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# PROFILE OF ELDERLY PEOPLE WITH FEMUR FRACTURES LIVING IN THE MUNICIPALITY OF CARAÁ

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All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0). Abstract: The aim of this study was to find out the profile of elderly people diagnosed with femur fractures in the municipality of Caraá. This is a quantitative, descriptive, cross-sectional, population-based, censustype study using a questionnaire developed by the researcher, with elderly people aged 60 and over living in the urban and rural areas of the municipality of Caraá - Rio Grande do Sul/Brazil. The research was approved by the Research Ethics Committee of the Centro Universitário Cenecista de Osório (UNICNEC) under the number of the Research Ethics Committee (CEP) 6.271.664. This study included elderly people aged 60 or over diagnosed with a femur fracture. Nine elderly women who had suffered a femur fracture were interviewed, all of whom were female, with an average age of 81.1 years, all of whom were white, Catholic and retired. Most had a partner and multiple pathologies, and rated their health as reasonable. In order to restore the damage caused, 44.44% of the patients had been hospitalized for 17 days or more, and a large part of the sample had back problems and osteoporosis, took 5 or more medications a day and had urinary incontinence. Few of them use rugs on the floor and have stairs at home, and most of them have grab rails in the bathroom to help them. The data shows that the majority of elderly people have fallen at home, making it a risky place. There is a lack of prevention of fractures and falls in elderly patients on the part of the SUS. As a result, the number of elderly people with fractures accessing health services increases every day, as prevention is not effective. However, nurses and doctors are of great importance to patients, and should have a broad view of them, assessing them and providing comprehensive care. It is suggested that further research be carried out to encourage policies for caring for the elderly. Thus, this study brings the innovation of nurses and doctors providing care and detecting early changes and possible complications, taking part in monitoring the patient and the services provided to them by their multi-professional team.

**Keywords:** nursing; medicine; femur fracture; elderly.

# INTRODUCTION

As life expectancy increases, the most commondiseases in theelderly are becoming more frequent and known. Femoral neck fractures are one of many examples<sup>1</sup>. These fractures, on any anatomical scale, are considered serious and pose a great risk to health, since recovery requires a long period of time and, even so, some patients can develop complications, sequelae and even death<sup>2</sup>.

This happens for a number of reasons: the elderly have a reduced functional reserve and several chronic diseases. At the time of the fracture, around 70% of these patients have at least two or more diseases. The elderly are subject to complications in both the immediate and late post-operative periods, with an average of three complications, the most common being thromboembolism due to prolonged rest, pressure damage, urinary tract infection and atelectasis. Complications are serious in 26% of these cases, leading to a higher risk of death<sup>3</sup>.

According to a study on hospitalizations of elderly people due to femur fractures in the public health service in Brazil2, these fractures have a high incidence, high lethality and high cost for both institutions and families. In 2018, Brazil had a total of 58,298 elderly people diagnosed, while in 2019, this number grew to 63,102 cases. This data has grown by an average of 8.24%, which is worrying and requires policies aimed at preventing diseases and conditions that could lead to fractures in these elderly people4. Women are more affected than men and individuals aged 80 or over are the most vulnerable to both morbidity and mortality<sup>2</sup>. Nurses and doctors have a major role to play in the care of elderly fractures, from diagnosis, preparation and post-surgery until discharge from hospital, as well as in the Family Health Strategy (ESF), providing care, detecting alterations and possible complications, taking part in monitoring the patient and the services provided to them by their multi-professional team<sup>5</sup>.

Nursing care, as well as medical monitoring, is essential for the recovery of hospitalized elderly people, as it involves the scientific knowledge of procedures to work with the demand. Thus, the professional must be able to talk, listen, perceive the patient's weaknesses, offer humanized assistance, identifying the care to be offered to relieve pain and the presence of injuries<sup>5</sup>.

The choice of topic is justified by the presentation of content in the classroom and by a case of femur fracture in the family. The search for this statistical data helps us to understand the proportion of the problem in our municipality, as well as guiding management teams to promote preventive methods and ways of dealing with this situation, thus reducing the incidence and lethality of fractures in the Caraense population. For the scientific community, it is important to obtain statistical data and the possibility of formulating public policies to help these elderly people.

This led to the following guiding question: Do elderly people who have suffered a femur fracture tend to recover their physical limitations in order to maintain their wellbeing? The aim of this study is to find out the profile of elderly people who have been medically diagnosed with a femur fracture in the municipality of Caraá.

# METHODOLOGY

This was a quantitative, descriptive, crosssectional, population-based, census-type study with 09 participants, with elderly people aged 60 and over living in the urban and rural areas of the municipality of Caraá-Rio Grande do Sul/Brazil, which belongs to the Bons Ventos health micro-region of the northern coast of Rio Grande do Sul.

The inclusion criteria were all elderly people aged 60 or over, of both sexes, who had or had already been diagnosed with a femur fracture, registered with the Family Health Strategy in the municipality of Caraá, living in the urban or rural areas of the municipality. The exclusion criteria were incomplete data which was not released in full, those who were traveling at the time of the interview, those deprived of their liberty by a court decision, those living in long-term institutions or those hospitalized during the period of data collection in the municipality of Caraá locality in which they live or with a diagnosis of femur fracture who are already deceased.

A survey instrument was constructed, a questionnaire with open and closed questions. The variables related to accidents caused by falls with closed and pre-coded questions were: location, household footwear, use of lights in the house at night and use of carpets. Socio-economic variables were also collected: gender, age (age groups), skin color, schooling, marital status and income. As open questions: their physical limitations after the femur fracture.

To carry out the data collection, the research and its objectives were presented to the Caraá Municipal Health Department, and contact was made with the Health Secretary and those responsible for the ESFs. Once the municipal administration approved the project, it was sent to the Research Ethics Committee (CEP). With the CEP's approval, data collection began on the platform of the Department of Information Technology of the Unified Health System (DATASUS), to identify the elderly who had suffered a femur fracture in the period selected, as well as the collection of medical records in the health units to identify them. Based on the data found on the platform and in the medical records, a database was built with the following variables: names of the elderly, along with age and address, helping to find the elderly to be interviewed, year of occurrence of the femur fracture, number of cases, according to ICD-10. Data on hospitalizations and deaths of patients diagnosed with femur fractures in the municipality of Caraá since its emancipation was taken into account. The data was collected at the same time in order to avoid mismatches in the system's information.

The Community Health Agents (CHAs) were essential in the search for the elderly, helping to identify the patients registered with the ESF and belonging to the microarea covered by each CHA. In addition, these professionals contributed greatly to publicizing the research prior to data collection, delivering a notice during the home visit about the interviewer's visit and the research to be carried out so that the elderly would be aware of and expect the interview.

Data collection was carried out by the academic and the doctor responsible for the research, who made themselves available to interview the elderly. First of all, the data collection instrument was read together with the instruction manual to clarify any doubts.

The interviewers wore normal clothes without further identification, as they were known to the majority of the survey sample. In addition, the interviewers took with them materials such as the printed data collection instrument, which was a quantitative survey with a structured questionnaire, a clipboard, a blank sheet of paper, a pencil, an eraser, a pen, a wristwatch, an ICF and documents informing them that the municipality's Health Department had authorized the research and that it had been approved by the CEP. The interview was not recorded and data collection took place in September 2023.

The interviews were carried out in the homes of the elderly, in a place of their choice or wherever they were at the time of the interviewer's visit and agreed to take part in the research, such as local cultural centers, always in the morning. The research was carried out anonymously and the participant's privacy was guaranteed during data collection.

In situations where the elderly person was unable to answer the questionnaire due to neurological or cognitive sequelae, they were interviewed by their main caregiver and the answers provided by the key informant were recorded in the questionnaire. The questionnaires were previously coded by the interviewers in order to maintain confidentiality and then double-entered into the database. The interviews lasted an average of 30 minutes each.

The research provided benefits to the elderly participants through contribution to knowledge about the profile of elderly people with femur fractures in this population, through the results obtained in the interviews. For the municipality, the research provided information on how the elderly in the community are doing, as well as providing results for new health promotion and prevention strategies, providing a better quality of life. In addition, this research resulted in knowledge of the prevalence and factors associated with femur fractures in the elderly, benefiting the organization of health services and nursing care and contributing to access to health care in a small municipality. The results obtained in this research have contributed to improving health care for the whole community, especially the elderly aged 60 and over, encouraging health actions that promote well-being and healthy ageing.

The research posed minimal risks to the elderly participants, since there were no physical risks to the study subjects. However, during data collection, there could be risks of embarrassment, of not understanding the question correctly and of how the researcher was conducting the interview. There could be a risk of fear and insecurity about the questions and the disclosure of their personal information. There could also be a risk of insecurity due to the interviewers being strangers and a risk of discomfort during the research due to their health problems.

Faced with the risk of embarrassment or not understanding, the interview was paused to guide the elderly person through the question, explaining the relevance of each question when the elderly person did not understand. It was explained to the elderly person that their participation would be voluntary and that they could refuse to answer the questions if they wished, as well as not taking part in the research at any point during the interview.

Prior to data collection, the interviewers introduced themselves and explained the importance and objectives of the research before the interview, when they signed the informed consent form. They also explained the elderly person was told that their name would not be disclosed at any time and was assured that another person could be with them at the time of the interview if they wished. When there was discomfort during the interview, the elderly person could receive support from the interviewer and be advised of the possibility of suspending the research, rescheduling it for another date and time according to their availability.

The data collected was entered into Excel to analyze the participants' responses. Afterwards, a descriptive statistical analysis of the questionnaire was carried out with the distribution of mean proportions and standard deviation, using the R 4.0.2 statistical program and identifying quantitative trends, providing an overview of the perceptions and knowledge of the elderly about the medical diagnosis of femur fracture.

The research was carried out in accordance with the Ethical Principles of National Health Council resolution 466/2012 and Ministry of Health resolution 580/2028 on research with human beings. The research was approved by the Research Ethics Committee of the Centro Universitário Cenecista de Osório (UNICNEC) under the Ethics and Research Committee (CEP) opinion number 6.271.664 and CAAE 70753223.0.0000.5591.

All the participants signed the Free and Informed Consent Form in two copies, with one copy remaining with them and the other with the interviewers. The elderly were free to withdraw from the study at any time.

The results of the research will be presented to the Municipal Health Secretary and disseminated in the various media so that the local population, including the elderly participants, is aware of them, after the research has been approved by the examining board. In addition, the publication of the data will contribute to the creation of public policies aimed at comprehensive care for the health of the elderly.

## RESULTS

Nine elderly women with a medical diagnosis of femur fracture living in the municipality of Caraá were interviewed. The data on sociodemographic and economic issues are shown in Table 1.

Variable	Ν	%
Sex		
Male	0	0,00
Female	9	100,00
Age group		
60-74 years	2	22,22
75-84 years	5	55,56
85 years or older	2	22,22
Skin color		
White	9	100,00
Attended school		
Yes	7	77,78
No	2	22,22
Marital status		
With a partner	6	66,67
Without a partner	3	33,33

**Table 1.** Sociodemographic and economicissues of elderly people with femur fracturesliving in the municipality of Caraá.

Source: Pellisoli, 2023

Among the 09 patients who took part of the sample,100.00% of them are female, aged between 70 and 97 (average age 81.11), white (100.00%). With regard to schooling, 77.78% had attended school for at least 3 years. As for marital status, 66.67% of these patients live with a partner. All this data can be seen in Table 1.

Variable	Ν	%
Length of stay		
0-10 days	2	22,22
11-16 days	3	33,33
17 days or more	4	44,44
Has Diabetes Mellitus II		
Yes	5	55,56
No	4	44,44
Has high blood pressure		
Yes	5	55,56
No	4	44,44
Has Rheumatism		
Yes	6	66,67
No	3	33,33
Has Osteoporosis		
Yes	5	55,56
No	4	44,44
Has heart problems		
Yes	4	44,44
No	5	55,56
Ever had a stroke or cerebral ischemia		
Yes	2	22,22
No	7	77,78
Variable	Ν	%
Respiratory problems		
Yes	4	44,44
No	5	55,56
Has back problems		
Yes	5	55,56
No	4	44,44
No. of hospitalizations in the last 12 months		
None	4	44,44
1-2 times	4	44,44
More than 2 times	1	11,11
General state of health		
Excellent/Very good/Good	0	0,00
Fair	7	77,78
Bad	2	22,22
Uses more than 5 medications/day		
Yes	7	77,78
No	2	22,22
Has urinary incontinence		
Yes	5	55,56
No	4	44,44

**Table 2.** Health problems of elderly people with femur fractures living in the municipality of Caraá.

Source: Pellisoli, 2023

In order to restore the damage caused, 44.44% of the patients were hospitalized for 17 days or more. With regard to comorbidities, 66.67% had rheumatism, 55.56% diabetes mellitus (DM), 55.56% systemic arterial hypertension (SAH), 55.56% back problems, 55.56% osteoporosis, 44.44% heart problems, 44.44% respiratory problems and 22.22% had already had a stroke or cerebral ischemia. With regard to the number of hospital admissions in the last 12 months, 44.44% of the patients did not require hospitalization. Of these patients, 77.78% rated their health as reasonable.

When asked about the variety of medications, 77.78% used more than 5 different medications a day. With regard to physiological elimination, 55.56% had urinary incontinence. This data can be seen in Table 2.

Variable	Ν	%
Smoking		
No	9	100,00
Alcoholic		
No	9	100,00
Religion		
Catholic	8	88,89
Spiritist	1	11,11

 Table 3. Behavioral habits of elderly people with femur fractures living in the municipality of Caraá.

 Correst Data

Source: Pellisoli, 2023

Regarding the behavioral habits of these patients, 100.00% of the sample were neither drinkers nor smokers. Most of them, 88.89%, are of the Roman Catholic religious denomination. Data as shown in Table 3.

Variable	Ν	%
Needed procedure surgical		
Yes	9	100,00
Has grab rails in the bathroom		
Yes	6	66,67
No	3	33,33
There are stairs in the house		
Yes	4	44,44
No	5	55,56
Keep a light on in your house at night		
Yes	6	66,67
No	3	33,33
It has a light switch near the bed		
Yes	4	44,44
No	5	55,56
Type of shoes you wear		
Slipper	5	55,56
Slippers	2	22,22
Closed shoes	2	22,22
He was afraid of falling again		
Yes	8	88,89
No	1	11,11
Where he was when the crash occurred		
At home	8	88,89
Geriatric Clinic	1	11,11
Use floor mats at home		
Yes	3	33,33
No	6	66,67
Used a health service in the last 3 months		
Yes	7	77,78
No	2	22,22
Type of health service used last time		
SUS	6	66,67
Private	1	11,11
Not applicable	2	22,22

**Table 4.** Issues related to the fracture and the useof health services by elderly people with femoralfractures living in the municipality of Caraá.

Source:Pellisoli, 2023

Table 4 shows that 100.00% of the patients assessed required surgery to correct the fracture. Thus, 66.67% of the patients have grab rails in the bathroom at home. However, 44.44% of the patients have stairs in their homes. On the other hand, 66.67% of the patients leave a light on in the house at night and 55.56% do not have a light switch next to their bed.

When asked about the type of footwear they wore, 55.56% said they wore slippers. However, 88.89% of the patients reported that they were afraid of falling again. When it came to where they were at the time of the fall, 88.89% were in their own home. In the last 3 months, 77.78% of them had used health services, 66.67% of which were provided by the Unified Health System (SUS).

# DISCUSSION

This study showed a predominance of women affected by femur fractures, in agreement with other studies, one of which with data on cases of femur fractures in the elderly in the municipality of Cascavel, Paraná, between 2012 and 2022, which also showed similar results, identifying that 65.6% of the 1,783 participants were women<sup>6</sup>. Another study suggests that this is because women start the process of losing bone mass earlier than men<sup>2</sup>. It could also be explained by the fact that women are the most physiologically vulnerable gender, due to a direct relationship between functional status and greater morbidity<sup>2</sup>.

In this study, there was a predominance of white women affected by femur fractures. This predominance can be explained by the fact that the majority of the population in the municipality of Caraá is descended from and colonized mainly by German and Italian immigrants, who have light skin. In a study carried out in Paraná<sup>6</sup>, there was also this predominance. On the other hand, in a study carried out in a hospital in Pará<sup>7</sup>, 92.7% of the patients belonged to the brown group. This can be explained by the different regions of the country in which the studies were carried out.

With regard to age, it was analyzed that there was a predominance of cases between 75 and 84 years old, with an average of 81.1 years. In line with these results, a study carried out at the University Hospital of the Federal University of Maranhão found patients aged between 60 and 98, giving an average age of 77.63 years<sup>7</sup>. It can be seen that the older people are, the higher the number of cases of femur fracture, demonstrating an increase in people's life expectancy.

With regard to schooling, the majority (77.78%) attended school. In a study carried out at the University Hospital of the Federal University of Maranhão<sup>7</sup>, only 35.2% of the sample attended school, and they only attended elementary school. Both illiteracy and low schooling interfere with social vulnerability as they are related to access to jobs, income, use of health services and receptiveness to educational and health programs.

As for marital status, 66.67% said they lived with a partner. In contrast, a survey carried out at a teaching hospital in the northern region of Paraná showed that 57.7% did not have a partner<sup>8</sup>. These family changes often contribute to a lack of care for the most debilitated.

With regard to length of stay, 44.4% of the sample reported having been hospitalized for 17 days or more (average of 43 days). When compared to a study carried out in a hospital in the north of Minas Gerais<sup>9</sup>, the average length of stay was 12.2 days. It can be seen that there is no standard length of stay for such cases. What varies greatly, and that's why such differentiation is the individual assessment of each patient, observing the pathologies, complications and reactions of each body post-fracture and post-intervention when necessary.

In relation to the types of associated comorbidities found in the study, compared to other studies, it was noted that it is common for elderly people to have been diagnosed with pathologies prior to the fracture, which in some cases can lead to a longer recovery period for patients. Most of them are affected by Systemic Arterial Hypertension (SAH)<sup>7,10-11</sup>.

They were also asked about their diagnosis of Diabetes Mellitus (DM), and more than half of the sample had the condition. In contrast, a study carried out in Maranhão<sup>10</sup> found that only 30.8% of the sample had a diagnosis and used medication for treatment. As for the diagnosis of Systemic Arterial Hypertension (SAH), 55.56% of the patients had it. In a study carried out with 135 elderly people living in the municipality of São Sebastião do Paraíso-MG, between 2005 and 2012, 63.00% of whom had medical confirmation of SAH. Such health problems directly influence the recovery and healing of these patients' surgery<sup>11</sup>.

However, a study carried out in a hospital in Maranhão<sup>10</sup> found that in addition to these pathologies, rheumatism, back problems and osteoporosis<sup>12</sup> are also indicators present in the majority of Brazilian studies carried out with the elderly, in line with the data indicated in this study. What can be found in other literature<sup>10</sup> is that osteoporosis is one of the main factors causing femur fractures in the population. In a study carried out in a public hospital in the state of Goiás with 183 patients diagnosed with proximal femur fractures who underwent surgical treatment, 90% of the causes of injuries were associated with this<sup>13</sup>.

With regard to heart disease, it was found that less than half of the sample suffered from some related pathology, which compared to a study carried out at the Hospital Regional do Baixo Amazonas, shows similar results in which only 13.4% of the elderly suffered from heart disease<sup>14</sup>. No association was found between the variables stroke or ischemia, due to the lack of data in studies on the subject.

As for respiratory problems, more than half of the elderly women did not have any pathology. When compared to a study carried out at the Orthopaedic Unit of a philanthropic hospital in the city of Aracaju/SE, only 9.6% of the patients had any respiratory complications. These results can be explained by lifestyle factors related to the past, as well as the climate in which they live and their exposure to it<sup>15</sup>.

With regard to the number of medications used per day for different pathologies, this study showed that most patients take more than 5 medications. In a study carried out at the Hospital Regional do Baixo Amazonas/PA<sup>14</sup>, the majority used only 02 different medications a day. It can therefore be understood that the population in the south of Brazil has more previous comorbidities than in this study, which is also a cause for concern, and it is necessary to carry out further research on the subject in order to be able to draw up a profile of these elderly people.

It is worth noting that urinary incontinence was present in more than half of the sample in this study, which also affected almost half of the elderly interviewed in an analysis of a large hospital in the south of Rio Grande do Sul<sup>16</sup>. A possible link between the factors of urinary incontinence and functional capacity is the evidence that the elderly have a loss of mobility limitation, which can lead to a fall, due to the correlated age factor<sup>16</sup>.

The study found that none of the patients were drinkers and/or smokers, which is similar to a study carried out in a hospital in Diamantina/MG<sup>17</sup>, where 69.2% did not use these substances. However, the consumption of these products are important risk factors in the development of osteoporosis, and need to be combated in order to prevent not only this pathology, but also femoral fractures. This will lead to an improvement in the living conditions of the elderly, with fewer people bedridden and debilitated due to fractures and a reduction in public spending.

In this study, the majority of the sample followed the Catholic religion, in agreement with a study carried out in Pará<sup>7</sup>, in which 75% of the sample also said they were Catholic. These results are justified given that more than half of the Brazilian population follows this religious denomination. We also found that all the patients required surgery to reconstruct the femur. The surgical procedure is necessary and most of the time indispensable for maintaining the quality of life of elderly people affected by fractures. However, this becomes challenging for health services, since the occurrence of adverse events such as pressure injuries and infections during hospitalization are common in this age group and can negatively influence the patient's prognosis8. In agreement with this, a study in a state public hospital in Pernambuco found that 96.4% of patients required surgery<sup>18</sup>.

Some small details end up bringing important results when a fall occurs. It was analyzed that 55.56% of the elderly women do not have a light switch next to their bed, which implies that they are in danger at night. Loose rugs on the floor are also a major cause of accidents and it was found that a minority of patients have rugs on the floor at home, meaning that they are gradually becoming aware of the risks<sup>18</sup>.

This study showed that more than half of the sample had grab rails in the bathroom, which gives these patients greater safety. These results corroborate a study carried out in Foz do Iguaçu/PR<sup>19</sup> which showed similar results. More studies on the subject are needed to update data and to work on these guidelines with the elderly, ensuring greater safety.

For greater safety, it is essential that the homes of these elderly women do not have stairs, as this can increase the rate of falls. In this study, the majority of homes did not have stairs. This is something very positive, as it promotes safety and eliminates the risk of accidents. In a study carried out in Pernambuco<sup>18</sup>, 11.6% of these fractures were due to falls on stairs. However, there is still a need for guidance for these families, as well as the installation of handrails on those that cannot be removed.

No association was found between the variables hospitalizations in the last 12 months, use of health services in the last 3 months and the type of service used. No studies were found to discuss the type of footwear these elderly people wear at home and the correlation with lights on at home during the night to prevent falls due to the dark.

With regard to the fear of falling again, the majority reported that they were very afraid. In agreement with this study, in a medium-sized municipality in the interior of São Paulo<sup>20</sup>, a large proportion of of the elderly who no longer left the house for fear of falling and having to go through it all again in hospital. This leads us to pay special attention to these cases, referring these patients, if necessary, to professionals trained in psychological counseling, giving them a better quality of life.

As for the causes of femur fractures in the elderly, as well as the location of the fall, these occurred from a height and the majority were at home during the daytime. In agreement with this research, a study carried out in a hospital in the state of Goiás<sup>14</sup>, found similar data. This is justified by the fact that these elderly people still have carpets on the floor, wear unsuitable footwear and have walking difficulties.

When asked about their general state of health, most of the patients gave a reasonable answer. This may be justified by some of the patients' reports that they felt a lot of pain in the hip region, weakness in the fractured limb, difficulties in walking and posture or even no movement in the limb. In a study carried out in a hospital in Pernambuco<sup>18</sup>, all the patients were able to walk, but had multiple limitations, such as the presence of pain (86.3%), edema (69.4%) and functional impotence (65.0%). Lower functionality is also associated with a higher incidence of delirium<sup>3</sup>.

# CONCLUSION

This study found that the profile of patients with a medical diagnosis of femur fracture living in the municipality of Caraá/RS is that of white women, with multiple previous pathologies, with psychological sequelae from the fear of falling again, who are aware of the use of grab bars in the bathroom and who keep a light on at night, as a result of accidents due to falling, which demonstrated the fragility of this population in the face of this event. Most of the elderly people fell at home, an environment which should be a safe and reliable place for the elderly, but which often becomes a risky place.

Femur fractures cause pain and suffering, as well as death for many patients. There is also a lack of prevention of fractures and falls in elderly patients on the part of the SUS and other health systems. As a result, access to health services for fractures is increasing every day, because prevention is not effective. Nurses and their teams provide care and guidance, especially in hospital units due to trauma. Paying attention to the risk factors associated with falls has become a necessary and important practice in professional care for the elderly and their families. Furthermore, there is a need to create public policies aimed at specific care for these elderly people, in order to improve their quality of life.

However, nurses and doctors are of great importance to patients, both in preventing falls and in post-femur fractures, where they are able to manage the case, discuss measures to be adopted together with the multidisciplinary team, list the patient's priorities, carry out their duties and delegate those necessary to nursing technicians.

Furthermore, there is still a lack of material on this subject in the municipality, which makes it difficult to know the real health situation of this group. In this way, the research obtained data that will serve to encourage other studies related to femur fractures in the elderly, seeking to improve guidance and provide an environment that is pleasant and welcoming for everyone, bringing with it the knowledge needed to prevent new injuries and mortality.

# REFERENCES

• Comissão Nacional de Incorporação de tecnologias no Sistema Único de Saúde. CONITEC. Ministério da Saúde aprova as Diretrizes para o tratamento de fratura do colo de fêmur em idosos. [homepage na internet]. 2018. Disponível em http://antigo-conitec.saude.gov.br/. [Acesso em 15/11/2023].

• Macedo G G, Teixeira T R G, Ganem G, Daltro G C, Faleiro T B, Rosário D A V, et. al. Fratura do fêmur em idosos: um problema de saúde pública no Brasil. Rev, Eletrônica Acervo Científico. REAC/EJSC, [on line]. 2019. Vol. 6, e1112. Disponível em https://acervomais.com.br/index.php/cientifico/article/view/1112. [Acesso em 21/10/2023].

• Mielke J, Vicente C R. Perfil epidemiológico e mortes por fratura de fêmur em idosos residentes no estado do Espírito Santo de 2010 a 2017. Rev. Bras. Pesq. Saúde Vitória [on line]. out-dez, 2020. Disponível em https://periodicos.ufes.br/rbps/article/ view/21767 [Acesso em 22/10/2023].

• Duailibe Y S, Sousa F C C. Internações por fratura de fêmur em idosos no Brasil: antes e durante a pandemia de COVID-19. Anais do II Congresso Nacional de Trauma e Medicina de Emergência. Manaus(AM). [on line]. 2023. Disponível em https:// even3.blob.core.windows.net/processos/44160d9aedcd4c3584a0.pdf. [Acesso em 16/11/2023].

• Oliveira D S, Fernandes F M, Silveira M G M, Ventura M M. Fatores relacionados ao delirium e à mortalidade em idosos vítimas de fratura de fêmur em uma enfermaria de ortopedia. Rev. Geriatr Gerontol Aging 13(2):75-9. [on line]. 2019. http://www.ggaging.com/details/530/pt-BR/factors-related-to- delirium- and-mortality-in-older-adults-with-femur-fracture-on-an-orthopedic-unit. [Acesso em 15/11/2023].

• Bortolini R, Cshmitt E V. Fraturas de fêmur em idosos: Comparação clínico epidemiológica em cascavel, Paraná, de 2012 a 2022. Revista Ibero-Americana de Humanidades, Ciências e Educação. São Paulo, v.9.n.08. [on line]. Ago. 2023. Disponível em https://periodicorease.pro.br/rease/article/view/10992/4743 [Acesso em 10/11/2023].

•• Cunha A P, Couto E M S, Fernandes F P, Lima Y M S, Pachedo D C L, Araújo C S S, et. al. Fatores associados à incidência de fraturas de fêmur nos idosos. Rev. Research, Society and Development, v. 11, n. 13, e64111334297. [on line]. 2022. Disponível em http://dx.doi.org/10.33448/rsd-v11i13.34297. [Acesso em 16/11/2023].

• Alcantara C, Dellaroza M S G, Ribeiro R P, Carvalho C J A. Fratura de fêmur nos idosos: tempo de espera cirúrgica e desfecho da hospitalização. Rev. Cienc Cuid Saude 20:e54726 [on line]. 2021. Disponível em http://www.periodicos.uem.br/ojs/index. php/CiencCuidSaude. [Acesso em 17/11/2023].

• Moreira R S, Souza J G, Siqueira A R, Xavier M D, Oliveira S P, Bauman C D. Mortalidade em idosos com fratura de fêmur proximal em um Hospital Universitário. REAS/EJCH Vol.13(1) e6382. [on line]. 2021. Disponível em https://acervomais.com. br/index.php/saude/article/view/6382. [Acesso em 14/11/2023].

• Santos N M C, Silva J C A, Lui L C P, Andrade O A, Beserra N J C, Cavalcante T B. Avaliação funcional de idosos com fratura do colo do fêmur submetidos à artroplastia de quadril. Rev. Pesq Saúde, 19(3): 103-107 [on line] Set-dez, 2018. Disponível

• Silva J C A, Ribeiro M D A, Silva L N, Pinheiro H A, Bezerra L M A, Oliveira S B. Fraturas de fêmur em idosos nas diferentes regiões do Brasil de 2015 a 2020: análise dos custos, tempo de internação e total de óbitos. Rev. Pesqui. Fisioter., Salvador 11(4):798-806. [on line]. Novembro 2021. Disponível em https://www5.bahiana.edu.br/index.php/fisioterapia/article/ view/4168. [Acesso em 15/11/2023].

• Soares G F C, Andrade E G S. A osteoporose: um dos principais fatores responsável de fraturas em idosos e sua relevância. Rev Inic Cient Ext. [on line]. 2019. Disponível em https://revist

• Soares D S, Mello L M, Silva A S, Nunes A A. Análise dos fatores associados a quedas com fratura de fêmur em idosos: um estudo caso- controle. Rev. Bras. Geriatr. Gerontol., Rio de Janeiro18(2):239-248. [on line]. 2015. Disponível em https://www. . [Acesso em 17/11/2023].

• Rezende L C B, Arcanjo R C, Leão G T, Vasconcelos P M F, Oliveira A C M, Teixeira L S et. al. Perfil epidemiológico de idoso com fratura de fêmur proximal submetidos a tratamento cirúrgico. Brazilian Journal of Health Review, Curitiba, v.4, n.6, p. 28421-28429. [on line]. Nov./de

• Santos L E S, Santos V V, Naziazeno S D S. Fatores causais associados à Fratura de fêmur em idosos. Rev. Ciências Biológicas e de Saúde Unit. Aracaju, v. 6 n. 3 p. 121-134. [on line]. Março 2021. Disponível em https://periodicos.set.edu.br/cadernobiologicas/ article/view/9865. [Acesso em 15/11/2023].

• Casagranda, L P, Santos F, Lange C, Llano P M P, Milbrath V M, Pinto A H. Condições de saúde dos idosos internados com fratura de fêmur. Rev. O Mundo da Saúde, São Paulo; 40(3):319-326. [on line]. 2016. Disponível em https://revistamundodasaude. emnuvens.com.br/mundodasaude/article/view /261 . [Acesso em 16/11/2023].

• Ribeiro R F, Veloso C H, Batista R A O, Oliveira T, Santos S A, Bastone A C. Fratura por fragilidade: fatores de risco em uma coorte retrospectiva. Rev. Acta Fisiatr. 2;29(3):177-183. [on line]. 2022. Disponível em https://www.revistas.usp.br/actafisiatrica/article/view/197435. [Acesso em 10/11/2023].

• Silva E R R, Marinho D F. Perfil epidemiológico de idosos com fratura proximal de fêmur atendidos no Hospital Regional do Baixo Amazonas, Santarém, PA, Brasil. Revista Kairós-Gerontologia, 21(3), 215-234. São Paulo (SP), Brasil: FACHS/NEPE/ PEPGG/PUC-SP. [on line]. 2018. Disponível em https://revistas.pucsp.br/index.php/kairos/article/view/42739. [Acesso em 16/11/2023].

• Pereira S G, Santos C B, Doring M, Portella M R. . Prevalence of household falls in long-lived adults and association with extrinsic factors. Rev. Latino-Am. Enfermagem 25. [on line]. 2017. Disponível em https://www.scielo.br/j/rlae/a/VsqLg8MqWVvqvTQ5Rh9qLbd/abstract/? lang=pt# . [Acesso em 14/11/2023].

• Modesto R F, Nascimento E N, Gimeniz-Paschoal S R. Ocorrência de fratura de fêmur e rastreamento de sinais de depressão em idosos. Revista Psicologia: Teoria e Prática, 20(2), 325-338. São Paulo, SP. [on line]. Maio-ago 2018. Disponível em http:// pepsic.bvsalud.org/pdf/ptp/v20n2/pt\_v20n2a13.pdf. [Acesso em 18/11/2023].