



## Demands of hospitalized older adults after correction of proximal femur fracture by fall

*Demandas de idosos hospitalizados pós-correção de fratura de fêmur proximal por queda*

*Demandas de ancianos hospitalizados después de corrección de fractura de fémur proximal causada por caída*

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### ABSTRACT

**Objective:** to identify the demands of hospitalized elderly, and of their companions, after correction of proximal femur fracture by fall, and to propose health education measures. **Method:** this convergent care study was conducted from January to December 2016 with 102 hospitalized older adults and their companions, after correction of proximal femur fracture by fall. Data were produced by conversation interview and participant observation. **Results:** the older adults' demands and those of their companions involved doubts and fears about mobilization, restrictions on movement, obtaining and using walkers, and the need for guidance from professionals about modifications to the home and preventing further falls. **Conclusion:** the problematization and dialogue enabled them to set out their needs and think about possible strategies to meet or alleviate their demands. It is important to involve the older adults and their companions in educational actions for care consistent with the needs and realities they experience.

**Descriptors:** Health education; accidental falls; hip fractures; geriatric nursing.

### RESUMO

**Objetivo:** identificar as demandas dos idosos hospitalizados pós-correção de fratura de fêmur proximal por queda e de seus acompanhantes e propor ações de educação em saúde. **Método:** pesquisa convergente assistencial, realizada de janeiro a dezembro de 2016, com 102 idosos hospitalizados pós-correção de fratura de fêmur proximal por queda e com seus acompanhantes. Produziram-se os dados por meio de entrevista conversação e observação participante. **Resultados:** as demandas encontradas dos idosos e acompanhantes envolveram dúvidas e receio sobre mobilização, restrições de movimentos, uso e obtenção de andador, necessidade de receber orientações dos profissionais sobre modificações na residência e prevenção de novas quedas. **Conclusão:** com a problematização e o diálogo estabelecido, eles puderam expor suas necessidades e refletir sobre possíveis estratégias para solucionar ou minimizar suas demandas. O envolvimento dos idosos e acompanhantes nas ações educativas é importante para um cuidado condizente com as necessidades e a realidade vivenciada.

**Descritores:** Educação em saúde; acidentes por quedas; fraturas do quadril; enfermagem geriátrica.

### RESUMEN

**Objetivo:** identificar las demandas de los ancianos hospitalizados después de corrección de fractura de fémur proximal causada por caída y también las de sus acompañantes y proponer acciones de educación en salud. **Método:** investigación convergente asistencial, realizada de enero a diciembre de 2016, junto a 102 ancianos hospitalizados después de corrección de fractura de fémur proximal causada por caída y a sus acompañantes. Se han producido datos mediante entrevista, charla y observación participante. **Resultados:** las demandas de los ancianos y acompañantes encontradas involucraron dudas y temores sobre movilización, restricciones de movimientos, uso y obtención de andador, necesidad de recibir orientaciones de los profesionales sobre modificaciones en la residencia y prevención de nuevas caídas. **Conclusión:** Con la problematización y el diálogo establecido, ellos pudieron exponer sus necesidades y reflexionar sobre posibles estrategias para resolver o minimizar sus demandas. La participación de los ancianos y acompañantes en las acciones educativas es importante para un cuidado acorde con las necesidades y la realidad vivida.

**Descriptores:** Educación en salud; accidentes por caídas; fracturas de cadera; enfermería geriátrica.

## INTRODUCTION

Falls in the elderly are considered a public health problem. The Unified Health System (SUS) spends more than R\$ 51 million per year on the treatment of fractures resulting from falls. The cost of hospital services for the treatment of elderly people hospitalized for falls is higher when the fractures are femoral, when the age group is 80 years old or more or when the hospitalization time is higher<sup>1</sup>.

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Among external causes of morbidity, mortality and hospitalization are falls<sup>2</sup>, which usually result in proximal femoral fractures (FFP), requiring surgical treatment. Falls are defined as “inadvertently staying on the ground or at a lower level, excluding intentional changes of position to lean on furniture, walls or other objects”<sup>3:9</sup>.

Often, after surgery, the elderly and the family are afraid of a new fall, presenting feelings of fragility and insecurity, which may lead to the loss of autonomy and independence of the elderly<sup>4</sup>. This fact can lead to complications such as functional decline and immobilization, which restricts the movement of the elderly.

The implications of falls in the lives of the elderly and the family are diverse, such as overprotection and constant vigilance in relation to the elderly. In addition, the restriction of social activities and the work of the relatives due to the responsibility for the care has repercussions on the financial condition of the family<sup>5</sup>.

In this sense, nursing plays a fundamental role in assisting the elderly, and it is relevant to know the conditions of the elderly who are under nursing care, because it coexists and builds links with nurses during hospitalization. Thus, it has the commitment to carry out actions of Health Education (ES) that aim at the autonomy and independence of the elderly after FFP correction. ES has a fundamental role in the rehabilitation of the elderly who experienced falls and in the adequacy of their families to the new needs of care.

Based on these considerations, the question is: What are the demands of hospitalized elderly people after FFP correction for falls and their caregivers? To answer that question, the objective was to identify the demands of the hospitalized elderly after FFP correction caused by fall and of their companions and to propose actions of ES.

## METHOD

This is a Convergent Care Research (PCA), which requires convergence, which occurs through the juxtaposition of care actions with the research in the same physical and temporal space<sup>6</sup>. It should be noted that ES actions developed after the identification of the demands of the elderly and companions, involving researcher and informants, are represented by Notes of Assistance (NA) in the text. In addition, the ES process was based on Freire's theoretical references of dialogic education and awareness<sup>7</sup>.

The research was developed in a surgical unit of a hospital in Southern Brazil. The elderly who underwent correction of FFP caused by fall and hospitalized at the unit and their companions participating in the study were selected by intentional sampling. The study included 102 elderly patients who underwent FFP correction surgery, 75.5% were women and 24.5% were men.

In the meeting with the elderly and their companions, the interview conversation and participant observation were held. The conversation interview was characterized by informal conversations during care practice and resulted in information about the assistance process and research data<sup>5</sup>. On the other hand, participant observation complemented the interview conversation, as it enabled the observation of the elderly person in the bed, facial expressions, and the organization and instrumentalization of the companion to assist and/or perform care during hospitalization. The interview and the observation had a script with topics that were explored with the participants, and information that was not included in the script was also recorded.

In addition to the initial meeting, subsequent visits, depending on the presence of the elderly in the hospital context and the demands presented, were proposed, which were also conducted by interview conversation and participant observation, involving informal conversations about hospitalization, clinical evolution of the elderly and possible doubts. In these moments, according to the identified needs, the ES strategy was used as the dialogue and the scenarios about the care that involved the movement of the elderly. There was an average of 1.63 meeting for each elderly, with average duration of 30 minutes each.

The research was approved by the Ethics Committee in January 2016, by opinion 1.394.524. All participants signed the Informed Consent Form. The identity of the research participants was preserved by coding of the data collected. “I” was attributed to the elderly, followed by the sequential number according to the participation in data collection. The Notes of Assistance are represented as “NA”; the Interview Conversation Notes, by “NEC”; as well as the Participating Observation Notes, by “NOP”, as follows: “I05 – NEC” or “I05 – NOP”.

## RESULTS AND DISCUSSION

Among the list of care demands of the elderly and their caregivers in the postoperative period of FFP correction caused by fall, during hospitalization, there are the doubts and the fear about mobilization, the restrictions of movements, the use and the obtaining of walker, the need to receive professional guidance on changes in residence

and the prevention of further falls. It is evidenced that just one elderly person and his companion presented several demands cited, reflected in the broad intervention of the researcher in each situation denoted.

The need for guidelines for care for the elderly, exposed by fear of mobilization, was identified. This demand increased with the approach of hospital discharge.

*Companion tells that the elderly had an episode of dyspnea (asthmatic) at night and from then refused to be mobilized in bed. Companion is also afraid of the move and says that has already requested a hospital bed at the health plan, as believes that the elderly woman will not be able to get shower until next month. (117 – NEC)*

Elderly and companions had concerns about the perception that changes would be necessary because of the decline in clinical condition and dependence during hospitalization. Therefore, the impossibility of the elderly to remain alone after discharge from hospital (NA) was discussed.

Doubts were correlated with FFP, involving the mobilization of the elderly, the surgery, restrictions after hospital discharge, adaptations at home, the acquisition of device for gait and their proper use.

*Companion mentions doubts about how to move the elderly, take him to the bathroom and to the bath. He says that the professionals of the unit had not provided such guidelines, only the information that in six weeks the old woman could not put her foot on the floor and should use the walker. Both companion and elderly do not know how to get the walker. Still, the companion is worried about the elderly, who is afraid of falling and mentions that it will be difficult to deal with this situation. According to the elderly and the companion, the nursing gave only information like the relief of the pressure points of the body, except the coccyx. (184 – NEC)*

The gaps in the knowledge of the professionals of the unit reflected in the guidelines shared with the elderly or in the absence of them. In the case of nursing, the lack of emphasis on the importance of relieving pressure in the coccyx region is associated with doubts about the mobilization of patients who underwent hip surgery. In the meantime, it is pointed out that the elderly is at greater risk for developing pressure injuries, either by the presence of cardiocirculatory diseases, by the decreased elasticity in orthopedic surgeries or by aging, which modifies the skin and subcutaneous tissues<sup>9</sup>.

In this context, the practice of ES presents itself as a way of delaying complications. Although ES is an essential practice for nurses, its implementation has gaps. It is inferred that the surgical unit nurse needs to be instrumented to know how to deal with elderly post-correction of FFP and, thus, to enhance their role as educator.

From the identification of the demands of the elderly and companions, in order to intervene in the reality found, demonstrations and mobilizations of the elderly were carried out in the bed with the help of the companion, besides repositioning of the decubitus and relief of pressure points. Among the activities of ES performed, the care for the prevention of dislocation of the prosthesis was staged by the researcher, such as the positioning of the leg in abduction, use of device to aid the gait, ways of sitting giving preference to chairs and higher armchairs, placing pillows between knees so as not to cross legs and ways to put socks and shoes avoiding bending (NA). Other care has also been taken, such as adapting the bed and the toilet, elevating them if necessary, not sleeping on the operated side, avoiding turning the leg of the operated joint out or in and raising the hip with the opposite leg of surgery to the put on the mat<sup>10</sup>.

From the staging – which also involved the use of a walker – by the researcher, the elderly and companions visualized the information and questioned it, thus learning of new practices.

*Elderly with hospital discharge. She is happy with the mobilization carried out by the researcher, because she says that she has not yet moved. She sits on the bed with her feet out for about 30 minutes, then is put back in her dorsal position. Companion questions how she will transport the elderly to her home. Elderly thanks for the care received, mentions that she will take care of herself: 'not too stuck, not too fucked up'. He asks about bathing at home and picks up information about the beginning of walk with walker. (124 – NEC)*

Rehabilitation initiated early postoperatively, associated with continued programs after hospital discharge, increases the functional capacity of the elderly who surgically corrected FFP<sup>11</sup>. Moreover, the process of rehabilitation depends on the continuity, coordination and interrelation between the health team and the elderly and is finished when the individual becomes autonomous and independent, according to their limitations.

The walker is a gait aid device, considered an important technology in recovering the elderly that corrected FFP; and the early start of walking is important for the rehabilitation in the postoperative period. This comes to the



understanding that technology and humanism are not excluded, but one complements the other and contributes to the improvement of a reality; thus, technology and science cannot be discarded for liberating education<sup>12</sup>.

Each new situation presents elements that need to be decoded by the learner with the help of the mediator. The more information that corresponds to the reality of the learner, the more dynamic the debate becomes<sup>12</sup>.

*Elderly states that she feels safe to perform the care at home. It is noticed that she is oriented, repeating movements that she learned with the researcher in previous moments. Although she has arthrosis on her hands and arms, she makes efforts. Their limitations make it difficult to perform care, such as feeding and securing the walker. Elderly trains the use of the walker. She also says she is excited about being discharged from hospital, because she will find her granddaughters, and wants to perform the care that has been explained. (I09 – NEC)*

After the movement, the elderly felt happy to associate the technology with the information received, since the walker is a device that they need to know how to use to feel confident in the movements. In ambulation, the body weight was divided between the walker and the operated joint, characterizing the gait with partial load<sup>12</sup>. It is suggested that ES is an important instrument for rehabilitation (NA).

A study shows that, in the case of the elderly, poor knowledge can cause avoidable complications and deterioration of health status. Therefore, it is stated that the patient and caregiver must receive the necessary information not only at discharge, but also during hospitalization. The information to the surgical patient is fundamental in the treatment and responsibility of all health professionals involved in the care<sup>13</sup>.

The demand for guidelines on changes in residence arises from the experience of the hospitalization process by the companions, causing them to question how to avoid further falls at home. Based on this identification, general adaptations were approached in the residence, involving other aspects besides the factor causing that hospitalization (NA).

*The elderly grandson questions about the need for physical modification in the residence. He says he is willing to learn about adaptations and necessary care after discharge. He mentions that he has already made some adaptations in the residence, like installing bars of support in the bathroom where the elderly person fell, as directed in the previous visit of the researcher. He states that he will strive to maintain the family's income and that the money of the elderly will only be taken care of himself. (I13 – NEC)*

Changes in residence to prevent further falls aim to keep the elderly active and safe, since the vicious cycle of falls involves immobility after falling, which results in reduced functional capacity and the potential for further falls. The study states that the regular practice of physical exercises promotes improvement of aspects of balance, flexibility and functionality, as well as increase muscular endurance and thus reduce the risk of falls and, therefore, rescind the cycle dependent on falls<sup>14</sup>.

The need for care is inherent to the human condition, and the care taken by nursing during hospitalization will also have a preventive character when returning to the home. The creation of the new reality cannot exhaust the process of awareness, that is, there is a need for other changes.<sup>6</sup> It is understood that, firstly, the elderly and companions would modify the causative factor of the fall and, after learning and reflecting on other risks, would continue to modify their reality. The changes involve, in addition to physical modifications, the stimulation, perseverance and patience of the elderly and their families, so that they may act as agents of their transformation.

ES needs to make sense for the population to which it is directed, thus enabling interaction with the elderly and companions, in order to obtain better solutions. When asked about avoiding sitting in low places to prevent excessive hip flexion, the elderly and their companions questioned how they could adapt the bed. Within the possibilities of the elderly, they discussed ways to adapt this reality according to the rehabilitation needs of the surgery, such as adjusting the height of the bed with wood or bricks. Also, it was explained about the importance of leaving the ground free of obstacles, taking care of removing carpets from the house or fixing them to the ground (NA).

Modifications were suggested in the bathroom, such as the installation of plastic grab bars in the stall and near the toilet. For the patients with trochanteric fracture correction, we talked about placing a firm chair inside the box. In addition, the use of rubber mats and the height adjustment of the vessel with a lift were discussed to avoid flexing more than 90° the hip, preventing a dislocation of the prosthesis (NA).

It was advised to the elderly and their companions that, in the presence of stairs, it is important to maintain good lighting, and they should have handrails. Also, they discussed with them possibilities of fixing electronic wires in the house and removing furniture or objects from the circulation area, to facilitate passage with a walker and reduce risks (NA).

From the dialogue with the elderly and companions, it was possible to problematize their needs and construct educational actions in keeping with these realities. This form of data construction demonstrates that teaching requires respect for freedom and a conviction that change is possible by listening to learners<sup>15</sup>. The participation of the elderly in the dialogue allows for greater interaction and discussion, enabling the change in the vision about health from the interventions performed. These actions reach the practice through the nurse's role, which visualizes effective strategies for the promotion of the health of the elderly<sup>16</sup>.

The dialogical relationship established with the elderly and accompanying persons allowed us to identify that the needs pointed out were instrumental demands, permeated by the concern with the costs incurred in taking the elderly to the home due to the indispensability of the walker. This concern is related to the socioeconomic conditions of the patients currently treated in the SUS. One of the problems was that some elderly people already used a chair as a walker due to lack of resources, which influences the quality of care and the occurrence of new falls. The lack of information about obtaining the walker in a less expensive way for the family led the researcher to empower them on the search of social worker or the Department of Health of their municipality in order to obtain a device to aid the march (NA).

*Elderly and companion are concerned about buying walker or cane due to socioeconomic problems. It is observed that the companion has difficulty in understanding the guidelines (I02 – NOP)*

*Patient in the bed, presents himself communicative, shakes hands with the researcher and says he wants to go home. The elderly present lags of loss of concentration and memory. You can switch to decubitus by yourself. Daughter says she will go to the radio to ask for help to buy walker and wheelchair because she has no financial resources. It also mentions that you want to talk to the social worker about purchasing these devices. (I21 – NOP)*

In the face of the unfavorable economic situation, the ES generates accountability and, consequently, the participants find alternatives to acquire fundamental devices for recovery, which would not be ideal since the system should provide conditions for rehabilitation. Some companions, who were relatives of the elderly, found, in campaigns in the media (municipality radio) or in raffles, ways to raise money to buy a walker and make adjustments at home.

It is understood that ES would be strengthened if there were support programs for its implementation, since it is essential at all levels of health care. Also, it is inferred that teaching the elderly and companions, knowing their interests, shows the flexibility of the educator to plan from the needs of the subjects. Thus, from the conversations established with the participants, the dialogues began to have meaning and promoted the change through the construction of plausible adaptations for the elderly.

## CONCLUSION

The convergent care study found that the elderly and their caregivers had doubts and fears about mobilization, movement restrictions, use and obtaining a walker, and revealed the need to receive more professional guidance on changes in residence and prevention of further falls. With the problematization and the dialogue established by the research nurse with the elderly and their companions, they were able to problematize about their needs and to reflect on possible strategies to solve or to minimize the demands that were within their reach.

In order to meet the demands of the elderly who performed correction of FFP by fall, the movements were staged by the researcher, assistance in the mobilization of the elderly in the bed with the participation of the companion and the training of the use of the walker. These actions have facilitated the understanding of the elderly and caregivers, since mobilization is complex and requires them to feel safe to do so.

From this, it was evidenced that ES must be guided by the problematization in search of thinking and experiencing strategies to intervene. Also, the use of PCA in this research made it possible to flexibilize the way of producing the data and, thus, facilitated the resolution of health problems through the introduction of innovations in practice.

The results presented highlight the reality of the study population. Thus, it is pertinent to invest in the deepening of this issue with the health professionals who tune the care to the elderly population post-correction of FFP, in order to instrumentalize them and sensitize them as to the specificity of the theme and the population. During the ES process, there are times when listening to the educator is necessary. Thus, even when sharing guidelines, the differential lies in the way in which a dialogic relationship is established, bringing subjects that make sense for the elderly and caregivers during the hospitalization, problematizing and reflecting on joint solutions that are accessible to the context in which they are inserted.

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