

# Psychosocial resources of the elderly to rehabilitate gait and dignity of self-care after femur fracture

**RESUMO** | Objetivos: compreender a experiência do idoso no restabelecimento da marcha após cirurgia de fratura de fêmur por queda e elaborar modelo teórico que a represente. Método: pesquisa qualitativa na abordagem da Teoria Fundamentada nos Dados, com saturação teórica, mediante a análise da transcrição da nona entrevista não diretiva audiogravada, com idosos que vivenciaram a experiência. CAAE 021.0.063.000-10. Resultados: emergiram três subprocessos: sentindo-se desafiado a recuperar a dignidade de desenvolver o autocuidado em situação de risco; perseverando em recursos psicossociais para reabilitar marcha ameaçada; resgatando a autoconfiança para deambular. Do realinhamento desses subprocessos, abstraiu-se a categoria central (processo), recursos psicossociais do idoso para reabilitar marcha e dignidade do autocuidado após fratura de fêmur. Conclusão: o modelo teórico emerso sinaliza a dignidade humana do autocuidado como preceito moral do idoso e ordenador no resgate da autoconfiança, perante as ameaças à reabilitação da marcha, apoiado em seus recursos psicossociais (família, religiosidade e reminiscência).

**Descritores:** Idoso; Fraturas do Fêmur; Reabilitação; Adaptação Psicológica; Medo.

**ABSTRACT** | Objectives: to understand the experience of the elderly in reestablishing gait after surgery for a femur fracture due to a fall and to develop a theoretical model that represents it. Method: qualitative research in the Grounded Theory approach, with theoretical saturation, through the analysis of the transcription of the ninth audio-recorded non-directive interview, with elderly people who lived through the experience. CAAE 021.0.063.000-10. Results: three sub-processes emerged: feeling challenged to recover the dignity of developing self-care in a situation of risk; persevering in psychosocial resources to rehabilitate threatened gait; rescuing self-confidence to wander. From the realignment of these sub-processes, the central category (process), psychosocial resources of the elderly to rehabilitate gait and dignity of self-care after femur fracture was abstracted. Conclusion: the theoretical model emerged signals the human dignity of self-care as a moral precept of the elderly and ordering the recovery of self-confidence, in the face of threats to gait rehabilitation, supported by their psychosocial resources (family, religiosity and reminiscence).

**Keywords:** Elderly; Femur Fractures; Rehabilitation; Psychological Adaptation; Fear.

**RESUMEN** | Objetivos: comprender la vivencia de los ancianos en el restablecimiento de la marcha después de cirugía de fractura de fêmur por caída y elaborar un modelo teórico que la represente. Método: investigación cualitativa en el abordaje de la Teoría Fundamentada, con saturación teórica, a través del análisis de la transcripción de la novena entrevista audio-grabada no directiva con ancianos que vivieron la experiencia. CAAE 021.0.063.000-10. Resultados: emergieron tres subprocessos: sentirse desafiado a recuperar la dignidad para desarrollar el autocuidado en una situación de riesgo; perseverar en los recursos psicossociales para reabilitar la marcha amenazada; recuperar la confianza en sí mismo para deambular. A partir de la realineación de estos subprocessos, se abstrajo la categoría central (proceso), recursos psicossociales de los ancianos para reabilitar la marcha y la dignidad del autocuidado después de la fractura de fêmur. Conclusión: o modelo teórico emerso sinaliza a dignidade humana do autocuidado como preceito moral do idoso e ordenador no resgate da autoconfiança, perante as ameaças à reabilitação da marcha, apoiado em seus recursos psicossociais (família, religiosidade e reminiscência).

**Palabras claves:** Envejecimiento; Fracturas de Fêmur; Reabilitación; Adaptación Psicológica; Miedo.

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## INTRODUCTION

Falls are among the leading causes of injury, death and disability in the elderly<sup>(1-2)</sup> and, therefore, two thirds of them suffer for fear of suffering a new incident, even to carry out activities of daily living.<sup>(3-4,7)</sup> A fact that affects the quality of life, not only by reducing their functional abilities, but also by increasing the risk of falls<sup>(6)</sup>.

Fractures represent 5 to 10% of orthopedic events and 1 to 2% of these occur in the femur, with 90% resulting from falls, requiring hospital admissions for surgery.<sup>(8)</sup>

The type of procedure and surgical extension, age, clinical condition of the patient and comorbidities will delimit the treatment and rehabilitation process of

the patient at home. However, it is clear that most elderly people who undergo surgery on the femur have a delay in re-establishing their gait<sup>(9)</sup>, a fact that may be related to the intensity of the pain, the difficulty in mobility and the exacerbated fear of walking again, and, mainly, of falling again.

The literature associates this fear with "psychomotor maladjustment", relating it to postural instability with retropulsion and a phobic fear of falling again<sup>(4)</sup>, to the point of making it necessary to develop technologies to support the rehabilitation work of these elderly people, considered the most severe form of post-fall syndrome.<sup>(10,11)</sup>

Despite the challenges posed by this syndrome, involving: limited mobility, difficulty in performing daily activities<sup>(7)</sup>, loss of confidence and self-esteem, in addition to the feeling of seclusion and confinement, and suffering from pain, the elderly manage to overcome them, through the development of strategies that lead them to functional independence, such as maintenance of mental health and participation in daily activities.<sup>(12)</sup>

Based on the above, the following question arises: how has the gait rehabilitation process of elderly people in the postoperative period following a femur fracture surgery after a fall been configured?

## OBJECTIVES

To understand the experience of the elderly in reestablishing gait, after surgery for a femur fracture due to a fall, and to elaborate a theoretical model that represents it.

## METHOD

### Ethical aspects

Research conducted after approval of the project by the Research Ethics Committee (CAAE 021.0.063.000-10) and obtaining free and informed consent for the participation of the actors. After transcribing the interviews, the digital files were

deleted, starting to identify the actors by numeric coding (1, 2, 3, ...).

### Type of study and theoretical-methodological framework

Qualitative research in the comprehensive approach, respecting the Consolidated Criteria for Reporting Qualitative Research (COREQ)<sup>(13)</sup>, using the references: Grounded Theory on Data - GT<sup>(14)</sup> (methodological) and Symbolic Interactionism<sup>(15)</sup> (theoretical).

### Research scenario and actors

Study with elderly people ( $\geq 60$  years old) who underwent surgery for a femur fracture, between January 1st and December 31st, 2019, in two large tertiary hospitals in a city in the state of Paraná, affiliated with the Unified Health System. Access to patients was through lists provided by the Medical and Statistical Archive Services (SAME) of the institutions, with: names, addresses and telephone numbers of the elderly. Those with addresses assigned to the five urban regions covered by the Family Health Strategy (ESF) and who were experiencing a fracture situation for the first time were selected.

The first contact was made by telephone, introducing themselves and explaining the purpose of the research, to invite them to participate in the study. As, most of the time, the person who attended was a relative, if he accepted the invitation, the researcher confirmed with him if the elderly person had the cognitive and communication capacity to be interviewed.

### Data source

Data collection took place through a non-directive interview, with the guiding question: "How was your experience with the fracture of the femur?" Individual and audio-recorded interviews were carried out, conducted from July 2020 to January 2021, by one of the researchers trained in the data collection technique, in the homes of the elderly, at an agreed time, respecting the confidentiality of their information.

### Data analysis

At the end of the interviews, they were transcribed and submitted to manual analysis by one of the researchers and

validated by the second, with training and experience in operationalizing the steps of the GT methodological framework: micro-analysis, open coding, axial coding and selective coding.<sup>(14)</sup>

As recommended by the methodological framework, the stages of data collection and analysis took place concomitantly, until theoretical saturation was obtained from the analysis of the ninth interview. For this, one of the strategies proposed by the methodological framework for validating the experience discovered with the raw data was used<sup>(14)</sup>.

## RESULTS

### Characterization of the actors

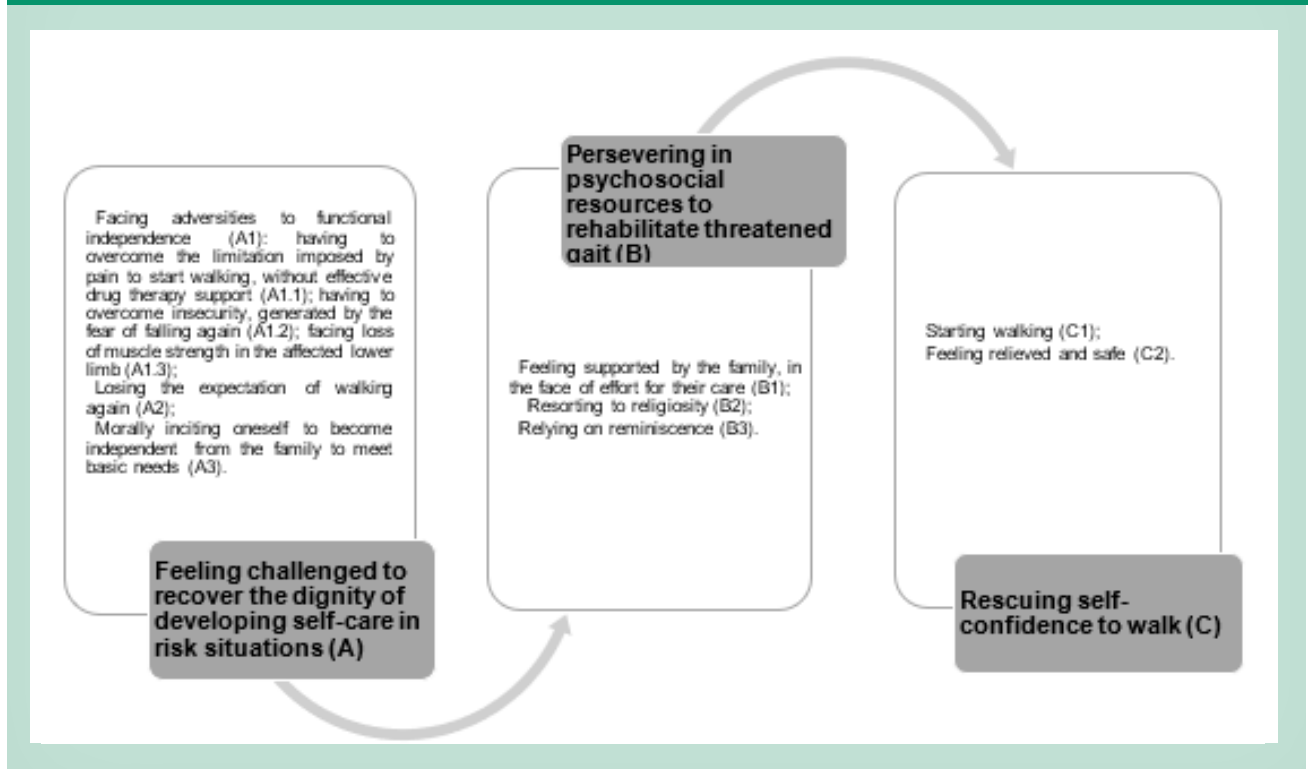
Nine actors participated in the study, six women and three men, between 62 and 81 years old, corresponding to six retirees, a farmer, a truck driver and a housewife, with a family income between two and seven current minimum wages. During rehabilitation, eight of them enjoyed full functional independence and one was partially dependent on a family caregiver.

### Theoretical model abstracted from experience

Data analysis, according to the steps of GT<sup>(14)</sup>, the interaction of the elderly with the reestablishment of ambulation and, consequently, with their functional independence at home, in the postoperative period of surgery for a femur fracture due to a fall, was apprehended. The methodological framework allowed establishing theoretical relationships between the components (categories and subcategories), to develop an explanatory and analytical process of actions and interactions related to the experience, represented by the central category (theoretical model): psychosocial resources of the elderly to rehabilitate gait and self-care dignity after femur fracture (Figure 1).

This experiential process of the elderly unfolds into three sub-processes: feeling challenged to recover the dignity of developing self-care in a situation of risk (A); persevering in psychosocial resources to rehabilitate threatened gait (B); rescuing

**Figure 1. Central Category (Theoretical Model) - Psychosocial resources of the elderly to rehabilitate gait and self-care dignity after femur fracture.**



self-confidence to walk (C).

Feeling challenged to recover the dignity of developing self-care in a situation of risk (A) is the first sub-process of the experience of the elderly person rehabilitating himself at home after surgery for a femur fracture due to a fall. It is configured in the impetus for courageous action in mobilizing psychosocial resources to face unfavorable conditions for the rehabilitation of their gait and, consequently, functional independence to reassure their autonomy as human dignity. This subprocess unfolds into three categories: facing adversities to functional independence (A1), losing the expectation of walking again (A2) and morally inciting to become independent from the family to meet basic needs (A3).

Facing adversities to functional independence (A1) groups conditions perceived by the elderly, such as threats to the reestablishment of their walking at home, grouped into three subcategories: A1.1, A1.2 and A1.3.

The first challenge refers to coping with postoperative pain at home, as a painful sensory experience, because after hospital discharge, many times, the elderly end up having to overcome the limitation imposed by pain to start walking, without effective drug therapy support (A1.1). He describes the pain resulting from ineffective sedation, ranging from intense to unbearable, with physical and emotional suffering, manifested in crying, fear of not recovering and reduced movement. This fact hinders his mobilization in and out of bed, even delaying the start of walking. This suffering, for some, is postponed for months and without any analgic intervention. Elderly people with osteoarticular diseases associate the worsening of pain with these comorbidities, a challenging sensory experience that delays the recovery of gait in the elderly, sometimes feeling insecure about pain to walk, as reported by:

[...] When I was going to walk, I

couldn't even put my foot on the ground [...]. I suffered a lot with the pain [...] <sup>(7)</sup>. [...] I was bedridden for three months, almost immobile. [...] Six months after I started to get up and use a wheelchair, it still hurts <sup>(8)</sup>.

In addition to the pain, the elderly find themselves having to overcome insecurity, generated by the fear of suffering another fall (A1.2). Affective state raised by the awareness of danger, which leaves him in a state of apprehension, given his susceptibility to presenting a new event. They count:

[...] After the surgery I had difficulty walking. I still use the walker, because my legs hurt a lot when I walk [...]. I'm afraid of being without him. [...] I'd like to walk again without support, but I'm afraid of falling <sup>(9)</sup>. [...] After the surgery I started to walk a little, because I was very afraid [...], but at the same time I wanted to walk as I used to walk [...] <sup>(4)</sup>.

In addition to the pain and the fear of falling, most of the time, the elderly also end up facing the loss of muscle strength in the affected lower limb (A1.3), relating it to the time spent in bed, as reported:

[...] I lost the strength in my leg to walk again, even with the help of crutches [...]. I think because I stayed in bed for a long time and that interfered with my recovery [...] <sup>(7)</sup>.

The interaction of the elderly with these adversities makes them feel insecure, losing the expectation of walking (A2), expressed in discouragement in the face of the uncertainty of recovering autonomy in old age. Melancholic context, faced with the threat of enjoying an idealized period with freedom and well-being, as described:

[...] I walked a lot and now I lost the freedom to go back and forth [...] (9). I walked normally [...] before the pain [...] and now I don't even know if I'll walk anymore <sup>(8)</sup>. [...] I thought I would never walk again <sup>(3)</sup>.

However, even in this challenging context, one perceives the elderly with determination and, therefore, morally inciting themselves to become independent from the family in meeting basic needs (A3), for feeling uncomfortable and dejected in the condition of being dependent on the family, for their care, such as: personal hygiene, food, eliminations, among others, as they report.

[...] I was very sad, for becoming dependent on my daughter. I felt pain in my legs that wouldn't let me get up! I cried a lot when I thought I might not walk anymore <sup>(3)</sup>. [...] It was a little difficult to recover at home [...]. My neighbor, a nursing assistant, had to help and teach my daughter [...] how to bandage, bathe and clean me [...] <sup>(9)</sup>.

This context is decisive for the elderly to try to overcome the challenges that prevent them from recovering their gait and, consequently, their dignity in taking care of themselves with functional independence. Moral principle that leads him to the second sub-process of the experience:

persevering with psychosocial resources to rehabilitate the threatened gait (B). Moment when he takes on the responsibility of regaining his governability, influenced by the capacity for psychological and physical self-control supported by the family, religiosity and reminiscence. Strategies resulting from their beliefs and values in overcoming situations that threaten them in reestablishing their ability to walk and, consequently, their autonomy to enjoy a dignified old age.

The first strategy is to feel supported by the family, in view of the effort for their care (B1), for which they were not prepared. In this way, they are considered to be largely responsible for their own restoration at home, in response to their basic human needs, even if performed by a formal caregiver, hired by the family, as reported:



[...] My husband started to do all the housework, with great affection [...] <sup>(4)</sup>. [...] I went to my son's house, there he medicated me and bathed me [...]. Very well taken care of! <sup>(7)</sup>. [...] When my sister could no longer take care of me, we hired a caregiver [...] <sup>(6)</sup>.



The elderly also feeds back their perseverance by resorting to religiosity (B2), supported by their beliefs, rescues in faith in spiritual entities the psycho-spiritual strengthening, to overcome the painful experience that configures the elderly in rehabilitation of surgery for fracture of the femur after a fall. With religiosity, he manages to recover his self-esteem and security, also attributing his recovery to an omniscient and omnipotent supernatural being. They tell:

[...] I have faith in God that I will recover [...] at least walk again without pain! It's my dream (crying) <sup>(6)</sup>. I was walking supported by crutches [...]. Not anymore. I recovered [...]. This surgery I had was a blessing from God <sup>(7)</sup>.

In addition to family and religiosity, the elderly rely on reminiscence (B3), to overcome the challenges experienced, he benefits from pleasant memories, reporting his values as a person, such as: the taste for work, taking care of the grandchildren and contributing financially to the maintenance of the house, according to his memories:

[...] I've always been a worker, on the farm and after I moved to the city. I helped raise the grandchildren. I really liked working [...] <sup>(9)</sup>.

The adoption of these three psychosocial resources by the elderly helps to overcome the adversities related to their rehabilitation and influences a positive outcome, configuring the third sub-process of the experience, rescuing self-confidence to walk (C), signaled when the elderly person sees himself starting to walk (C1), symbolically translated into the concrete possibility that he will regain his gait. The first steps push the elderly to get out of bed with assistance, progressively envisioning the abandonment of human support and equipment that aid in locomotion, such as the use of a wheelchair, after crutches or walkers, until strengthening the muscles, for the stability of their joints, as reported:

[...] I started to see my improvement, when I put my foot down and took the first steps <sup>(3)</sup>. [...] My recovery was im-

proving, because from the wheelchair, I switched to the walker and now I use a cane <sup>(5)</sup>.

Gradually, the elderly feel relieved and safe (C2), showing an emotional reaction of feeling comfortable again, verbalized in the relief of pain at the fracture site, seeing ambulation recovered and, therefore, reaching the goal of recovering the gait and the human dignity of being able to continue enjoying old age with autonomy, as they report:

[...] Now, I went back to doing all the housework, my cooking and even cleaning the house <sup>(1)</sup>. [...] I'm much better, happier at home [...]. I feel recovered, walking and happy <sup>(4)</sup>. [...] I'm relieved, safe to walk and giving my daughter less work [...] <sup>(3)</sup>.

## DISCUSSION

The theoretical model emerged signaled the human dignity of developing self-care as a moral precept of the elderly, ordering the rescue of self-confidence to walk, supported by their psychosocial resources, in the face of threats to gait rehabilitation and, consequently, to their autonomy.

According to Symbolic Interactionism, human action is directed by the self, that is, the judgment that the person makes of himself, which is highly dependent on social definitions. This action is considered as a result of an active decision-making process, involving the definition of the situation, which is central to the way in which the action will occur. <sup>(16)</sup>

In this way, judging oneself with the dignity of developing self-care in a situation of risk, was configured in the experience as an intervening component to instigate the elderly to seek strategies to deal with threatening symbols to the re-establishment of their gait, such as: pain when being moved, fear of falling again and loss of muscle strength in the affected lower limb. He needed to understand that in order to continue envisioning a positive outcome for his experience, he had no

option but to face these threats, in order to regain the self-confidence to walk. A fact that mobilized him to lean on his own psychosocial resources (family, religiosity and reminiscence), in an attempt to reverse the situation conceived by him as undignified, that of depending on family care to meet his basic needs in old age, once designed with autonomy.

Rather, society is people interacting, that is, they become social objects for each other, use symbols, direct the self, engage in mental action, make decisions, change directions, share perspectives, define reality, situation, and assume the role of the other. <sup>(15)</sup>

In this way, in the light of Symbolic Interactionism <sup>(15)</sup>, one can consider the preserved ability to develop self-care, symbolically understood as a social object (self), based on the moral principle of human dignity, that is, of value to the individual, as well as to society, signaled through self-control, mainly over basic human needs.

Human dignity in the context of old age has already been the subject of discussions in the light of Bioethics, which relates this principle to the notion of indignity, as the violation of the very core of a human being. For this reason, he defends the application of the concept of human dignity to revert to the conditions that may exist, before a specific indignity arises. <sup>(16)</sup>

However, physical decline due to social causes can make the elderly suffer indignities, making them increasingly vulnerable during the natural aging process, potentially leading them to conditions of indignity that people usually try to avoid, to experience an "inclusive aging", with preservation of the creativity and vitality of the elderly in an active environment. <sup>(17)</sup>

As already mentioned, the judgment that people make of themselves is highly dependent on social definitions. <sup>(15)</sup> The Kantian approach has exerted great influence on society regarding the conception of human dignity. For Kant, only rational beings have dignity, since their autonomy is the very foundation of dignity. However, much criticized by Ethics

and Philosophy for limiting the number of beings that can be seen as subjects of morality. According to Kant's line of reasoning, non-rational beings, not only animals, but also people with serious disabilities, would be excluded from moral protection. In any case, for Kant, autonomy is the basis of human dignity. <sup>(16)</sup>

The theoretical model set up by this research signaled psychosocial resources (family, religiosity and reminiscence), encouraging the elderly to remain persevering, in the face of threats to regain self-confidence to walk, after surgery for a femur fracture due to a fall. These coping strategies were described, in 2011, by Taylor and Broffman, as psychosocial resources, according to their functions, origins and associations with mental and physical health. These authors considered that, in view of the human being's need to reestablish his self-control, he has the capacity to rescue internally or in social relations, means to deal with difficulties, aiming at psychological well-being and, consequently, enjoying the beneficial effects on your mental and physical health. <sup>(17)</sup>

For these authors, the origins of psychosocial resources are in the environment, in genetic predispositions and in their interactions with the individual, as well as the coping processes associated with neural responses to threats as possible mediators. These, in turn, regulate psychological, autonomic, neuroendocrine and immunological responses, leading the individual to achieve positive health outcomes. <sup>(17)</sup>

The experience signaled the elderly persevering in three psychosocial resources to rehabilitate their threatened march, firstly in the family, specifically in the feeling derived from their interactions with the efforts mobilized by the family members.

Family social support has proven to be one of the main and most effective strategies available to the elderly to deal with the difficulties inherent in the aging process and walking recovery. <sup>(18)</sup>

In the light of Symbolic Interactionism <sup>(15)</sup> family can be inferred as a group of individuals in interaction, who become social objects for each other. To do so, they

use symbols directing the self, engaging in mental action, to make decisions, change directions, share perspectives, define reality, situations and assume the role of the other, that is, with the potential to take care of their members.

Thus, in home health care for the dependent elderly, care planning should consider the binomial, that is, include the family caregiver, also called informal caregiver, so that they are not exposed to illness due to the overload of the assumed role.

For these reasons, it is essential for the binomial family caregiver-dependent person to have access to Public Health Policies, which should offer evaluation programs and interventions continuously implemented by health teams.

In addition to family support, religiosity can be analyzed in the light of Symbolic Interactionism as a social practice. Through faith, people manage to regain self-confidence to overcome difficult situations, supported by the psycho-spiritual interaction with a supernatural, omniscient and omnipotent Being.

The resource of religiosity plays an important role for physical and mental health and demonstrates a positive impact on the way the elderly understand and face the interferences and challenges in this phase of life.<sup>(19,20)</sup> In view of the dimension of such a resource in the elderly's life, involvement in spiritual activities has a preventive role, both in the development and duration of depressive symptoms: the more engaged, the less they develop the general picture of the disease. In addition, religiosity favorably interferes with coping with obstacles and difficulties in life, strengthening resilience and improving the quality of life of the elderly person.<sup>(21,22)</sup>

Not only religiosity, but also reminiscence emerged as an important psychosocial resource, used by the elderly to help them face the challenges experienced during their recovery at home. The positive use of this strategy by the elderly was verified, mainly when interacting with physical and emotional suffering, pain and the state of bed confinement. The use of remi-

niscence commonly leads the recovering patient to feel strengthened in moments of fragility, supported by the movement of his own valuation as a person, with a significant past for himself, his family and society.

Reminiscence is described as a way to rescue the memory and memories of the past and has been used as an effective intervention tool, with bedridden elderly, noticing an improvement in the clinical picture of depression and suffering, causing a significant increase in cognition during recovery.<sup>(23)</sup>



In nursing, the use of reminiscence with the elderly has shown significant and effective results in terms of valuing their lives, promoting them to engage in social and community activities, in addition to helping nurses to improve their work in developing self-esteem in this population.



It is also added that when the nursing professional uses reminiscence in the process of caring for the elderly, depression and anxiety scores are significantly reduced. By promoting self-esteem, cognitive emotion is regulated; therefore, the satisfaction of the elderly with life increases.<sup>(24)</sup>

In this research, however, reminiscence was not analyzed as an applied therapeutic technique, but taken as a process of self-valorization of memories by the elderly person, that is, understood as the mental capacity to abstract situations of overcoming their experiences to raise their self-esteem. For the elderly, those who value themselves are satisfied with the way they are and, consequently, demonstrate confidence that their actions and judgments were sufficient to fulfill their mission, especially as a mother or father.

Thus, reminiscence was self-processed by the elderly as a motivating action to overcome the challenges caused by their state of functional dependence and reclusion in bed. Therefore, it was shown to be a coping strategy for the elderly to strengthen themselves and stay alive in the hope of recovering their ambulation.

Considering the above, it is noteworthy that this experience took place in regions ascribed to the FHS, with difficulties in assisting the elderly at home, recovering from femur surgery. According to the Brazilian Guidelines for the Treatment of Fractures of the Femur Neck in the Elderly, effective monitoring by interdisciplinary teams, based on a rehabilitation program, from planned discharge to home, can compose strategies that contribute to minimize the undesirable effects of post-femur fracture surgery in the elderly, acting in the management and relief of suffering caused by pain, either by administering analgesics or other strategies to restore independence and dignity, lost during the recovery process.<sup>(25)</sup>

A limitation of this study was the non-inclusion of a sample group of elderly people who had not regained their ability to walk, due to the difficulty in locating them, because, according to information

from family members contacted, it was verified that the majority had died due to surgical complications and/or worsening of their quality of life, because they had not regained their ability to walk.

One of the contributions of this research is the theoretical model signaling the need to restructure the care network for the elderly in the Unified Health System, in order to encourage hospitals to prepare the dependent elderly-family caregiver bi-

nomial for scheduled discharge, as well as the primary health care network with an interprofessional team to assist this binomial in the rehabilitation process, in order to prevent indignities with modifiable situations, such as suffering from pain, fear of another fall, as well as any threats to the rescue of the autonomy of the elderly in the postoperative period of surgery for a femur fracture, after a fall.

## CONCLUSION

The theoretical model that emerged explains the psychosocial strategies of the elderly (family, religiosity and reminiscence) for gait rehabilitation after femoral fracture surgery, as a social and interactive value in the process of caring for elderly people in rescuing their self-confidence for walking. 🐦

## References

- Kim, SH. Risk factors for severe injury following indoor and outdoor falls in geriatric patients. *Arch Gerontol Geriatr.* 2016;62:75-82. DOI: 10.1016/j.archger.2015.10.003.
- Almeida LMS, Meucci RD, Dumith SC. Prevalence of falls in elderly people: a population based study. *Rev Assoc Med Bras.* 2019;65(11):1397-1403. DOI: 10.1590/1806-9282.65.11.1307.
- Makino K, Makizako H, Doi T, Tsutsumimoto K, Hotta R, Nakakubo S, et al. Impact of fear of falling and fall history on disability incidence among older adults: prospective cohort study. *Int J Geriatr Psychiatry.* 2018;33(4): 658-662. DOI: 10.1002/gps.4837.
- Scheffer AC, Schuurmans MJ, van Dijk N, van der Hooft T, de Rooij SE. Fear of falling: measurement strategy, prevalence, risk factors and consequences among older persons. *Age Ageing.* 2008;37(1):19-24. DOI: 10.1093/ageing/afm169.
- Moura SRB, Vieira JPPN, Santos AMR, Mesquita GV, Ribeiro JLV. Percepção de idosos sobre o risco de queda. *Rev Interdisciplinar [Internet].* 2017; [cited 2019 Sept 8] 10(4):1-1. Disponível em: [https://revistainterdisciplinar.uninovafapi.edu.br/index.php/revinter/article/view/1291/pdf\\_214](https://revistainterdisciplinar.uninovafapi.edu.br/index.php/revinter/article/view/1291/pdf_214).
- Santos SCA, Figueiredo DMP. Preditores do medo de cair em idosos portugueses na comunidade: um estudo exploratório Ciênc. saúde colet. 2019;24(1):77-86. DOI: 10.1590/1413-81232018241.29932016.
- Santos, NMC, Silva JCA, Lui LCP, Andrade AO de, Beserra NJC, Cavalcante TB. Avaliação funcional de idosos com fratura do colo do fêmur submetidos à artroplastia de quadril. *Rev Pesq Saúde.* 2018;19(3): 103-107. DOI: 10.366/40125/2/PB.
- Garcia PA, Dias JMD, Silva LA, Dias C. Prospective monitoring and self-report of previous falls among older women at high risk of falls and fractures: a study of comparison and agreement. *Braz J Phys Ther. [Internet].* 2015 June [cited 2020 July 06] 19(3): 218-226. DOI: 10.1590/bjpt-rbf.2014.0095.
- Ono NK, Lima GD de A, Honda EK, Polesello GC, Guimaraes RP, Riccioli Júnior W, et al. Artroplastia parcial no tratamento das fraturas do colo do fêmur. *Rev bras ortop [Internet].* 2010;45(4):382-8. Available from: <https://doi.org/10.1590/S0102-36162010000400007>.
- Piau A, Krams T, Voisin T, Lepage B, Nourhashemi F. Use of a robotic walking aid in rehabilitation to reduce fear of falling is feasible and acceptable from the end user's perspective: a randomised comparative study. *Maturitas.* 2019;120:40-46. DOI: 10.1016/j.maturitas.2018.11.008.
- Young WR, Mark Williams A. How fear of falling can increase fall-risk in older adults: applying psychological theory to practical observations. *Gait & Posture.* 2015;41(1):7-12. DOI: 10.1016/j.gaitpost.2014.09.006.
- Griffiths F, et al. Evaluating recovery following hip fracture: a qualitative interview study of what is important to patients. *BMJ Open* 2015;5(1):1-10. DOI: 10.1136/bmjopen-2014-005406.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007;19(6):349-357. DOI: 10.1093/intqhc/mzm042.
- Strauss A, Corbin J. *Basics of qualitative research: techniques and procedures for developing grounded theory.* 4rd edition. Thousand Oaks: Sage; 2015.
- Charon JM. *Symbolic interactionism: an introduction, an interpretation, an integration.* 10th edition. Englewood Cliffs (NJ): Prentice Hall; 2010.
- Gordon JS. Indignity and old age. *Bioethics.* 2018;32(4):223-32. DOI: 10.1111/bioe.12434.
- Taylor SE, Broffman JI. Chapter one - Psychosocial resources: functions, origins, and links to mental and physical health. In: Olson JM, Zanna MPBT-A in ESP, editors. *Academic Press;* 2011. p. 1-57. Available from: <http://www.sciencedirect.com/science/article/pii/B9780123855220000019>.
- Costa FM, Nakata PT, Morais EP. Estratégias desenvolvidas pelos idosos residentes na comunidade para morarem sozinhos. *Texto & Contexto Enferm.* 2015;24(3):818-25. DOI: 10.1590/0104-07072015002730014.
- Dias EM, Pais-Ribeiro JL. Espiritualidade e qualidade de vida de pessoas idosas: um estudo relacional. *Psic saúde & doenças.* 2018;19(3):591-604. DOI: 10.15309/18psd190310
- Lucchetti A, Barcelos-Ferreira R, Blazer DG, Moreira-Almeida A. Spirituality in geriatric psychiatry. *Curr Opin Psychiatry.* 2018;31(4):373-377. DOI: 10.1097/YCO.0000000000000424.
- Reis LAD, Menezes TMDO. Religiosity and spirituality as resilience strategies among long-living older adults in their daily lives. *Rev Bras Enferm.* 2017;70:761-6. DOI: 10.1590/0034-7167-2016-0630.
- Kapri A, Kathpalia J. Impact of spirituality on well-being of old aged people. *Indian journal of health and wellbeing [Internet]* 2019 [cited 2019 Sept 14];10(4-6):129-131. Available from: <http://www.i-scholar.in/index.php/ijhw/article/view/185266>.
- Shropshire M. Reminiscence intervention for community-dwelling older adults without dementia: a literature review. *Br J Community Nurs.* 2020;25(1):40-44. DOI:10.12968/bjcn.2020.25.1.40.
- Zhang HH, Liu PC, Ying J, Shi Y, Wang SQ, Zhang ML, et al. Evaluation of message communication strategy combined with group reminiscence therapy on elders with mild cognitive impairment in long-term care facilities. *Int J Geriatr Psychiatry.* 2018;33(4):13-622. DOI: 10.1002/gps.4822.
- Brasil. Secretaria de Atenção à Saúde Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Portaria Conjunta Nº 21, de 24 de setembro de 2018. Aprova as Diretrizes Brasileiras para o Tratamento de Fratura do Colo do Fêmur em Idosos. *Diário Oficial da Brasília,* 01 out. 2018; Seção1.