another one adds that, for patients in wheelchairs, slippers are preferred because they are easier to put on and take off (E-CF1), a practice frequently observed at the institution. Professionals reflect on the more active role for older adults:

> *We must ask for the patient's direct collaboration, encouraging their involvement [...] perhaps by conducting awareness sessions with those who can collaborate, not only for self-care but also to raise awareness of situations in relation to other patients, making each older person responsible for their own care and the care of others. No one knows your conversation partner's habits better than the older person sitting in the armchair next to him [...] They can alert each other […] and are fundamental in monitoring older people who are less aware of the problem. (E-CF15)*

However, there is no consensus regarding family involvement, with contact being described as difficult and sometimes conflictual.

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> *Families rarely visit the home; it's difficult for us to have contact with them. Even when they do come, there's not much concern for what's needed; some even doubt that we're doing our best; others don't even show up, nor do they care, but when they fall, they end up blaming us. (E-CF29)*

All participants agree on the need for training on falls and a guiding protocol.

After a fall, the healthcare team has to be contacted for an assessment of the person and to document the incident. Surveillance and assistance in performing ADLs are increased. Often, older people are verbally warned, by some caregivers and even by other older people, to remain seated and avoid moving around without supervision. Data analysis allows us to conclude that this overprotection limits mobility and fuels the fear of falling, not only in those who have fallen, but also in other older people who hear the message "don't get up because you might fall" (O).

The fear of falling - the elephant in the LTC.

The exploration of the most frequent words in the interviews and field diary is represented in Figure 1 and allows us to verify that fear has a significant expression.

Figure 1: Word cloud. Developed in Venngage®. Lisbon, Portugal, 2025.

It is important to clarify that the fear of falling is not addressed as a risk factor in the participants' discourse. Some older adults view it as a protective factor, helping them to make safer decisions.

> *I fell and broke a toe, they put a splint on it and I had a lot of difficulty walking. After removing the splint I had to do physiotherapy. I'm so afraid of falling again that I avoid doing a lot of things (...) when I go to the bathroom I always check if the floor is dry, I never use the stairs. (E-PI15)*

> *I see what causes others to fall and, because I'm afraid it might happen to me, I avoid making the same mistakes. (E-PI39)*

Others associate it with the fear of losing independence and autonomy, which leads them to conceal incidents:

> *The other day I slipped in the bathroom, but I didn't tell anyone. I'm terrified of falling, but if I say I'm stumbling around, they won't let me do things, and I'm afraid of losing the little autonomy I have left. (E-PI21)*

In the professionals' statements, this fear takes on different forms. It emerges associated with the consequences of falls for the older people), but also the fear that the accident might occur during their shift, accompanied by feelings of guilt:

> *We know that a fall can be the end for them, because if they break something and have to go to the hospital, they come back more dependent than they were before, and they rarely manage to walk properly again. (E-CF23)*

> *We all fear that a fall might happen on our shift; we always feel responsible for it happening to us, especially when people get hurt—it's always annoying, we always think we're somehow to blame. (E-CF8)*

Finally, concern is expressed regarding the family's reaction and the possible legal consequences for the professionals and the institution:

> *The other day I overheard the employees talking amongst themselves; Mrs. Maria fell, broke her leg, and went to the hospital. The family threatened to file a complaint against the nursing home; they were all afraid of the complaint, but they were not at fault at all. They always tell her to call when she needs to go to the bathroom so they can help her, but she insists on going alone and without her cane. (E-PI11)*

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It is worth noting that the use of physical restraints and constant warnings against movement are practices based on caregivers' fear that a fall will occur. It is concluded that fear of falling is a central aspect in LTCs, determining interventions, mediating relationships, and potentially impacting the increase in prevalence. Figure 2 graphically represents the model used in fall risk management at the LTC.

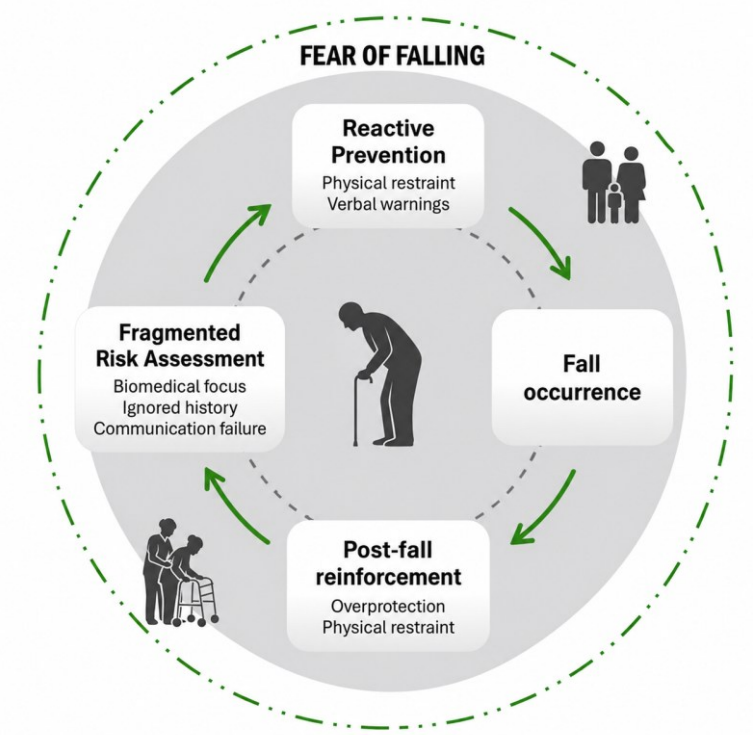

Figure 2: A model used in the management of falls in institutionalized older people. Lisbon, Portugal, 2025.

DISCUSSION

This investigation analyzed the model used in fall risk management in a long-term care facility, revealing a reactive approach, based on the biomedical model, and governed by an implicit organizational fear – a dimension underexplored in the literature. The discussion of these findings is structured around their most significant aspects: the dissonance of the management model with the evidence, the systemic failures in the risk assessment process, and, as the most innovative contribution, the role of fear as an organizing principle of practices.

Regarding the first category emerging from the analysis of the results, "institutionalization," the results demonstrate that the initial identification of risk factors, such as gait alterations and cognitive decline, is in agreement with the international evidence validating them[8]. However, the evaluation process, although protocol-based, as verified in clinical records, proves to be an isolated act whose results are neither disseminated throughout the team nor integrated into the care plan. This practice diverges sharply from international guidelines, which advocate for a comprehensive and systematically communicated assessment to support decision-making[1,3]. This study goes further by demonstrating how this communication failure perpetuates risk management based on the individual beliefs of professionals rather than on evidence. Additionally, the devaluation of the history of falls, a critical finding highlighted in the results, represents a fundamental dissonance with scientific evidence, which establishes it as one of the strongest predictors of future falls[8,9,16].

Regarding ongoing risk management, the team's emphasis on physical dependence as a risk factor is, in fact, aligned with the literature[8,17]. However, the study reveals a significant discrepancy between the risk perceived by professionals and the actual, multifactorial risks recorded through observation. The incorrect use of walking aids and inadequate furniture, for example, constitute extensively documented environmental and behavioral risk factors[2,3,6,8]. However, in the context studied, these aspects are neglected. This inattention to modifiable risk factors[18] represents a gap in the provision of care and demonstrates an opportunity for intervention.

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The authors note that effective fall prevention strategies require understanding and controlling characteristics associated with increased risk, including characteristics that are immutable (demographic data), difficult to modify (geography), and potentially modifiable (health and functional conditions). Developing and implementing evidence-based strategies to address modifiable characteristics can reduce the risk of falls[18].

The scope of the preventive measures reveals the most glaring divergence from current scientific evidence. The observation, confirmed by the interviews, demonstrates an overemphasis on physical restraint as a primary strategy. This practice directly contradicts guidelines and research that demonstrate the iatrogenic effects of restriction and promote, instead, multi-component interventions such as physical exercise, staff education, and environmental adaptation[1,9,10,11]. While international literature advances in the implementation of restriction-free care cultures[1,19], the results of this study suggest that the observed practice remains within a reactive safety paradigm, resulting in a cycle of immobility and increased dependency. Education and training for teams should be strengthened to reduce or completely eliminate practices that restrict mobility, especially for new employees[1,11,19]. The practice-based learning (PBL) can be an important pedagogical resource because it contributes to professional understanding and responsibility, providing opportunities to learn new skills, refine organizations, and align public health systems with desired practices[19].

The most innovative contribution of this study to the scientific discussion lies in identifying the fear of falling as the "elephant in LTCs", not only as an intrinsic risk factor for the older people (ptophobia), but as an underlying organizational management model. While the results corroborate the literature by identifying fear in the older person as a modulator of behavior, which can lead to activity restriction[2, 5, 6], the investigation progresses by uncovering, through interviews, a systemic fear among professionals. Fear manifests itself in caregivers, through the apprehension of liability and legal consequences, leading them to adopt restrictive practices, and in older people, when they sometimes conceal incidents so as not to see their autonomy further curtailed. Fear— in the older person, in their family, and among professionals—has a direct impact on clinical decisions and behaviors, and contributes to understanding the complex dynamics of fall prevention in institutional settings[19,20]. This finding thus positions the study within an original perspective, diverging from the conventional literature, which tends to focus on protocols and clinical risk factors, underestimating the impact of organizational culture and caregivers' emotions as barriers to evidence implementation.

In summary, the results confirm that the practices in the studied LTC diverge from evidence-based recommendations, a phenomenon documented in other contexts[10,11]. However, the strength of this research lies in its action-research methodology, which allowed it to uncover not only *what* (the dissonance), but *why* this dissonance takes place, by pointing to fear and systemic communication failures as central barriers to the implementation of a preventive and truly person-centered care model.

Study limitations

The study has limitations associated with the action-research method. Data obtained in a very specific context cannot be replicated. However, triangulating various sources increased the validity of the study and provides a more holistic view of it.

Furthermore, the findings of this study are limited to the context of the study and, therefore, are not generalizable. Nevertheless, these limitations regarding the rigor with which the research was conducted allow for the transferability of the results to similar contexts and the discussion of this phenomenon.

FINAL CONSIDERATIONS

This objective of analyzing the model used in managing fall risk in institutionalized older individuals is considered to have been fully achieved, leading to the conclusion that the prevailing model is reactive, centered on a biomedical approach, and based on restricting mobility. Risk management has proven to be a fragmented process, with systemic failures in communication and in the application of assessment, which perpetuates a significant dissonance between daily practices and scientific evidence.

The most significant contribution of this research lies in identifying fear – not only fear of the older people (ptophobia), but an organizational fear shared by professionals and families – as the central and underlying element that governs the culture of care. This fear of failure and its consequences (blame, litigation) acts as the main barrier to the implementation of preventive and empowering strategies, favoring instead a culture of overprotection and restriction. Overcoming this situation therefore requires more than

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just implementing new protocols; it implies a paradigm shift focused on empowering teams and dismantling this culture of fear.

Although the results are not generalizable given the nature of this single case study, the depth of the analysis allows for its transferability to similar contexts. The action-research methodology was fundamental in uncovering these dynamics and establishes the basis for the next phase of the project: the co-construction and implementation of interventions focused on the barriers identified here. Briefly, this study demonstrates that, to effectively manage the risk of falling, it is imperative to first manage the fear surrounding it.

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Conceptualization, C.L.B. and I.A.; methodology, C.L.B, A.R.P., L.C.P., M.M.S., L.S., R.F. and I.A.; software, C.L.B e I.A.; validation, C.L.B, L.C.P., M.M.S., L.S. and R.F.; formal analysis, C.L.B and I.A.; investigation, C.L.B, A.R.P. and I.A.; resources, C.L.B.; data curation, C.L.B. and I.A.; manuscript writing, C.L.B, A.R.P., L.C.P., M.M.S., L.S., R.F. and I.A.; review and editing, C.L.B, A.R.P., L.C.P., M.M.S., L.S., R.F. and I.A.; visualization, C.L.B, A.R.P., L.C.P., M.M.S., L.S., R.F. and I.A.; supervision, C.L.B., L.S. and R.F.; project administration, C.L.B.; financing acquisition, C.L.B. All authors read and agreed with the published version of the manuscript.

Use of artificial intelligence tools

Authors declare that no artificial intelligence tools were used in the composition of the manuscript "*A model used in the management of falls in institutionalized older people: an action-research study*".