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Fonseca, Renata Francielle Melo dos Reis; Matumoto,
Silvia; Xavier, Joab Jefferson da Silva; Faller, Jossiane Wilke

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*Renata Francielle Melo dos Reis Fonseca*[1]
*Silvia Matumoto*[2]
*Joab Jefferson da Silva Xavier*[3]
*Jossiane Wilke Faller*[4]

# Risk Behavior for Falls in the Elderly: Experiences of Community Health Workers*

**Theme of the article:** Promotion and prevention.

**Contribuction to the discipline:** Discuss and describe the factors that constitute risk behaviors for falls, in order to provide knowledge that contributes to planning care interventions by the health care team, developing and improving care, and promoting health in the elderly.

ABSTRACT

**Objective:** To identify the risk behaviors of the elderly at home, described by community health workers, and related factors. **Materials and methods:** Qualitative research, in the dialectical perspective, carried out through a focus group with community health workers from a family health strategy unit in a municipality of the State of São Paulo, Brazil. Thematic content analysis was used for the study. **Results:** The revealed risk behaviors are related to extrinsic factors (architecture, furniture, and equipment), socioeconomic factors (low income, level of education, deficit of social and a family support), and psychological factors (feeling of vulnerability, dependence and not self-acknowledging in a dangerous condition). **Conclusions:** Falls are the result of a complex interaction between the factors and, the behaviors studied so that adequate identification of these can subsidize individual and collective intervention actions, as well as care management and planning processes aimed at the health of the elderly person.

KEYWORDS (Source: DecS/MeSH)

Aged; elderly; accidental falls; risk factors; primary health care; health promotion.

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1 https://orcid.org/0000-0002-5878-0826. Universidade de São Paulo, Brasil. renatafrmelo@alumni.usp.br

2 https://orcid.org/0000-0002-8590-5276. Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, Brasil. smatumoto@eerp.usp.br

3 http://orcid.org/0000-0001-5748-1018. Universidade de São Paulo, Brasil. yoav@alumni.usp.br

4 https://orcid.org/0000-0002-1216-8180. Universidade Estadual do Oeste do Paraná, Brasil. jossiana.faller@unioeste.br

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# *Comportamiento de riesgo para caídas en adultos mayores: experiencias de los agentes comunitarios en salud**

RESUMEN

**Objetivo:** identificar los comportamientos de riesgo de los adultos mayores en el domicilio descritos por las agentes comunitarias de salud y sus factores relacionados. **Material y método:** investigación cualitativa, en la perspectiva dialéctica, realizada por medio de un grupo focal con agentes comunitarios de salud de una unidad de estrategia de salud de la familia de un municipio en el Estado de São Paulo, Brasil. Para el análisis, se utilizó el análisis de contenido temático. **Resultados:** los comportamientos de riesgo revelados están relacionados con factores extrínsecos (arquitectura, mobiliario y equipamiento), factores socioeconómicos (bajos ingresos, escolarización, déficit de apoyo social y familiar) y factores psicológicos (sensación de vulnerabilidad, dependencia y no reconocerse en una condición peligrosa). **Conclusiones:** las caídas son el resultado de una compleja interacción entre los factores y los comportamientos estudiados, por lo que una adecuada identificación de estos puede subvencionar acciones de intervención individual y colectiva, así como procesos de gestión y planificación de cuidados dirigidos a la salud de la persona mayor.

PALABRAS CLAVE (Fuente: DeCS/MeSH)

Adulto mayor; anciano; accidentes por caídas; factores de riesgo; atención primaria de salud; promoción de la salud.

* Este artículo es derivado de la tesis de maestría "Prevenção de quedas nos idosos: adesão na atenção primária", presentada a la Escuela de Enfermería de Ribeirão Preto, Universidade de São Paulo, disponible en: https://teses.usp.br/teses/disponiveis/22/22134/tde-30052018-105526/pt-br.php

# *Comportamento de risco e fatores para quedas em idosos: experiências de Agentes Comunitários em Saúde**

RESUMO

**Objetivo:** identificar os comportamentos de risco dos idosos em domicílio e descrever fatores relacionados. **Material e método:** pesquisa de abordagem qualitativa, realizada por meio de Grupo Focal com Agentes Comunitárias de Saúde de uma unidade de Estratégia de Saúde da Família de um município no interior do Estado de São Paulo, Brasil. Para análise, utilizou-se análise temática de conteúdo. **Resultados:** revelaram comportamentos de risco relacionados a fatores extrínsecos (arquitetônicos, mobiliários e equipamentos), fatores socioeconômicos (baixa renda e escolaridade, déficit suporte social e familiar) e fatores psicológicos (sentir-se vulnerável, dependente e não reconhecer-se em condição de risco). **Conclusão:** as quedas são resultado da complexa interação entre os fatores e comportamentos estudados, portanto uma adequada identificação destes podem subsidiar ações de intervenção individual e coletiva, assim como processos de planejamento de cuidado e gestão voltadas à saúde do idoso.

PALAVRAS-CHAVE (Fonte: DeCS/MeSH)

Idoso; pessoa idosa; acidentes por quedas; fatores de risco; atenção primária à saúde; promoção da saúde.

* Este artigo é derivado da tese de mestrado "Prevenção de quedas nos idosos: adesão na atenção primária", apresentado ao Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, disponível em: https://teses.usp.br/teses/disponiveis/22/22134/tde-30052018-105526/pt-br.php

## Introduction

Falls have a high impact on the quality of life of elderly people (and, consequently, on various health sectors), due to the forced reduction of their daily functions, hospitalization or institutionalization, as well as their high costs. The significant morbidity and mortality rates demonstrate the need to create public policies and programs for prevention and rehabilitation (1). Therefore, falls are of the utmost importance with regards to the comprehensive care of the elderly, and require the intervention of nursing as the provider of health education and as a fundamental participant of the primary care and provided care management teams (2, 3).

Falls are a multifactorial occurrence, but, as the previous study confirms, few research studies portray the influence of the behavior and risk attitudes of the elderly on falls (4, 5).

Risk behavior encompasses attitudes, tasks or activities, and habits that elderly adopt and execute, even in the face of possible harm, such as falling. Behavioral risk factors are related to human actions, emotions, or everyday choices that can be modified (6). In older people, a judgment is established on risk behaviors, such as their tendency to continue carrying out their day-to-day activities, despite the danger that implies. This, given the difficulty of adapting to their new condition, accompanied by age-related changes and a deficit of sensory and motor performance (7).

Risk behaviors include inappropriate activities, such as walking downstairs carrying a heavy load; unsafe motor movements; fast movements (such as walking, getting up, or changing position at a fast pace) or sudden movements (like turning the head or torso sharply backward); sedentary lifestyle; exposure and activities on slippery or uneven surfaces, and in poorly lit places; bathing without support bars; use of inappropriate shoes (with slippery soles, high heels, open sandals without fastening [such as velcro or a buckle] and thick soles); improper use of mobility aids, such as the walker; use of furniture to fetch objects out of reach, such as stools; walk-in heavy traffic areas; not asking for help; use of alcohol and tobacco, polypharmacy or self-medication (4, 5).

Within the primary care sphere, Community Health Workers (CHW) interact with the elderly of the community on a daily basis. They conduct activities of health promotion and prevention of injuries (individual and collective). The implementation of subventions that support the practice of the CHW to foster their activities with the community can be found in the literature (8).

Therefore, the review addresses risk behavior in the elderly in order to subsidize actions aimed at the prevention of falls. Thus, the objective of the article was to identify the risk behaviors for falls in elderly described by the CHW and its related factors.

## Materials and Methods

A qualitative research study was conducted, due to its nature allows to reveal human characteristics that would be arduous with quantitative methodologies. Essentially, they allow us to investigate, explain, analyze and elucidate in an interactive way the human and its relationships, constituted by real structures of immateriality, and abstraction, such as faith, beliefs, values, habits, attitudes and customs (9).

The different paradigmatic currents organize the theoretical foundations according to world view, principles, methodological convictions and, conceptual applications, to explain the procedures in the construction of the investigation and to guide the process of interpretation, in order to explain the qualitative research with rigor and reliability (10).

To aid the observations, explanations, and perceptions from the point of view of the subjects of the universe in which they occur, the dialectical method was used. This is aimed to understand the constitutive relationship between the phenomenon and the whole, based on concrete experience. Objectivity, which through meticulous use of the method allows a closer approach to the object of study, helps to understand the subject-object interaction in a socio-historical context. A deeper understanding can be achieved through discussion guided by critical analysis, comparison with scientific knowledge, and exposure of subjectivities, such as relationships between subjects and culture, personal and material history (i.e., residence, furniture and all those objects that are part of the elderly person's history). In this way, objectivation describes the problem before its determinations and transformations by the social actor (11).

Sometimes, the essence of risk behaviors and falls is not evaluated or identified by the health care team. By evaluating the elements that determine them, we seek to understand, through the subjects involved in their context, the contradictions, the subjective, and the objective of the dialectical method.

The CHW, as social actors, participate in the phenomenon through daily interaction, insertion in places where social dynam-

ics occur (like domestic and community spaces), the bond and trust established with elderly people, and the family (12). That being said, research with workers within the scene of the elderly experiencing the event of the fall, from a healthcare point of view, is indispensable and justified.

This investigation was carried out in a municipality in the State of São Paulo. The health care unit chosen for the study is located in a traditional neighborhood and is recognized for serving a significant proportion of the elderly population. This unit works from the perspective of the *family health care strategy* and relies on a multi-professional team to accompany families.

The focus group (FG) technique was used to collect the data. This method of capturing the interaction between the participants is noted because of the accessibility of execution that it provides, and by the free expression of the experiences of a few participants, through conversations without interference or prejudice from the researcher (13).

The participation of CHW was proposed by the manager of the healthcare unit, by noticing the inclusion criterion of having more than three years of experience in monitoring the elderly in the family health care strategy. The invitation was personally made by the principal investigator, who stressed the total freedom to decide to participate in the study. There were no rejections.

In October 2017, a 90-minute focus group meeting was held with 5 participants, in the meeting hall of the healthcare unit, a space that offered privacy and round table interaction. It was coordinated by a researcher with a doctorate degree with proficiency in the technique and in the field of health care of elderly, supported by one of the previously trained authors.

A script was used, that included guiding questions such as: "Are there many elderly who suffer falls in your area?; How do you identify the risks of falls?; What are your actions in preventing falls in the elderly?; Report the perceived fall risks and how you handled the situation." The semi-structured script allowed the generic questions to be discussed in-depth, while the topic was addressed.

The discussion environment was favored by the previous interaction between the CHW and the ability to express themselves freely in the group. The FG coordinator was persona well-known by the CHWs, since research and health promotion activities had already been carried out in that unit. The discussion group was closed when the CHW considered that there were no more aspects to add.

The registry was made through a field journal. The process was recorded by the coordinator and assistant with a digital recorder, and the assistant recorded impressions, informal conversations, details about non-verbal communication, and other aspects of the environment in a notebook. Both transcribed the material with the software Microsoft Office Word®.

Participants' speeches were identified by sequence A1, and so on.

The thematic analysis of the content of the focus group was divided into three steps: pre-analysis, material exploration, and interpretation of the results. The *pre-analysis* consisted of a cursory reading of the data in order to familiarize ourselves with it. In the stage of *material exploration*, the units of significance were extracted, synthesized by phrases, and differentiated according to their essential elements. In the *analysis of results*, the units were added according to their similarity and relevance, classified into thematic categories. These were compared and based on current studies, under the references "falls in the elderly", "related factors" and "examples of perceived risk behaviors" (14).

Data was validated through multiple triangulation. External verifications, based on independent evaluations by different suitable people in the area, such as doctors (Ph.D.) in Nursing and in the field of research and knowledge of the qualitative method, reduced the possibility of bias due to erroneous interpretations. Furthermore, the triangulation of the data refers to the same elements found and described by international and national research, in different contexts and conditions of elderly populations, which allowed the generalization of results (15).

The study was approved by the Ethics Committee in Research of the Escola de Enfermagem de Ribeirão Preto of the Universidade de São Paulo, CAAE: 68815317.3.0000.5393. The established norms of the 466/2012 Resolution of the Conselho Nacional de Saúde (Brasil) were observed.

To provide reliability and rigor to the research, this study was based on the guidelines for the critical evaluation of qualitative research (COREQ). All the research and results were carried out following the signature of the *Free and informed consent term* of each of the interviewees.

## Results and discussion

The participants provided basic information that allowed a better approach to the subjects and characterization (Table 1).

**Table 1.** Characterization of the focus group participants

| Characteristic | Descriptor | Percentaje/ variation |
|---|---|---|
| Gender | Female | 100 % |
| Age | Years | 38-56 years |
| Occupancy in the unit | Community Worker | 100 % |
| Time in the position | Years | 5-17 years |
| Education | High School<br>Incomplete College | 80 %<br>20 % |
| Geriatric Training | Training/capability | 100 % |

Source: table extracted from the master's thesis in which this article is based on, Fonseca (16).

Regarding training in Geriatrics, all the CHW reported having participated in the training provided within the same unit. The courses were on sexuality, falls, vulnerability, and violence, among other topics.

The content analysis allowed relating the discourse of the participants who were grouped by categories of understanding and the approach to the aspects related to falls described in the scientific literature. The three categories, according to risk factors, are extrinsic, socioeconomic, and psychological.

### *Extrinsic factors*

The CHW reported various situations that characterize the behaviors of elderly, as in the following example:

> "She is 68 years old, [...] she fell badly tripping on the nightstand, at night, going to the bathroom in the dark [...]. Now she is afraid to walk on the street, [...] she feels imprisoned inside the house". (A3)

In the previous record, the risk behavior (going to the bathroom in the dark), the extrinsic risk factor (nightstand on the way at night) and the consequence of the fall (fear of falling and social isolation), was shown.

The extrinsic risk factors described in the literature are poorly lit environments; loose or pleated rugs; Carpet edges (mainly folded), slippery floors — such as waxed floors — or poorly maintained floors; disorganized environments, low furniture or objects left on the floor, such as shoes, clothing, threads, toys, garbage, and debris, among others; unstable or sliding furniture; tall steps of uneven height or width; stairs with a highly-designed floor, which makes it difficult to see each step; steps without end signaling; the presence of animals, grab bars, chairs, beds, and seats of inadequate height; armless chairs; wearing high-heels, shoes that are untied, poorly adjusted, or with slippery soles; stairs with front lighting (17, 18, 19).

These factors are especially related to the residence; they are predisposing and are the most prevalent. They are present in 30-50 % of the events of falls. Another study shows that 65 % of falls occur at home and in an inappropriate environment (5, 17, 20). The research carried out in Ribeirão Preto, São Paulo, cites that, regarding the places where falls occur, 65 % take place in a home environment, and 15 %, on public places (21). The research carried out in Ribeirão Preto, São Paulo, cites that, regarding the places where falls occur, 65 % take place in a home environment, and 15 %, in public places.

The CHW present risk behaviors in elderly people, such as the use of furniture for activities and the use of inappropriate footwear:

> "She climbed onto the bench and went to collect some papers. While she was going up, she tryed to hold from the closet, the trunk fell and landed on her". (A2)

> "…That flip flop is not good for the lady. Because several times I go there and she wears the same flip flop". (A3)

Many falls occur in the attempt to avoid obstacles, or in places where the environment demands a certain physical ability (22). It is also highlighted that there is a dynamic between environmental conditions and individual behavior. A fall is the result of the complex interaction between the set of intrinsic and extrinsic risk factors involved, but it is not possible to establish the precise influence of each factor. It can only be stated that the risk of falls increases linearly with the number of associated risk factors. Although those of an intrinsic nature often refers to the aging process, intervention on factors that may be related to falls, such as extrinsic, can obtain effective results in reducing the incidence or minimizing the severity of falls (23).

## *Socioeconomic factors*

In this category, the statements of the CHW were grouped in regards to socioeconomic factors: low level of schooling, low income, a deficit in access to social and healthcare services, lack of social interaction and communication, inadequate housing or in rural areas, living alone (24, 25).

The following records present a financial difficulty as a trigger for risky behavior and the lack of adequate environmental conditions:

> "He does not leave the light on because he thinks he spends a lot". (A1)

> "Many of us got them to put on the grab bar to help roll over. Some do not get or have no financial means... the issue is highly related to financial circumstances, sometimes from the family". (A3)

In the general panorama pointed out by the CHW, the lack of social or family support faced by the elderly in the community is quite evident.

> "Like most workers, we find many elderly in the area. I have found a considerable number of elderly living alone, and some who have no family support". (A3)

> "There are elderly who ask for help a lot, but they are not able to get it from anywhere". (A1)

For the elderly, the quality of interpersonal relationships and emotional and psychological difficulties (such as depression or loneliness) are as significant as physical health conditions. The literature points to the correlation between social support and the general state of health of elderly, and the ability to promote or maintain emotionally and functionally their mental and physical state (26). The social support, mainly by the family, is able to provide instrumental support to help with daily activities; evaluation support or help with decision making or problem-solving; support of information such as counseling or particular concerns; and emotional support for the provision of affection, sympathy, understanding, and appreciation (25). Social support also encourages elders to adopt protective attitudes (27, 28).

When analyzing the nature of risky behavior, it is often observed that elders assume such behavior because they perceive themselves facing their social breakdown and are left with no choice to act. With no alternative, because there is no help available, the elderly perform the task, regardless of the risks.

> "He had to fetch something that was across the street. As he crossed, he tripped on the sidewalk and fell". (A1)

In health care, when analyzing the decision or alternative found by the elderly, their perception of the need to carry out an activity, and its purpose must be assessed. Gardening, for example, can be considered essential for the older, while for health professionals it can be optional (29). It is highlighted, with this answer, that the dialogue on the activities carried out by the elder must be evaluated by the health team.

## *Psychological factors*

Here are included the reasons or justifications for the assumption of risk and some elements related to the perception by the CHW on how the elderly wants to be regarded:

> "I think the elderly does not want to be seen as incapable. Even knowing his limitations, he does not want to show... that he... is not capable. 'I do not want anyone to do anything for me, I still want to do it myself'". (A5)

Risk behavior reflects that elderly do not see the fall as relevant in order to avoid feeling vulnerable. For this reason, when doing tasks or activities, they do not take the necessary precautionary measures for fear of being labeled old or fragile. A clear example is their concern about what people think of their appearance in public and this, consequently, makes them want to walk without using the required attachments, even though this represents a risk. Any restriction of daily activities brings feelings of frustration and loss and decreased independence. For these reasons, many elders become anxious and reluctant when conversations or discussions about falls take place. The inclination to test their own physical limits is common among elders; they resist acknowledging their limitations and understanding the changes in their bodies. Many elders do not realize their own risk levels for falling (24, 28, 30).

> "So, they worry a lot about what people will say, what others will think...". (A1)

> "But she did not calm down [...], she went alone to pick up the base bed to take it to the room [...]. The bed fell on top of her. She was hospitalized for a few days because of that". (A5)

There are many precautions that elders can take to avoid falls, without requiring significant adjustments in their behavior or in the home environment. Daily activities often require balancing the risk of falling and the ability to avoid falling. Thus, there must be a balance between risky behavior and prevention, which is difficult for many elders (22, 31).

Another situation commonly heard in the daily operation of health professionals is the difficulty of elders to ask for help from others, due to the feeling of dependence or discomfort with the presence of others.

> "And one thing I hear elderly say: 'I do not want to give work [or be a burden] to anyone' [to be looked after by someone]". (A1)

> "It is like they... the daughter comes every day, and she feels like she is a burden on the daughter. And then, she cries". (A4)

The feeling of being a burden on the family comes from changes in the traditional compositions and attributes of relationships and family duties, which influence the care offered to elders and their willingness to commit to their self-care (25).

Many elders are not aware of the consequences or the danger that their risk behaviors involve (24, 32).

> "The body does no longer work the same... they believe that it still gives... that it has no limitations. Then, they get up suddenly at once and get dizzy". (A4)

> "And on one of those visits, they talked and started speaking about the risk of carpets. [...] Thereafter, on other visits, I observed that there were no more". (A4)

Sometimes risky behavior is part of the process of rehabilitation and adaptation to the state of independence or clarification of the real limitations of the elder (29).

The described and analyzed discourses show that the behavioral risks of the elderly can be characterized as a deficiency in their self-care, ignorance of environmental risks and their limitations, or lack of support and social interaction. They also show how falls affect the sense of identity of those who suffer them, to which is added the derogatory prejudice about advanced age. Thus, acceptance of risk passes through fear of vulnerability, loss of independence, and finitude of life (31, 33).

The presented factors allow us to understand that they are preventable, such as risk behavior. The focus of the care and resource model should focus on early intersectoral rehabilitation interventions, on the reduction of damage caused by comorbidities, on the style and quality of life of elderly people and on their functional capacity. In addition, from the perspective of the CHW, the elements that cross psychosocial aspects, which are found in everyday life, have a considerable impact on the genesis of falls. In other words, for the CHW, the factors described that comprise the risk behaviors are key points for the prevention of falls because they are part of the daily experience of the elderly (3, 34).

Using their main instrument of work —home visits—, the CHW can expand their observation, provide information, interpret and reflect on vulnerabilities, absences, and family and social dynamics, that would not be possible to verify superficially through biomedical consultations (12). This is the core of the role of the CHW, in which they contribute to the promotion of health by identifying the determinants that act on the incidence of falls, the health-disease process, the restructuring of care, and the reorientation of multi-professional work (35).

About falls, the CHW must help to raise awareness among elders and their families about the extrinsic factors of the residences and the environment, about the care of urban mobility, about the need for regular support by healthcare professionals, the importance of physical exercise and recreational activities to keep the elderly active. Surveillance activities are also worth noting, recording the falls of the most vulnerable older adults and reporting to the healthcare team (36).

To achieve this, the CHW has the assistance and supervision of the nurse, as manager of care. It should be noted that comprehensive care for elderly is feasible only when there is an approach to the day to day reality of each individual, their habits, and their problem (12).

In this way, nurses must have knowledge in gerontology to update themselves, as well as to train the healthcare team and educate their patients. In particular, with regard to CHW, the nurse is responsible for their training, qualification with technical knowledge, and improvement of those (37).

The nurse must recognize CHW as mediators between the healthcare service and the community. It is recommended that they actively participate in health education, either in home-visits or with the team in activities such as conferences, workshops, or

rounds of conversations. In this way, primary care develops a permanent education that allows listening and sharing information to consolidate the link between the team, the adaptation of the language, and the use of creative, effective and, transformative teaching methods (38).

Consequently, primary care provides the elderly with an active character, distinctive of an individual who chooses to adopt protective behaviors and reflects on the multidimensional elements that can cause a fall or possible diseases (37).

## Conclusions

This study allowed us to analyze, along with the CHW, the risk behaviors of the elderly, and the factors associated with said behaviors. The CHW identified extrinsic, socioeconomic, and psychological factors, as their interaction produces risky behaviors and consequent falls.

The factors identified constitute knowledge that can subsidize health education processes for the prevention of falls in the elderly, aspects to consider when planning collective actions for healthcare and management, as well as raising awareness to prevent falls effectively among primary healthcare professionals.

### *Limitations*

The main limitation of this study was to work with the perception and experiences of the CHW of only one family healthcare unit in a municipality since this presents a bias in the research and, therefore, partial results.

Based on the return of the study to the participants, it is suggested for future research to evaluate programs to prevent falls in elders that contemplate risk behaviors and health education programs that address extrinsic factors, strengthen the social support network and work on the psychological aspects of the elderly concerning aging (feelings, beliefs, habits, among others).

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## References

1. Rhyn B, Barwick A. health practitioners' perceptions of falls and fall prevention in older people: A metasynthesis. Qualitative Health Research. 2018;29(1):69-79. DOI: https://doi.org/10.1177/1049732318805753
2. Frith KH, Hunter AN., Coffey SS, Khan Z. A Longitudinal Fall Prevention Study for Older Adults. The journal for nurse practitioners. 2019;15:295-300. DOI: https://doi.org/10.1016/j.nurpra.2018.10.012
3. Santos JC, Arreguy-Sena C, Pinto PF, Pereira EP, Alves MS, Loures FB. Social representation of elderly people on falls: Structural analysis and in the light of Neuman. Rev Bras Enferm. 2018;71(suppl. 2):851-9. DOI: http://dx.doi.org/10.1590/0034-7167-2017-0258
4. Duru P, Özlem Ö, Ünsal A, Balci-Alparslan G. The frequency of falling elderly and evaluation of the behavioral factors related to preventing the falls. Journal of Duzce University Health Sciences. 2016;6(1):34-40. Disponible en: https://www.researchgate.net/publication/295907997_The_Frequency_of_Falling_Elderly_and_Evaluation_of_the_Behavioral_Factors_Related_to_Preventing_the_Falls
5. Bilik O, Damar HT, Karayurt O. Fall behaviors and risk factors among elderly patients with hip fractures. Acta Paul. Enferm. 2017 Ago; 30( 4 ): 420-427. DOI: http://dx.doi.org/10.1590/1982-0194201700062
6. Clemson L. Fall Risk Behavior. Encyclopedia of Behavioral Medicine. New York: Springer Science; 2013. DOI: https://doi.org/10.1007/978-1-4419-1005-9_879
7. Butler AA, Lord SR, Taylor JL, Fitzpatrick RC. Ability versus hazard: risk-taking and falls in older people. The Journals of Gerontology. 2015 may. 70(5 serie A): 628-634. DOI: https://doi.org/10.1093/gerona/glu201

8. Silva DM, Silva MAC, Oliveira DS, Alves M. Cotidiano de agentes comunitários de saúde com idosos segundo o referencial de Certeau. Cogitare enferm. 2017 Out/dez; 22(4): 1-9. DOI: https://doi.org/10.5380/ce.v22i4.50436

9. Holanda A. Questões sobre pesquisa qualitativa e pesquisa fenomenológica. Análise Psicológica 2006;24(3):363-372. Disponible en: http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0870-82312006000300010&lng=pt&nrm=iso.

10. Bruyne P, Herman J, Schoutthete M. Dinamica da pesquisa em ciência sociais: os pólos da prática metodológica. 5 ed. Rio de Janeiro: Francisco Alves Editora, 1991.

11. Minayo MCS, Costa AP. Fundamentos teóricos das técnicas de investigação qualitativa. Revista Lusófona de Educação 2018;40(40):139-153. Disponible en: https://revistas.ulusofona.pt/index.php/rleducacao/article/view/6439

12. Assis AS, Castro-Silva CRC. Agente comunitário de saúde e o idoso: visita domiciliar e práticas de cuidado. Physis: Revista de Saúde Coletiva 2018;28(3), e280308. DOI: http://dx.doi.org/10.1590/s0103-73312018280308

13. Kinalski DDF, Pala CC, Padoin SMM, Neves ET, Kleinubing RE, Cortes LF. Focus group on qualitative research: Experience report. Rev Bras Enferm. 2017;70(2):424-9. DOI: http://dx.doi.org/10.1590/0034-7167-2016-0091

14. Minayo MCS. O Desafio do Conhecimento: Pesquisa Qualitativa em Saúde. 14. São Paulo: Hucitec; 2014.

15. Santos KS, Ribeiro MC, Queiroga DEU, Silva IAP, Ferreira SMS. O uso de triangulação múltipla como estratégia de validação em um estudo qualitativo. Ciência & Saúde Coletiva [online] 2020;25(2):655-664. DOI: https://doi.org/10.1590/1413-81232020252.12302018

16. Fonseca RFMR. Prevenção de quedas nos idosos: adesão na atenção primária [dissertação]. Ribeirão Preto: Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto; 2018. DOI: https://doi.org/10.11606/D.22.2018.tde-30052018-105526

17. Silva WFLT, et al. Fall determinants and associated factors in older people. International Journal of Sports Science 2016;6(4):146-152. Available from: http://article.sapub.org/10.5923.j.sports.20160604.03.html

18. Labrador DC, Miranda GLH, Corral LEF, Bazart NO. Factores de riesgo asociados a caídas en el anciano del Policlínico Universitario Hermanos Cruz. Rev. Ciencias Médicas de Pinar del Río. 2016 ene.-feb. 20(1):40-46. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1561-31942016000100011&lng=es

19. Menz HB, Auhl M, Munteanu SE. Effects of indoor footwear on balance and gait patterns in community-dwelling older women. Gerontology 2017;63:129-136. DOI: https://doi.org/10.1159/000448892

20. Pitchai P, Dedhia HB, Bhandari N, Krishnan D, D'Souza NR, Bellara JM. Prevalence, risk factors, circumstances for falls and level of functional independence among geriatric population: A descriptive study. Indian J Public Health. 2019;63:21-6. DOI: https://doi.org/10.4103/ijph.IJPH_332_17

21. Vicentive FB, Ferreira JBB, Vinhati DS. Entre a gestão e o cuidado da saúde do idoso: enfoque no evento quedas. Medicina Ribeirão Preto Online. 2016;49(5):411-420. DOI: https://doi.org/10.11606/issn.2176-7262.v49i5p411-420

22. Leite NS, Kanikadan OS. Estudo bibliográfico sobre prevenção de quedas em idosos no universo da atenção básica. South American Journal of Basic Education Technical and Technological. 2016;3(2):167-182. Disponible en: https://periodicos.ufac.br/revista/index.php/SAJEBTT/article/view/611/0

23. Phelan EA, Mahoney JE, Voit JC, Stevens JA. Assessment and Management of Fall Risk in Primary Care Settings. The Medical Clinics of North America. 2015;99(2):281-293. DOI: https://doi.org/10.1016/j.mcna.2014.11.004

24. Loganathan A, Ng CJ, Low WY. Views and experiences of Malaysian older persons about falls and their prevention-A qualitative study. BMC Geriatr. 2016 may. 16:97. DOI: https://doi.org/10.1186/s12877-016-0274-6

25. Organização Mundial da Saúde. Relatório Mundial de Envelhecimento e Saúde – Resumo [serial online]. 2015. Disponible en: http://sbgg.org.br/wp-content/uploads/2015/10/OMS-ENVELHECIMENTO-2015-port.pdf

26. Pereira MCA, Santos LFS, Moura TNB, Pereira LCA, Landim MBP. Contribuições Da Socialização E Das Políticas Públicas Para A Promoção Do Envelhecimento Saudável: Uma Revisão De Literatura. Rev Bras Promoç Saúde Fortaleza. 2016 ene.-mzo.; 29(1):124-131. Disponible en: https://periodicos.unifor.br/RBPS/article/view/4422

27. Durbin L, Kharrazi RJ, Graber R, Mielenz TJ. Social support and older adult falls. Inj. Epidemiol. 2016;3(1):4. DOI: https://doi.org/10.1186/s40621-016-0070-y

28. Finnegan S, Bruce J, Seers K. What enables older people to continue with their falls prevention exercises? A qualitative systematic review. BMJ Open. 2019; 9:e026074. DOI: http://dx.doi.org/10.1136/bmjopen-2018-026074

29. Haines TP, Lee DA, O'Connell B, Mcdermott F, Hoffmann T. Why do hospitalized older adults take risks that may lead to falls? Health Expectations. International Journal of Public Participation in Health Care and Health Policy. 2015;18(2): 233-249. DOI: http://dx.doi.org/10.1111/hex.12026

30. Morsch P, Myskiw M, Myskiw JC. A problematização da queda e a identificação dos fatores de risco na narrativa de idosos. Ciênc. Saúde Coletiva. 2016 nov. 21(11):3565-3574. DOI: http://dx.doi.org/10.1590/1413-812320152111.06782016

31. Pohl P, Sandlund M, Ahlgren C, Bergvall-Karenborn B, Lundin-Olsson L, Wikman AM. Fall risk awareness and safety precautions taken by older community-dwelling women and men: A qualitative study using focus group discussions. PLoS One. 2015 mzo.; 10(3):e0119630. DOI: https://doi.org/10.1371/journal.pone.0119630

32. Hill AM, Francis-Coad J, Haines TP, Waldron N, Etherton-Beer C, Flicker L, et al. "My independent streak may get in the way": How older adults respond to falls prevention education in hospital. BMJ Open. 2016;6(7):e012363. DOI: http://dx.doi.org/10.1136/bmjopen-2016-012363

33. Gardiner S, Glogowska M, Stoddart C, DPhil SP, Lasserson D, Jackson D. Older people's experiences of falling and perceived risk of falls in the community: A narrative synthesis of qualitative research. International Journal of Older People Nursing 2017;12(4):12151. DOI: http://dx.doi.org/10.1111/opn.12151

34. Gomes FA, Camacho ACLF. O idoso e a mobilidade urbana: uma abordagem reflexiva para a enfermagem. Rev de Enferm UFPE online 2017;11(12):5066-73. DOI: https://doi.org/10.5205/1981-8963-v11i12a23068p5066-5073-2017

35. Ribeiro GRMS, Graça BC, Nascimento VF, Hattori TY, Gleriano JS, Terças-Trettel ACP. Atividades gerenciais do enfermeiro no monitoramento das visitas domiciliares do agente comunitário de saúde. Arq. Cienc. Saúde UNIPAR 2018; 22(3):179-185. DOI: https://doi.org/10.25110/arqsaude.v22i3.2018.6559

36. Miranda DP, Santos TD, Espírito Santo FH, Chibante CLP, Barreto EA. Quedas em idosos em ambiente domiciliar: uma revisão integrativa. Revista Enfermagem Atual 2017; Edição Especial:120-129. Disponible en: https://revistaenfermagematual.com.br/index.php/revista/article/download/560/531

37. Barreto ACO, Rebouças CBA, Aguiar MIF, Barbosa RB, Rocha SR, Cordeiro LM, Melo KM, Freitas RWJF. Percepção da equipe multiprofissional da Atenção Primária sobre educação em saúde. Rev. Bras. Enferm. 2019;72(Suppl. 1): 266-273. DOI: http://dx.doi.org/10.1590/0034-7167-2017-0702

38. Pinto CJM, Assis VG, Pecci RN. Educação nas unidades de atenção básica: dificuldades e facilidades. Rev Enferm UFPE online 2019;13(5):1429-36. Disponible en: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/237759