

Risk Assessment and Patient Safety In Physiotherapy Practice: A Comprehensive Analysis of Factors Contributing to Patient Falls

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ABSTRACT: Risk assessment is a systematic procedure employed to detect potential dangers and evaluate the possible consequences of disasters or calamities, ensuring comprehensive hazard identification in the work environment. Integrating risk assessment into management and organizational processes is crucial, especially in healthcare settings like physiotherapy, where patient safety is paramount. This comprehensive review systematically compiled and analyzed relevant studies from scholarly journals, bibliographies, and related articles to evaluate the effectiveness of risk assessment procedures in identifying and mitigating potential hazards in physiotherapy practice. The review specifically focused on the use of the STEADI tool in conjunction with electronic health records (EHR) for joint risk assessments. The risk assessment process involves three key stages: identification, calculation, and implementation of control measures. Various methodologies were explored, including models like CATCH fall administration, PISTI management, multidisciplinary collaboration, and Fall TIPS. Falls, a major global health issue, are the 13th leading cause of death worldwide, with preventive strategies shown to reduce fall-related deaths by up to 92%. Effective risk assessment is essential for ensuring patient safety in physiotherapy. By identifying and mitigating potential risks, particularly those related to falls, healthcare providers can significantly improve patient outcomes and safety in clinical practice.

Keywords: Patient Safety, Risk Assessment, Physiotherapy Practice, Fall.



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INTRODUCTION

Risk management involves the systematic identification, assessment, and mitigation of potential risks that could threaten an organization's operations (ISO 31000:2018). Within healthcare, particularly in hospital settings, risk management is crucial for ensuring patient safety. Risk

assessment, a core component of risk management, is an ongoing process that involves identifying, evaluating, and responding to potential hazards in the workplace. This process is essential in defining specific terms, such as an accident, which is understood as an unplanned event that leads to loss, and risk, which refers to the probability and severity of an unfavorable outcome due to a hazard.

Healthcare facilities, particularly hospitals, present a high-risk environment where numerous hazards can significantly impact both patient safety and the health of healthcare workers. According to the US National Safety Council (NSC), hospital personnel have a 41% higher likelihood of contracting infections compared to workers in other industries. The complexity of hospital operations, including departments like the ICU, surgical wards, and radiology, introduces various risks ranging from biological and chemical hazards to ergonomic and psychological stressors (Ekrami et al., 2024).

While existing research has extensively covered specific risk factors in hospital settings, such as infection control and chemical exposure (R. N. M. R. Fitri, 2022; Jahangiri et al., 2020), there is a significant gap in studies that examine the comprehensive effectiveness of risk assessment tools in addressing patient fall risks. Falls remain a critical issue in healthcare, with estimates showing that they were the 13th leading cause of death globally in 2015. Despite various interventions, falls continue to pose a serious risk, leading to severe injuries, increased healthcare costs, and negative impacts on patients' mental health (Ortenzio et al., 2024).

This study aims to address these gaps by evaluating the effectiveness of current risk assessment tools in mitigating patient fall risks across different hospital departments. It will also investigate how emerging technologies, such as wearable devices and advanced monitoring systems, can be integrated into traditional risk management frameworks to enhance patient safety. The primary objectives of this research are:

1. To evaluate the effectiveness of current risk assessment tools in mitigating patient fall risks in hospitals.
2. To investigate the role of emerging technologies and practices in enhancing hospital risk management, particularly in reducing fall incidents.
3. To identify gaps in existing risk management practices and propose strategies to address these challenges, thereby improving patient safety and reducing healthcare costs.

This study will provide a holistic analysis of risk assessment practices in hospitals, focusing on fall prevention. By combining traditional risk management tools with modern technological advancements, the research seeks to propose a more effective strategy for reducing patient falls. This integrative approach will contribute to the ongoing development of risk management practices in healthcare, offering practical recommendations for improving patient safety and reducing the burden of fall-related injuries in hospitals.

The findings of this study will have significant implications for healthcare providers, policymakers, and researchers, offering new insights into the effectiveness of risk assessment tools and the potential for integrating new technologies to enhance hospital safety.

METHOD

The data for this literature review were collected using a systematic approach to identify relevant studies. The sources of the literature included peer-reviewed journals, academic books, conference proceedings, and reputable online databases such as PubMed, Google Scholar, and Scopus. These databases were chosen for their extensive coverage of medical and healthcare-related literature. Additionally, gray literature, such as government reports, industry guidelines, and white papers, was also considered to provide a broader context.

Literature Selection Criteria

1. Inclusion Criteria:

- **Relevance to the Research Focus:** Only studies directly related to risk analysis principles and patient fall safety in medical settings, with a particular emphasis on physical therapy, were included.
- **Publication Type:** Peer-reviewed articles, systematic reviews, meta-analyses, and clinical guidelines were prioritized to ensure the quality and reliability of the data.
- **Time Period:** The literature search focused on studies published from January 2013 to December 2023. This 10-year window was chosen to capture the most recent advancements and trends in the field while also providing a comprehensive view of the evolution of risk management practices.
- **Language:** Only studies published in English were included to maintain consistency in data interpretation.
- **Population:** Studies involving adult patients in medical and physical therapy settings were included to ensure relevance to the study's focus on patient fall safety.

2. Exclusion Criteria:

- **Irrelevance:** Studies that did not directly address risk management, patient fall safety, or were focused on non-medical settings were excluded.
- **Non-peer-reviewed Literature:** Articles from non-academic sources, opinion pieces, and editorials were excluded unless they provided significant insights or were referenced in high-quality studies.
- **Outdated Research:** Studies published before 2013 were excluded unless they were seminal works that provided foundational knowledge relevant to the research focus.

Data Analysis Process

The data analysis process involved several stages:

1. **Literature Identification:** A comprehensive search strategy was employed using keywords such as "risk assessment," "patient fall safety," "physical therapy," "hospital risk management," and "patient safety protocols." Boolean operators (AND, OR) were used to refine the search and ensure that all relevant studies were captured.
2. **Screening and Selection:** The initial search yielded a large number of studies, which were then

screened based on titles and abstracts. Studies that met the inclusion criteria were selected for full-text review. Duplicates were removed during this process.

3. **Data Extraction:** For the selected studies, data were extracted systematically using a standardized form. This form captured essential details such as study objectives, methods, sample size, key findings, and relevance to the research focus. Special attention was given to studies that provided quantitative data on patient falls, risk factors, and outcomes related to risk management interventions.
4. **Synthesis and Analysis:** The extracted data were then synthesized to identify common themes, trends, and gaps in the existing literature. The synthesis process involved both qualitative and quantitative analysis. Qualitative analysis focused on thematic patterns and the evolution of risk management practices over time. Quantitative analysis involved aggregating data on patient fall rates, risk factors, and the effectiveness of different interventions.
5. **Critical Appraisal:** To ensure the reliability and validity of the findings, each study was critically appraised using established criteria for evaluating the quality of research. This appraisal considered factors such as study design, sample size, bias, and the robustness of the findings.

This detailed literature review methodology ensures a comprehensive and systematic approach to synthesizing existing research on risk analysis principles in patient fall safety, particularly in physical therapy. By clearly defining the inclusion and exclusion criteria, specifying the time period of the literature, and thoroughly explaining the data analysis process, this study aims to provide a robust foundation for understanding and improving risk management practices in healthcare settings.

RESULT AND DISCUSSION

Risk Assessment

The risk assessment process in healthcare, particularly in hospital settings, involves three key stages: identification, quantification, and the implementation of control measures. These stages are vital for ensuring the safety and well-being of both patients and healthcare staff. Several methodologies exist for conducting risk assessments, such as the HOSHRA index, which categorizes risks into chemical, biological, psychological, physical, and ergonomic hazards. The choice of methodology is influenced by factors like the assessment's purpose, the type of data available, and the stage of the system under consideration.

Recent advancements in technology have introduced innovative methods for risk assessment. For instance, the use of inertial measurement units (IMU) in Time Up and Go (TUG) testing has shown promise in assessing fall risks among the elderly. This method involves collecting personal and health-related information using sensors to develop practical models for identifying and mitigating risks (Jutharee et al., 2023).

Physiotherapy practices also incorporate various tools and methodologies to assess and mitigate fall risks. Notable examples include the Morse Falls Scale (MFS) for adults and the Humpty

Dumpty Falls Assessment (HDFA) for pediatric patients. These tools are crucial for evaluating patients' fall risks and developing tailored intervention plans (Heng et al., 2020).

Physiotherapy Risk Assessment Practices

In the realm of physical therapy, fall prevention strategies are primarily implemented through frameworks such as the Centers for Disease Control and Prevention's STEADI program. This program is designed to prevent falls among older adults, who are at a significantly higher risk of falling (Bhasin et al., 2020). Physical therapists play a crucial role in this prevention by conducting comprehensive assessments and implementing evidence-based practices (Johnston, 2018) (B & A, 2023).

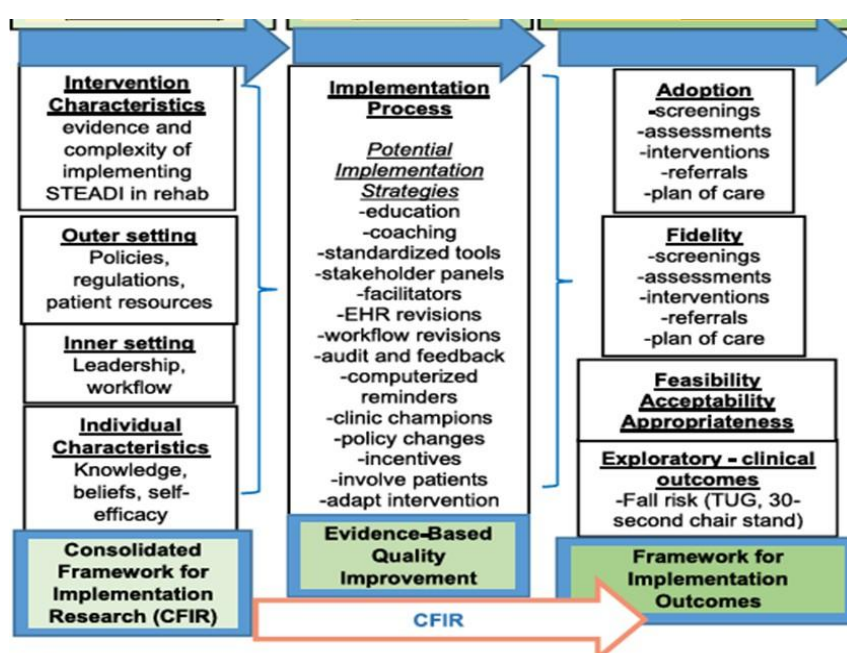
The preparation for physiotherapy risk assessment involves conducting ergonomic evaluations that consider individual work environments and tasks. This holistic approach ensures that all potential hazards are identified and mitigated effectively. Additionally, physiotherapy practices emphasize the importance of compliance with regulations such as HIPAA to protect patient information and ensure the safety of therapeutic interventions.

Falls Risk and Patient Safety

Falls are a significant global health issue, particularly among older adults. The data indicate that falls were the 13th most common cause of death worldwide in 2015, with the number of fatalities increasing by 55% between 1990 and 2015 (Imran et al., 2023). The prevalence of falls varies across regions, with higher rates observed in countries like Saudi Arabia compared to lower rates in countries like Japan and the United States (Alabdulgader & Rabbani, 2021; Alamri et al., 2023).

The risk factors for falls are numerous and include chronic conditions, functional limitations, and environmental hazards. For example, studies have shown that individuals with conditions such as Parkinson's disease, Alzheimer's disease, and diabetes are at a higher risk of falling. The significance of these risk factors highlights the need for targeted interventions to prevent falls, especially in high-risk populations (Yaghoubi et al., 2020).

The protocol implementation research logic model is shown in Figure 1 below:



Risk Assessment Practices

The results indicate that while traditional risk assessment methodologies, such as the HOSHRA index, remain crucial, there is a growing need to integrate advanced technological solutions like IMUs for more accurate and individualized assessments. This integration can significantly enhance the precision of risk mitigation strategies, particularly in preventing falls among vulnerable populations like the elderly. The application of these technologies represents a shift towards more personalized and data-driven approaches to risk management in healthcare settings.

Physiotherapy Risk Assessment

In physiotherapy, the emphasis on fall prevention through the STEADI program demonstrates the critical role that physical therapists play in safeguarding older adults. The comprehensive approach that includes ergonomic assessments and compliance with safety regulations ensures that risks are minimized during therapy. However, the challenge remains in ensuring that these practices are consistently implemented across different settings, particularly in outpatient environments where older adults are most at risk.

The discussion also highlights the importance of continuous education and training for healthcare providers to keep up with evolving best practices and technological advancements. Ensuring that physical therapists and other healthcare workers are equipped with the latest knowledge and tools is essential for effective risk management.

Falls Risk and Patient Safety

The analysis of falls risk underscores the complexity of this issue, with varying prevalence rates and risk factors across different regions and populations. The data suggest that while falls are a significant concern globally, the specific causes and contributing factors can differ widely. This variability necessitates a tailored approach to fall prevention, taking into account regional and cultural differences in healthcare practices.

The discussion also emphasizes the need for a multidisciplinary approach to fall prevention, involving not only physical therapists but also other healthcare professionals such as occupational therapists, nutritionists, and social workers. Collaboration among these professionals is crucial for developing comprehensive care plans that address all aspects of a patient's health and well-being.

Linking Findings with Previous Research

The findings of this study align with previous research on the importance of comprehensive risk assessment and the need for multidisciplinary interventions in fall prevention. For instance, the use of the STEADI program in physiotherapy is supported by earlier studies that have demonstrated its effectiveness in reducing fall risks among older adults. Additionally, the identification of chronic conditions as significant risk factors for falls is consistent with existing literature, further reinforcing the need for targeted interventions.

However, this study also contributes new insights by highlighting the potential of integrating advanced technologies into risk assessment practices. The use of IMUs and other digital tools represents a novel approach that could enhance the accuracy and effectiveness of fall prevention strategies, a topic that has not been extensively explored in previous research.

Implications of the Findings

The findings of this study have significant implications for healthcare practice and policy. The integration of advanced technologies into risk assessment could revolutionize the way fall risks are identified and managed, leading to more effective prevention strategies. Additionally, the emphasis on multidisciplinary collaboration highlights the need for healthcare systems to foster teamwork among different professionals to address the complex issue of falls.

Moreover, the study suggests that healthcare providers should prioritize continuous education and training to keep up with technological advancements and evolving best practices. Policymakers should consider investing in the development and implementation of these advanced risk assessment tools to improve patient safety and reduce healthcare costs associated with falls.

Preparation for physiotherapy risk assessment involves conducting an ergonomic evaluation that includes subjective, objective, and ergonomic evaluation reports. An ergonomic assessment is a formal evaluation that examines the individual, their work tasks, and the equipment they use to perform them in their work environment. This assessment includes evaluating a) display hardware used in computer workstations, b) operators who use telephones, c) individuals who use microscopes, d) workers on production lines, e) individuals involved in packing, and f) drivers.

Physiotherapy practice perspectives

The following are physiotherapy practices that have two perspectives on pain risk and physical therapist staff.

1. Frequently, Insufficient physical treatment fitting or unseemly chosen benefit treatment includes destitute or improper strategy, the need for communication, exceptionally forceful drive, improper utilization of ice or warmth, and overextending limbs/joints amid strenuous workouts. Dangers of gear uncover a few potential dangers to patients, such as disappointment in educating properly or strategy, improper utilization of unapproved devices, or broken/damaged gadgets.

Non-compliance can have genuine results. When your specialist collects, offers, and employs secured, protected patient health information (PHI), you must legitimately follow HIPAA rules to protect and secure that data. Suppose patients' PHI is unveiled or uncovered to anybody not explicitly included in their care. In that case, you will confront genuine money-related and legitimate results, not to mention the misfortune of patient trust.

2. The foremost common hazards to staff such as physical, mental, and word-related /occupational violence: [//www.berxi.tcom/resources/articles/risk-management-in-physical-therapy-practices/](http://www.berxi.tcom/resources/articles/risk-management-in-physical-therapy-practices/)

A physiotherapist's fall risk assessment is a thorough evaluation to identify the factors contributing to an increased risk of falling. The assessment is crucial, as the physical therapist devises a tailored plan to mitigate the risk of falls and enhance the patient's overall safety and mobility. Below is a representation illustrating the components of a fall risk assessment conducted by a physical therapist:

1. Therapeutic History Review
2. Interview And Self-Report
3. Physical Examination:

- Assessment of walking (how the persistent strolls), posture, and adjustment, both while standing and walking
- Assessment of muscle strength and joint flexibility
- Examination of sensation in the lower limits.
- Evaluation of the patient's capacity to perform functional tasks such as getting up from a chair, walking, and climbing stairs.
- 4. Functional testing:
 - Testing the patient's ability to perform particular functional tasks related to fall risk, such as sitting to standing, standing on one leg, and turning while walking.
 - Assessing the patient's ability to recover balance after a perturbation (gentle push or pull)
- 5. Vision Evaluation
- 6. Medical Reviews
 - Review the patient's medications to recognize any that cause dizziness, drowsiness, or other side effects that can contribute to falls.
- 7. Environmental Assessment
- 8. Orthopedic And Neurological Assessment
- 9. Balance And Mobility Testing
- 10. Cognitive Evaluation
- 11. Education And Recommendation
- 12. Individualized Care Arrange:
 - Creating an individualized arrangement of care that incorporates particular works out and mediations custom-made to address the patient's fascinating needs and diminish fall risk
- 13. Follow-Up:
 - Planning follow-up arrangements to screen advance, reassess fall risk, and alter the care plan as required.

<https://fiziologix.com/blog-fiziologix-physical-therapy-tips-and-self-healing/9/13/2023/what-to-expect-from-a-fall-risk-assessment-session-with-a-pt>. Healthcare providers can access various devices to identify individuals at risk of falling. Some instruments, such as the Falls Risk Assessment Tool (FRAT) and the Berg Balance Scale, have been specifically designed to evaluate the likelihood of falling. Physiotherapists widely employ these instruments. [https://www.physio-pedia.com/Falls_Risk_Assessment_Tool_\(FRAT\)#cite_note-1](https://www.physio-pedia.com/Falls_Risk_Assessment_Tool_(FRAT)#cite_note-1)

Falls Risk and Patient Safety

Falls are a significant global health problem, impacting the health of individuals and services. According to estimates, in 2015, falls were the 13th most common cause of death worldwide. Between 1990 and 2015, the number of deaths increased by 55%, reaching approximately 540,000 people per year. Falls that occur in hospitals are difficult to predict and prevent and can hurt maintenance patients. Falls can cause severe or fatal injuries and increase patient morbidity. The decline in medical services for Korean patients (KOPS) is already typical in many other countries' systems, including 13,146 incident reports. Other studies support this: In 2021, falls accounted for 6,199 cases (47th place) more cases than poisonings. Moreover, about 80% of them occur in

people over 60 (Choi & Choi, 2023). Falls are significant for morbidity and mortality because they occur frequently in older adults and can cause injuries. Another study in Saudi Arabia showed that the prevalence of falls among older adults in the previous year was 25.3% (95% CI: 20.6-30.5%). The recorded prevalence is comparable to the annual incidence of 65-year-olds reported by the WHO (W.H.O., 2015). A previous study in Saudi Arabia found the prevalence to be as high as 31.5% in the region. The prevalence is by far the highest in Jeddah (47.4%) and Riyadh region (49.9% and 57.7%). Similar studies outside Saudi Arabia have found contradictory results. Significantly lower levels were reported in Japan (16.5%) and the United States (22%). Studies in Ethiopia and Ecuador have shown lower group attrition that continues with age (28% and 28%, respectively). A study by Yang Liu et al. 2023 is a longitudinal study, and from 2011 to 2018, there is no significant decreasing trend even after individual adjustment, and there are temporally significant regional variations at the factor level, with the disease being more prevalent in the central and western regions compared to the eastern region (Liu et al., 2023). The decrease in rate is significant. Identify the oceans in the eastern region with the lowest water level decline during the study period. Significant risk factors for falls and injuries. For example, Chronic conditions and functional limitations. Falls with secondary trauma are on the decline, varying by region, which is essential for setting regional and subpopulation priorities for preventing falls and trauma in older adults in a regional study (China). It has a meaning. Studies in different parts of India show much higher prevalence numbers of 36.6% and 46.8% (Almegbel et al., 2018; Bhoomika et al., 2022).

Falls and resulting injuries account for 10-15% of all emergency department visits and 646,000 deaths worldwide each year. In addition, the consequences of falls and injuries increase with age and frailty. Therefore, falls are common in the elderly, which increases anxiety and reduces the quality of life of the elderly (Al-Ghamdi et al., 2020). You can also fall and cause serious injuries, e.g., fractures, stroke, headache, stress, severe post-traumatic and even death (Jayangsinghe et al., 2014; Chen et al., 2023) (Lederle & Widera, 2021). A broken hip bone is one of the most debilitating consequences of a fall. According to research, falls cause more than 90% of the 250,000 fractures in the United States annually. Remember that the injury may be too minor to impair the patient's health or cause a delay in rehabilitation. About 30-50% of falls result in physical injury, and 6% lead to fractures, bleeding, and even death. In the United States, reported prevalence reductions ranged from 3.3 to 11.5 patients per 1,000 days, with approximately 50% of treated patients experiencing a risk reduction patient per day. Based on a report in Brazil, about 35.4% of patient falls occurred in a hospital (Mielenz et al., 2020; Smith et al., 2020; Taylor & Kowalkowski, 2021). However, there are some significant observed associations based on design. -cross-sectional observations, but still a connection because the consequence is inconclusive (Behzd, 2020; Nunan et al., 2018; Rudd et al., 2020; Sam et al., 2023).

Fall is the reason for the most common injury in the elderly. Falling does not intentionally give rise to morbidity and mortality. It burdens the socially significant economy, making it the reason the leading second take care stays in all groups worldwide. Many biological, social, environmental, and behavioral factors can cause falls. For example, the type of sex is essential in predicting falls. Specifically, women's level fell 1.3 times higher compared to men's. Women accounted for 58% of injury nonfatal falls worldwide (Organization, 2021) (Peeters et al., 2018). Besides that, women are more likely to experience broken bones after falling. The data shows that women are twice as prone to being treated at a hospital and being treated in the emergency unit. The Emergency East Middle

study reports the prevalence of high falls (46 %), with Women at the risk of more falls (60%) in comparison to men (42%) (Alqahtani et al., 2019) research conducted on patients aged ≥ 60 years in Unaizah City show that prevalence fall was 34.5% in women and 28.5% in men. Another study in Jeddah City reported that 51.3% of women carrying age have a history of fall compared to 39.4% of men carry-age.

Multiple risk factors fluctuate, necessitating research to identify the underlying causes due to their influence. Time study is a method used to measure and analyze the time it takes to complete a specific task or activity—an observational or cross-sectional study focusing on silent phenomena, such as pre-existing conditions. Parkinson's disease, Alzheimer's disease, and various other factors such as muscle stiffness, motor slowing, orthostatic deficit, cognitive impairment, diabetes, cardiovascular diseases, systemic disease, and visual impairment are all linked to an increased risk of falls. A study conducted by Alanaz in 2023 reveals a significant decrease of 25.3% in the occurrence rate among senior citizens residing in Tabuk, Saudi Arabia. Elderly individuals who are at risk for long-term falls include those who face hindrances in walking, depressed symptoms, or difficulties in maintaining physical fitness due to an unsuitable environment, which may include ill-fitting shoes, inadequate illumination, clutter, and uneven floors (Alanazi & Salih, 2023). Descends swiftly as a result of gravitational force. Instances may arise, including descending from a chair or bed onto a slick or damp surface, necessitating prompt action and subsequent vigorous restoration or physical therapy.

A study conducted by Khawaja Imran (2023) revealed that 58.6% of participants experienced a significant reduction in their previous BMI, balance issues, vertigo, and anxiety. These factors are known to be connected with an elevated risk of decline as individuals grow older (N. Fitri & Riswari, 2022; Murray et al., 2020). Patients who experience falls exhibit greater functional and cognitive impairment, as indicated by long-term falls risk assessment, Montreal cognitive assessment (MoCA), dynamic gait index (DGI), and mini-BESTest scores. Individuals with a high BMI are more prone to falls. Given the recognized hazards and their complex character, specific actions are needed to address risky situations faced by the adult population and mitigate the factors that contribute to these risks. In order to enhance hospital services for patients at high risk of falling, it is advisable to adopt proactive strategies for fall prevention. These strategies should include regular assessment of risk factors and personalized interventions. This is particularly important in developing countries. Tailored interventions, such as engaging in sports, managing depression, and monitoring environments, have proven to effectively reduce falls and mitigate community-wide risks associated with falling. The health condition of the service provider is crucial in preventing falls among the elderly.

Caregivers, together with the elderly, should be educated more about health-related prevention (Chen et al., 2023; Djatnika et al., 2018; Jennifer L. Vincenzo, 2023; Kwon1 et al., 2021; Shipley, 2022). As age increases, it is necessary to recognize and overcome the decline of factor risk and emphasize the prevention of necessary procedures, proactive assessment of accident risks, and protocols in the hospital. Some factors changed potential risks, including body mass index, balance disorders, dizziness, and decreased anxiety, and identified an increase associated with a risk reduction in the elderly. Population Underscoring the importance of planned intervention to target risk factors. This use reduces the consequences of accidents and falls. Comprehensive

implementation of prevention programs is crucial to improve quality care services. Includes risk analysis with various individual components and measures to reduce falls and consequences(Lachapelle et al., 2018; Sutton et al., 2023).

Necessary: Prevention programs to reduce fall risk should include using tools in health risk units, including using fall risk care related to multifactor risk assessment. There is evidence that it is necessary for an accident. (Michalcova et al., 2020) Investigate patient satisfaction. (1) Several issues include the inability to achieve assessment, real-time risk mitigation, and real-time data upload and sharing. (2) Management's warning risk has not yet been mitigated. (3) reduce the career and work management risk complex; (4)) whether there are internal safeguards that inhibit litigation (e.g., litigation at different fall risk levels, litigation at different times, etc.); (5) Due to the lack of monitoring standards for reporting patient falls, care must be taken to maintain and correct follow-up (Wang et al., 2024).

Patient Safety: Utilizing system information can aid in the prevention and identification of patients who are at a high risk of experiencing long-term complications. Additionally, it can enhance reporting procedures, leading to improved fall prevention measures and higher-quality research. Use Fall TIPS (Customized Patient Safety Interventions) with automated clinical decision assistance. Assist in identifying and providing support to adult patients who are at risk of experiencing adverse health outcomes as they age, as discussed in the studies by (Dykes et al., 2017; Jacobsohn et al., 2022). The Reduction Falls program is a technique in neurology that focuses on patient safety. It examines the completeness and accuracy of data to ensure practical actions. The activity takes place biweekly, and there is unscheduled surveillance. Distinctive Print To ensure safety, position the patient in a lateral recumbent position. The accurate invoice will be completed in the brochure located in the receipt folder, allowing her 1000 days per patient. The compliance rate of TIPS posters is 90%, and all personnel have received 100% training. This is a 67% increase in data from 2019 to 2020 compared to the period before the intervention. The data intervention showed a 14% reduction in fall injuries from 2019 to 2020. Thus, adhering to TIPS will decrease injuries resulting from falls and slips. Minimize hospital expenditures and enhance the quality of patient care(Bridgitte Gourley Second Reader Sandra Lucci, 2021; Mehrzad, 2014). An analysis of hospital unit continuity in falls prevention programs for all medical/hospital services in the facility, focusing on these programs' effectiveness and implementation strategies. Department heads assessed the visibility and identification of fall prevention measures, the practices related to changing beds, and the monitoring of patients. Practices to ensure the safety of patients 4) Educational strategies about instructing patients on fall prevention and enlightening families on fall prevention. Additional specialized departments included palliative care, psychiatry, and geriatrics. You will receive assistance from various professionals, such as case managers, social workers, clinical pharmacists, nutritionists, physical therapists, quality control specialists, occupational therapists, respiratory therapists, and speech therapists. Expert participation is crucial when implementing change (Expert Advice for Implementing Change (ERIC). There are notable disparities among facility units regarding applying fall prevention procedures and methods. Subsequent investigations will analyze how units modify their fall prevention strategies in response to patient risk variables and how they implement them. An inquiry is necessary to determine the method of selecting an implementation plan, considering the already available resources (Turner et al., 2022).

Prevention

Preventable falls effectively impact the quality of service, quality of life, and cost efficiency. Several interventions and programs are used to prevent falls, including the CATCH falls management model, the PISTI management model, the interdisciplinary collaboration model, and the health education model. Some studies show that falls are about 92% preventable. However, the focus is still generally only on nurses or intensive care units, and the role of patients still needs to be considered. B. Clothing, food, accommodation, and transportation for the health of security personnel (*Desertation Doctor of Nursing Practice Degree School of Nursing*, 2021). With progress. Thanks to artificial intelligence, some robots can survive falls. Some robots are equipped with various functions and fall-prevention mechanisms. Six major robot types, 25 robot functions, and 59 robot mechanisms are focused on fall prevention. So far, initiating this breastfeeding phase is still possible, absolutely possible, and effective(Boariu, 2020; Boariu & Armean, 2020; Lin, 2020). However, based on the scientific literature, among others, the patient or his family or The practically possible applied prevention community by patients can be summarized as follows:

1. Risk assessment calculates and discusses appropriate strategies with patients with the disease
 - Possible drug side effects and possible interactions associated with the drug increase risk reduction. Consider the patient's fatigue or stop taking medications that affect thoughts, such as B. Sedatives, antihistamines, and some types of antidepressants.
 - The conditions for walking are hers. Do you experience dizziness, joint pain, sluggishness, or numbness in your legs when you walk?
 - Check your strength, balance, and brisk gait (style walking).
2. Stay active in the fall by doing physical activities like hiking, water sports, and tai chi. Do you need regular supervised physical therapy? We will create a training program to improve muscle balance, flexibility, and strength.
3. Please wear safety shoes to avoid the risk of falling. Wearing shoes that are shallow and flat allows them to fit perfectly into the non-slip sole.
4. Eliminate household hazards like
 - Remove boxes, newspapers, electrical, and telephone cords from main hallways.
 - Move the table. Place magazines and plant trays on shelves, then cross-high feature
 - Safely, loose carpet with two front tapes
 - Store clothes, dishes, food, and other essential items in easily accessible locations
 - Wipe up spills immediately, liquids, oils, food.
 - Use non-slip mats in the bath or shower; use the shower
5. The room should be free from easy tripping, hard-to-see things, uneven floors, and traps. Put a light night in the room's bedroom, bathroom, and corridor, and it should be easily affordable for the indicated people. Turn on the light before going up or down the stairs. Keep the flashlight in an easily accessible place so that the electricity is turned off.
6. Use aids
 - One-sided ladder handle.
 - Non-slip rung on wooden stairs Bath - plus hand shower while sitting. Deep physiotherapy

practices a day must-notice

1. Repair method communication with clear, concise, and repetitive CCR: Clear, straightforward, and repetitive.
2. Establish and enforce appropriate documentation protocols
3. Stick to the scope of practice, Follow proper care protocol, and carry out equipment tests regularly and routine
4. Guard function tool optimal
5. Maintain professional boundaries with guard connection professionally with quality good service
6. Closely supervise patients during treatments, notice potential hazards, and do mitigation when they appear. Always guard communication to get related feedback with good treatment executed. Keeping documentation on before, while, and after therapy
7. Compliance cannot be negotiated for covered clinics in HIPAA. Every employee must always follow development protocols and change laws for successful practice. It is also important to evaluate risk existing technologies and risks as well as renew appropriate policies so that
8. Report any claims immediately. Relaying these details in real-time ensures the best possible outcome.

CONCLUSION

Risk assessment is essential in maintaining patient safety with notice steps or stages in risk assessment. Factor risks must be identified, and which ones potentially give rise to hazards. Special care must address Patient safety and deterrence efforts as the case is dangerous falls because there appears to be an increase in patient falls. In physiotherapy, there is a practical need to notice the risk of falls with stages starting from identification until planning and evaluation of prevention of falls. All healthcare team members are involved in the complex matter of patient safety. Physiotherapists, regardless of their position or workplace, need to be constantly aware of all aspects of patient safety since increasing knowledge of the issue is essential to enhancing patient safety. If the profession is to support a culture of error detection and reporting instead of blaming, it must recognize that mistakes are unavoidable. More research is required to find out how much physiotherapists currently know about patient safety concerns, mainly how they see their involvement in patient safety. To further understand the nature and consequences of errors, data collection, root cause analysis, and practice modification are necessary to reduce errors and enhance patient safety(Alshammari et al., 2018).

This study provides a comprehensive analysis of risk assessment practices in healthcare, with a particular focus on fall prevention in physiotherapy(Brown & Gale, 2018; Brún et al., 2017). The results underscore the importance of integrating advanced technologies and multidisciplinary approaches to enhance the effectiveness of risk management strategies. The findings have significant implications for healthcare providers and policymakers, suggesting that continued investment in education, training, and technological innovation is crucial for improving patient safety and outcomes.

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