

## **ADAPTATION OF LONG-LIVED ELDERLY AT HOME AFTER HOSPITALIZATION IN THE INTENSIVE CARE UNIT AND HOSPITAL DISCHARGE**

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### **ABSTRACT**

**Objective:** to identify stimuli that interfere with the adaptation of long-lived elders at home after hospitalization in the intensive care unit and hospital discharge.

**Method:** a descriptive study with a qualitative approach, conducted with elderly individuals who were hospitalized in the intensive care unit and were already at home after hospital discharge. Data collection took place through open interviews and was performed at the intensive care unit of the hospital and at the home of the elderly. Home visits took place between December 2017 and February 2018, and were conducted in seven cities. Bardin's content analysis was used, and the discussion was based on Callista Roy's Adaptation Theory. Ethical and legal cares were strictly respected.

**Results:** eleven long-lived elders, aged between 80 and 94 years old, took part in the study. Two categories emerged from the participants' testimonies: Stimuli that contribute to adaptive behavioral responses in the long-lived elders and Stimuli that negatively affect the adaptation of the long-lived elders.

**Conclusion:** the main stimuli that contributed to the adaptive behavior of the long-lived elders were the return to their homes, family support and the social support network. In contrast, the stimuli that negatively affected adaptation were fear, lack of information and difficulties in continuing the care. The critical role of the health professionals in the intensive care unit and the hospital unit in preparing longevity the long-lived elders their families for hospital discharge and home return is highlighted.

**DESCRIPTORS:** Elderly aged 80 years old or more. Intensive care units. Patient discharge. Adaptation. Results of critical cares.

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# ADAPTAÇÃO DE LONGEVOS NO DOMICÍLIO APÓS INTERNAÇÃO NA UNIDADE DE TERAPIA INTENSIVA E ALTA HOSPITALAR

## RESUMO

**Objetivo:** identificar estímulos que interferem na adaptação de longevos no domicílio, após internação na unidade de terapia intensiva e alta hospitalar.

**Método:** estudo descritivo, com abordagem qualitativa, realizado com longevos que estiveram internados na unidade de terapia intensiva e já se encontravam em domicílio, após alta hospitalar. A coleta de dados ocorreu através de entrevista aberta e foi realizada na unidade de terapia intensiva do hospital e no domicílio dos longevos. As visitas domiciliares aconteceram entre dezembro de 2017 e fevereiro de 2018, e foram realizadas em sete cidades. Utilizou-se a análise de conteúdo de Bardin, e a discussão pautou-se na Teoria de Adaptação de Callista Roy. Os cuidados éticos e legais foram rigidamente respeitados.

**Resultados:** participaram do estudo 11 longevos, com idade entre 80 e 94 anos. A partir dos depoimentos dos participantes emergiram duas categorias: Estímulos que contribuem para respostas comportamentais adaptáveis em longevos e Estímulos que afetam negativamente a adaptação dos longevos.

**Conclusão:** os principais estímulos que contribuíram para um comportamento adaptativo dos longevos foi o retorno para o seu domicílio, o apoio familiar e a rede de apoio social. Em contrapartida, os estímulos que afetaram negativamente a adaptação foi o medo, a falta de informação e dificuldades na continuidade do cuidado. Ressalta-se o papel fundamental dos profissionais de saúde da unidade de terapia intensiva e da unidade hospitalar no preparo do longevo e sua família para a alta hospitalar e retorno domiciliar.

**DESCRITORES:** Idoso de 80 anos ou mais. Unidades de terapia intensiva. Alta do paciente. Adaptação. Resultados de cuidados críticos.

# ADAPTACIÓN DE LOS ANCIANOS A SUS DOMICILIOS DESPUÉS DE LA INTERNACIÓN EN UNA UNIDAD DE CUIDADOS INTENSIVOS Y DEL ALTA HOSPITALARIA

## RESUMEN

**Objetivo:** identificar los estímulos que interfieren en la adaptación de los ancianos a sus domicilios, después de la internación en una unidad de cuidados intensivos y del alta hospitalaria.

**Método:** estudio descriptivo de abordaje cuantitativo realizado con ancianos que estuvieron internados en una unidad de cuidados intensivos y ya se encontraban de regreso en sus domicilios después del alta hospitalaria. Los datos se recolectaron por medio de entrevistas abiertas que se realizaron en una unidad de cuidados intensivos de un hospital y en los domicilios de los ancianos. Las visitas domiciliarias tuvieron lugar entre diciembre de 2017 y enero de 2018 en siete ciudades. Se utilizó el análisis de contenido de Bardin, y la discusión se pautó sobre la base de la Teoría de Adaptación de Callista Roy. Se respetaron estrictamente los reparos éticos y legales.

**Resultados:** del estudio participaron 11 ancianos, de 80 a 94 años de edad. A partir de las declaraciones de los participantes surgieron dos categorías: Estímulos que ayudan a lograr respuestas comportamentales adaptables en los ancianos y Estímulos que afectan negativamente la adaptación de los ancianos.

**Conclusión:** los principales estímulos que favorecen un comportamiento de adaptación en los ancianos fueron el regreso a sus domicilios, el apoyo familiar y la red de apoyo social. Como contrapartida, los estímulos que ejercieron un efecto negativo sobre la adaptación fueron el miedo, la falta de información y las dificultades para proseguir con los cuidados. Se resalta el papel fundamental de los profesionales de la salud que trabajan en unidades de cuidados intensivos y en unidades hospitalarias en la preparación de los ancianos y de sus familias para el alta hospitalaria y el regreso a sus domicilios.

**DESCRIPTORES:** Anciano de al menos 80 años de edad. Unidades de cuidados intensivos. Alta del paciente. Adaptación. Resultados de cuidados críticos.

## INTRODUCTION

Population aging is a phenomenon that has been occurring worldwide, due to the decrease in the fertility rate and to the increase in life expectancy. In Brazil, between 2005 and 2015, there was a percentage increase in the elderly population, from 9.8% to 14.3%, respectively.<sup>1</sup> As a result of the demographic transition, there is also an increase in the proportion of the long-lived elders, those aged 80 years old and over, and the need for hospitalization, a trend also found in Intensive Care Units (ICU).<sup>2</sup>

In the hospitalized elderly, although the biological domain is commonly the most affected, it is also observed that psychological and social changes can make this population more susceptible to disease and disability.<sup>3</sup> In addition, with regard to the ICU, it is possible to observe that even in the elderly who have a good functional status upon admission to the unit, there is a significant degradation of their status at the time of hospital discharge.<sup>4</sup>

Older people experience an aging process that imposes them to a degree of fragility and requires qualified attention when returning home after hospital discharge since at home, elderly and family will share new demands for care, which require adaptation and institutional support capable of preventing complications and readmissions.<sup>5</sup> According to Roy's Adaptation Model, the change in the environment encourages the person to develop adaptive responses and to create new responses to this condition, which may be positive or ineffective.<sup>6</sup>

Regarding the adaptation process, Callista Roy's Adaptation Theory understands the person as an adaptive and holistic system and argues that internal and external stimuli affect people and influence the triggered responses.<sup>7</sup> Among the main contributions of Nursing Theories in the twentieth century one may find the focus given to the person as a holistic being, as a way to achieve health, and "adaptation" is understood as an important concept in nursing.<sup>8</sup>

A "stimulus" is defined as what causes a response, and encompasses everything that affects and influences one's development and behavior. They are evaluated from observed behavior and it is possible to define whether their effect on the person is positive or negative.<sup>6</sup> Therefore, this study questions what the stimuli are that interfere with the adaptation of the long-lived elders at home after hospitalization in the ICU. It is objected in such a way to identify stimuli that interfere with the adaptation of long-lived elders at home after hospitalization in the intensive care unit and hospital discharge.

Roy's Adaptation Theory will provide the insights to understand the adaptive process of these people returning to their homes, considering the stimuli present in their environment that will generate behaviors in the four adaptive modes: physiological, self-concept, interdependence and role performance. The research assumes that these elderly are affected in their biopsychosocial integrity during ICU hospitalization, and that such condition requires an adaptive response to new health conditions.

It is believed that the knowledge produced in this area may provide major vigilance and direct care to this population, once it is understood how hospital discharge and home return are experienced by the long-lived elders, and by identifying their facilities, difficulties and the effectiveness/need for specific home care.

## METHOD

This is a descriptive, exploratory study with a qualitative approach, developed in a medium-sized municipality, located in the southwest of the state of Bahia, 700 km from the capital Salvador/BA.

The survey was conducted in two locations: in the ICU of a hospital and in the residence of the long-lived elders who had been hospitalized in that unit. This hospital is public and has a 10-bed

intensive care ICU for adults and elderly, with clinical and surgical demands, and serves patients from several neighboring micro regions, being a referral service for about 30 municipalities.

The participants in the research were the ICU identified seniors who met the following inclusion criteria: having been admitted to the hospital ICU for a minimum of 24 hours, even if the patient was discharged from another unit such as the Medical Clinic or the Surgical Clinic, or even through another hospital, in case of transfer; having been discharged from hospital for a minimum of one week and a maximum of 12 months since according to studies, the mortality rate in this age group after 12 months of ICU admission is high;<sup>9</sup> being able to establish the verbal communication process during the interview.

Exclusion criteria were the following: those who, at the time of the interview, were not in adequate health, with drowsiness, hypoactivity, indisposition or pain after two attempts, and those not found by phone contact or at home after two appointments and visit.

Initially, in the ICU record book the researcher identified the long-lived elders who were hospitalized and left the unit within a year, considering the first day of visit in the unit as the final collect period. Thus, the period covered by the collection was from October 16, 2016 to October 16, 2017, totaling inpatients within one year. From then on, those who were hospitalized for a minimum of 24 hours in the ICU were selected.

During data collect in the ICU, 26 long-lived elders were identified who were hospitalized in the said period. Of these, six died during hospitalization and 20 were discharged from the unit. In telephone contact with the long-lived elders who were discharged, it was informed that five had died after returning home and that two had incoherent speech. It was not possible to locate two other long-lived elders. Thus, 11 seniors who met the inclusion criteria took part in the research. There were no exclusions.

In the unit's logbook information was found regarding the identification of the long-lived elders, their age, diagnosis, day of admission and discharge from the ICU. Information regarding the address and telephone contact of those selected was collected in the unit's agenda, as it was not possible to have access to medical records in the hospital's Medical and Statistical File Service (*Serviço de Arquivo Médico e Estatística*, SAME).

After identifying the long-lived elders eligible to participate in the study, a first telephone contact was made. On this occasion, the purpose of the study was explained and the subject was asked about their interest in participating. Then, as there were no refusals, the day of the visit was scheduled for the interview. Details regarding the explanation of the research and scheduling the visit were discussed with the family member of the long-lived elders, since that the contact available in the ICU was related to their guardian.

Home visits took place between December 7, 2017 and February 28, 2018, and were carried out in seven cities, since most of the long-lived elders were residing in other municipalities.

The instrument used for data collect was the open interview, with eight previously elaborated guiding questions recorded through a recorder and questions related to socio demographic aspects. In all participants, the Katz and Lawton Indexes were applied to assess their ability to perform basic activities of daily living (BADL) and instrumental activities of daily living (IADL), respectively. A roadmap was also used for observing the structure of the household, organized by the Ministry of Health.<sup>10</sup>

Information analysis was performed according to the thematic content analysis technique, proposed by Laurence Bardin; this is a scientific method that uses systematic procedures and objective description of the message content, organized in three phases: 1) pre-analysis; 2) exploration of the material and 3) treatment of the results and interpretation.<sup>11</sup>

The initial pre-analysis stage is the phase where data is organized and forms the *corpus* of the research.<sup>12</sup> Thus, for this stage, a floating reading was initially performed in order to identify and select the relevant ideas obtained in the data collect, focusing on the study's object.

In the exploration phase, which consists of deepening the study on the settled *corpus*, the statements were read exhaustively in order to categorize the results according to the identified themes, aiming at a better understanding of the analyzed questions.

Finally, in the treatment stage, attention was paid to the interpretation, following mutual exclusion, homogeneity, relevance, objectivity, fidelity and productivity, to produce results that could bring new knowledge. The data obtained were discussed based on the theoretical framework of the Callista Roy's Adaptation Model, also using evidence from the literature on the subject. Thus, the stimuli presented by the investigated individuals were identified.

In order to preserve the identity of the participants, it was decided to identify them in the statements through the letter "L" as in long-lived elder, followed by an "M" or an "F" to designate whether female or male, and a numeric number showing the order in which the interviews were conducted, for example LM1, LM2, LF3 ... LM11.

The research was based on the ethical precepts governing the Resolution 466 of the National Health Council (*Conselho Nacional de Saúde*, CNS). After authorization by the CEP, data collection began, where all participants signed the Free Informed Consent Form, which guarantees full rights to the interviewee, supported by rules that ensure their personal integrity and commitment to the person responsible for the research.

## RESULTS

Eleven long-lived elders took part in the research, six being female and five male; age ranged from 80 to 94 years old and all lived in small municipalities, where most of them preserved traces of rural lifestyle. The length of stay in the ICU ranged from three to 39 days, and in relation to medical diagnosis, gastrointestinal disorders prevailed. Table 1 below displays the information collected in the ICU about the long-lived elders:

**Table 1** – Information on the long-lived elders regarding age, number of days spent in the intensive care unit and diagnosis at the time of hospitalization. Bahia, Brazil, 2018.

	<b>Age during hospitalization</b>	<b>ICU* stay days</b>	<b>Diagnosis in the intensive care unit</b>
LM1	92	39	Severe Brady arrhythmia secondary to P2 + Acute Myocardial Infarction + dilated cardiomyopathy
LM2	88	17	Immediate Postoperative Exploratory Laparotomy (Right hemi colectomy) + obstructive acute abdomen + sepsis
LF3	82	09	Abscess drainage
LM4	81	09	Aortic dissection
LF5	85	06	Coleperitoneum + Systemic Arterial Hypertension + Diabetes Mellitus
LF6	81	03	Pulmonary trombo-embolism Heart Disease + Systemic Arterial Hypertension

Table 1 – Cont.

	Age during hospitalization	ICU* stay days	Diagnosis in the intensive care unit
LF7	81	16	Congestive Heart Failure + Pneumonia
LF8	94	05	Immediate Postoperative Exploratory Laparotomy (gastric tumor) + constipation + Systemic Arterial Hypertension + Diabetes Mellitus
LF9	84	06	Systemic Arterial Hypertension + cerebral hematoma + thrombocytopenia to clarify
LM10	85	03	Postoperative Immediate femoral fracture correction + trauma with humeral fracture + femur
LM11	80	07	Acute Abdomen

\*Intensive care unit.

Regarding demographic social aspects, most were married (n=05), attended only incomplete elementary school (n=08) and declared themselves white (n=05). All reported receiving an income of up to two minimum wages and being retired. Of the 11 long-lived elders, nine claimed to need a caregiver, whose role was mostly played by some female relative.

Regarding the performance of the BADL, of the 11 long-lived elders, only two were classified as “independent for all activities”; the others had dependencies in one, two, four, five or all six of the listed functions. In the evaluation of the IADL, five elders were classified as severe dependents and two as totally dependent on the nine functions analyzed; only one displayed mild dependence and none was evaluated as independent.

Regarding the structural aspects of the visited households, it was found that all houses had a chair, but without arms, beds and very low toilets. The following was identified in nine households: slippery floors, uneven height or width stair steps, and unmarked steps.

The reading, analysis and interpretation of the speeches, based on Callista Roy’s Adaptation Theory, allowed to delineate two thematic categories: Stimuli that contribute to adaptive behavioral responses in the long-lived elders and Stimuli that negatively affect the adaptation of the long-lived elders.

### Stimuli that contribute to adaptive behavioral responses in the long-lived elders

In the speeches of the long-lived elders, it was evident that the possibility of returning to their home after hospital discharge is a positive stimulus. They report feelings of well-being and tranquility that they can return to their homes, even if continuity of care is required, and attribute this factor as responsible for their adaptation, as described below:

*my home, is the best thing. Because [...] I am at ease (LF8). I adapted very well, because I am inside my house, I am very pleased to be inside my house. [...] I prefer to stay here [...] than at her home (daughter-in-law) (LM2). In my house it is different, other than in the hospital. In the hospital it is at the end point, it is not good (LM10).*

Family support was also another stimulus highlighted as triggering adaptive responses in the long-lived elders. Some deponents emphasized their gratitude for being able to count on the care of family members, and attribute their improvement and even life to it, as noted in the following statements:

*When a daughter leaves, the other comes. If it weren't for my daughters I would have died. They even help me to put on my cloths [...] It was God in heaven and them on Earth (LF5). My girls take good care of me (LF7). After I left there [hospital] I am getting better. I found a person who is [...] taking good care of me. [...] I found a support that was very good for me, while I'm alive I have her support [family caregiver]. I'm getting better, I'm not as I got out of there [ICU] anymore, thanks God (LM2). But thanks God, today, in view of what I have had, I can say that I'm fine. It's because my people welcomed me so much, thanks God, they did everything for me [thrilled] (LF9).*

Observing the value of family support in the adaptive process of the long-lived elders, through the testimonies, also highlights the importance of the social support network. The influence of these stimuli on generating adaptive behavioral responses can be observed in the following statements:

*It's people visiting me, it's visits day and night (LF5). My neighbor takes me [to mass] and brings me back very carefully. [...] It's far away from here, my son takes me by car and puts me there, there to go back, I'll walk back with the group. My friend takes me by the arm and brings me here at the door. For me, there it is a wonder, I talk, I tell a case and it is very good (LF6). They still made a birthday party for me, [...] they surprised me. I got to cry, when I saw (LF9). [...] the neighbor here always comes to talk, there are the others I'm seeing all the time [...], for me it is a pleasure. There is a neighbor that [...] helps me for many years (LM2).*

### **Stimuli that negatively affect the long-lived elders' adaptation**

Some deponents reported being afraid to experience again the situation that culminated in their hospitalization. This was an internal stimulus responsible for triggering negative responses, either because of feelings related to fear of the lived condition, or due to the deprivations generated in the development of the daily activities:

*Now, I'm so afraid of going back to what I went through. I pray every day. At night, I go to bed and ask for: oh Jesus, don't let me go through that suffocation I went through. [...] Ave Maria, it was suffering (LF6). [...] it is that I cannot make an effort, because it still impossible. If much, it has been 90 days since I have been operated on. [...] I can't strive in heavy duty job, because I'm afraid (LM2).*

*I was acting slowly, but I was walking around here. Not too far, because once I went far away and felt bad [...] I'm afraid to go far away because of this (LM10).*

In some situations, for the sake of protection, the family may limit the long-lived elders in developing actions and tasks that could propitiate them with pleasure and a sense of usefulness. The following statements demonstrate how the family member can use fear as a negative influencer:

*but they [daughters] don't let me walk not even a little, afraid of me falling. [...] What caused everything in me was the fall [...] I'm afraid of falling (LF3). I came out alone wobbling, but they [children] don't want to, afraid that I will fall or hit myself on the walls (LM4).*

In addition to the fear shown by the long-lived elders or their relatives, the lack of information or recommendation from the health team at the time of ICU discharge was identified as a stimulus that hindered the effective adaptation of the long-lived elders to home return. It was possible to notice that some elderly individuals had doubts related to the care, as verified below:

*no, they did not talk. When I was discharged I went away (LM1). I left the ICU, moved to another room. It was already indicated that I was going to be discharged, but no one told me anything, no matter at all, I assure you (LM2). I don't know if it's because the girl here is a nurse, but they had to teach, didn't they? [...] Now I have a walker, I was already walking on it, but after that [performing a surgical procedure], I did not walk anymore. But can I already walk in it? (LF3) No. If they said, just the girls [daughters] that they know (LF5).*

*They discharged me, but they recommend me nothing. I did my part like this, cautiously [...] I was informed by my doctor [particular], right now from the ICU, they didn't tell me anything (LF9). They said I could not get hot, lift weight [...], make efforts (LF6).*

Through the statements below, it is possible to notice the lack of articulation of the networks and the difficulties experienced by the long-lived elders, which culminate in the lack of care-related continuity after the hospital discharge. In some reports it is stated that the financial situation is a factor that hinders access to health, especially when considering the characteristics of this population, such as long-term residents in small municipalities, where access to public health is ineffective, as shown in the following speeches:

*I did not go [to the doctor]. Right now I was thinking of ordering an endoscopy to see what is going on, if it's the ulcer that wants to come back or if it's the same gastritis. [...] I just went once to the doctor [after hospital discharge]. Sometimes money is missing to go out (LM11). The physiotherapist at the hospital taught me how to do a physical therapy. She did a couple of times with me, then I said: if I found who did it well I would look good. Here I can't stand to get up. [...] I stretch my legs and arms and move my hands. But for the back, I can't do it alone, I can't do it (LM3). It's just that we walk, then we make the movement. The boy started physiotherapy here, he did it for a while and never came back. [...] And now to walk hurts (LM4). I'm doing physiotherapy. She (physiotherapist) is coming here, because going there is much more expensive [...] and there is no free service. It was hard to find physiotherapist, a lot of people need it and it is paid, it's hard (LF5).*

## DISCUSSION

Regarding the length of stay in the ICU and the medical diagnosis, the results presented differ from those of another research conducted in the state capital (Salvador), where the length of stay of the elders between 11 and 20 days in the unit predominated, with a prevalence of suspected diagnoses related to non-infectious causes, especially Stroke and Acute Myocardial Infarction (AMI).<sup>13</sup>

Regarding the low schooling evidenced in this study, the findings corroborate with those of a research carried out in a municipality in the southern region of Brazil, whose objective was to investigate the prevalence of frailty in a population of 69 long-lived elders. It was observed that 26.1% of these individuals did not attend school and 73.9% claimed to have attended only a maximum of eight years.<sup>14</sup>

Low schooling can lead to the Elderly Fragility Syndrome, as it limits their understanding of health education actions and, as a result, increased vulnerability may occur. The knowledge about the cared population's schooling is essential for the best strategies be designed that seek to cover the largest contingent of the elderly population in health care.<sup>15</sup>

The study's long-lived elders displayed poor performance of the BADLs and of the IADLs. A multicenter prospective cohort study conducted in two hospitals in southern Brazil, whose objective was to compare the functional capacity of elderly individuals (60 to 79 years old) with that of older elderly individuals ( $\geq 80$  years old) in the first six months after ICU discharge showed that there was

no difference in both groups; in both cases, there was a significant decline in the functional capacity of the elderly, when compared to their condition in the period prior to hospitalization. Thus, total dependence on functionality and inclination to perform BADLs was observed in more than half of the studied elderly individuals.<sup>2</sup>

In addition, the hospitalization, the pathology that generated it, the presented comorbidities, and the process of long-lived elders senescence, promote an even greater situation of dependence after discharge, with a great loss of functional capacity, when compared to the situation prior to hospitalization in the ICU.<sup>2</sup>

Home return is an important outcome in the perception of the elderly and enables their faster reinsertion in the co-living with the community.<sup>4</sup> In the speeches it is evident that the return to their home after hospitalization is a factor that contributes a lot to an adaptive response of the long-lived elders.

However, the outcome of the elderly after hospitalization may differ. One study found that out of the 110 (62.1%) elderly individuals aged 75 years old or more who were admitted to the ICU and were discharged, 65.5% went to their homes, 24.1% to the home of some relative, 9.2% to a nursing home for the elderly and 1.2% to some chronic care center. In total, 14.3% of the elders had to move to live elsewhere, leaving their old homes.<sup>4</sup>

According to the theoretical assumptions of Callista Roy's Adaptation Model, the family is classified as a common influential stimulus that affects a person's adaptation.<sup>6</sup> In the reported statements, one may observe the presence of the stimulus, represented by family support, and the positive responses generated by it. The long-lived elders attribute the support found in the family as an essential influencing agent responsible for their recovery.

Even with the changes that have been taking place in family structures, family remains the element that most ensures care to the elderly. A survey showed that older individuals over 85 years old had a smaller family and friend network when compared to those aged 75-84 years old and 65-74 years old. In addition, the elderly who showed the highest degree of dependence on instrumental autonomy were those with a smaller family network.<sup>16</sup>

It should be noted that all health professionals should be aware of and involved with the care network in their municipality, aiming at preparing the elderly and their families for home return, in order to promote and/or intensify stimuli that contribute to satisfactory adaptive responses. If it were a reality, in this study, the network and health professionals should fall into this category, as a contributing stimulus for adapting the elderly at home after hospitalization.

Considering the importance of the family in the long-lived elders' adaptive process, the need is evident for the consolidation by the health team of public policies that strengthen the health care network, both formal and informal, as well as social support networks.

Social support is an important determinant for health services of any complexity level and also a tool capable of modifying the health and disease process in the elderly individuals, since it contributes to the humanized and effective care; thus, it is important to involve the elderly in social activities that enable an interaction between them and the social network.<sup>17</sup>

The presence of a support network made up of friends and neighbors seems to be favored by the cultural characteristics of rural spaces and small towns, as they provide constant contact between people, and represent, for the long-lived interviewees, a positive and pleasant experience in the home return, through a cycle of solidarity. Relationships settled with friends and neighbors are referred to as favorable aspects for feelings of recognition, appreciation and well-being and, therefore, should be considered in the long-term care plans and actions.

Concerning the stimuli that negatively affect the adaptation of the oldest old, it was observed that fear was an influencer present in several speeches, appearing in some reports as a stimulus of internal origin and, in others, of external origin. Even when fear is not classified as the one that most

immediately confronts longevity, it exerts a great influence on its behavior, and measures need to be taken to modify this ineffective response and make it adaptive.

A research conducted with 55 institutionalized elderly individuals and whose objective was to investigate the reasons that can lead the elderly to use wheelchairs, identified that of the 22 wheelchair users evaluated, 41% had the potential for not using the chairs, and used them for being afraid of falling.<sup>18</sup>

Thus, the importance is noted of adding positive stimuli in the adaptive process of the elderly, as a way to provide an active aging. The risk of falls can be mitigated through the adoption of preventive measures, which should be assessed individually, considering the health conditions of the elderly, and the environment. In this sense, architectural barriers were observed in households that, if attenuated, could offer more security for the long-term to better develop the autonomy.

Thus, it is essential to constantly investigate the reasons that lead to falls, in order to direct the necessary approaches to be performed by health professionals, with the aim of reducing this event in the elderly population.<sup>19</sup>

In addition, the lack of information from the health team in the ICU and at hospital discharge was also an identified stimulus that affected adaptation, as observed in Roy's Theory, which argues that lack of knowledge is a stimulus that affects the level of adaptation.<sup>6</sup> In our study, it was possible to observe through the testimonies that the great majority of the participants were not adequately prepared for returning home and some had questions related to the care.

It is also necessary to have communication of the nursing team with the family during the ICU stay, in order to ensure that information and guidance are provided, with a view to a better preparation for discharge and home return of the elderly.<sup>20</sup>

The lack of information and of clarification regarding health issues related to longevity can have serious consequences, such as the practice of inadvertent harmful actions and, consequently, the worsening of the clinical condition. This is even more worrying when we consider the population of older elderly people who have experienced critical illness and ICU admissions, and who require specific care guidelines that promote their continued recovery at home.

There can be no gaps between theory and practice, and the generated knowledge should be used to drive changes in nursing care for the elderly in order to exponentially contribute to the promotion of healthy aging.<sup>21</sup>

Seeing themselves as vulnerable to disease, the elderly use scientific knowledge obtained from the information provided by health professionals, and reproduce at home the knowledge learned, generating positive actions that reflect on care.<sup>22</sup> At this juncture, primary care and the health professionals that are inserted in it are understood as essential, since through them, actions aimed at promoting health and quality of life of the elderly can be developed.<sup>16</sup>

Regarding the elderly who lived in the ICU, it should be considered that they may have weaknesses that require specific assistance, such as the need for follow-up with the physiotherapist to improve their mobility, speech-language follow-up for problems related to speech or swallowing, in addition to medical and nursing follow-up, in order to enable continuity of care and rehabilitation.

Thus, it is essential that there is an articulation between the hospital and the other health networks, aiming at sharing information regarding the hospitalization of the elderly, in order to ensure continuity of care when returning home.<sup>23</sup> However, the study evidenced the disarticulation of the nets and the difficulties experienced by the elderly, which culminated in the lack of continuity of care after hospital discharge.

In addition to the financial fragility to which they are exposed, there is also the prevalence of weaknesses related to their own age, which makes the search for health actions at all levels of care

even more urgent, and the implementation of public policies that offer social support to the elderly as a way of ensuring comprehensive care and dignified aging.<sup>14</sup>

In this study, structural and social barriers were perceived that prevented the continuity of home care for the long-lived person after hospital discharge. The lack of articulation between the primary and tertiary care networks and the problems of access to public health services require the elderly to live with difficulties related to their health condition, which could be minimized or solved if these people and their relatives were adequately prepared for hospital discharge, and if the public health services had broad access to multi-professional home care. The situation becomes even more delicate when socioeconomic constraints make it impossible to access private health care and environmental changes that may improve their adaptation.

Such stimuli can trigger ineffective responses and help culminate in weaknesses, vulnerabilities, loss of autonomy in performing daily life activities, social isolation, feelings of sadness, pain and poor prospect for quality of life.

The study has some limitations: it was performed in a single institution and it was not possible to obtain the values for evaluating BADL and IADL before the long-term hospitalization, so that a comparison could be made.

## CONCLUSION

From the analysis of the results, it was possible to identify the stimuli that contributed for the elderly to show adaptive behavioral responses, given the changes that occurred with the hospitalization process, namely: the return to their homes after hospital discharge, family support and social support, which was represented here by the network of friends and neighbors.

On the other hand, the fear of experiencing again the situation that culminated in their hospitalization and the fear imposed by family members, especially regarding falls, were important influencers that negatively affected adaptation and caused changes and deprivation in performing essential activities. The difficulty for accessing to health services, the lack of articulation of the primary and tertiary care networks, as well as the economic social difficulties experienced by some long-lived elders, were also stimuli that acted negatively, hindering the continuity of care.

ICU and hospital health professionals play a key role in preparing the long-lived elderly individuals and their families for hospital discharge and home return, by assessing each one's specificities, weaknesses, needs and individualities, so that goals that provide health promotion, disease prevention and the correct rehabilitation and social insertion of this elderly are designed.

With the home return, health care is expected to be continued through the articulation of networks and support for the primary care. These measures may contribute to well-being and to improvements in long-term quality of life, minimize the need for (re)hospitalization and reduce long-term mortality rates after the first year of hospital discharge.

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## NOTES

### ORIGIN OF THE ARTICLE

Article extracted from the dissertation - Adaptation of the long-lived elderly at home after hospitalization in the Intensive Care Unit, presented to the *Programa de Pós-Graduação em Enfermagem e Saúde* of the *Universidade Federal da Bahia*, in 2018.

### CONTRIBUTION OF AUTHORITY

Study desing: Santos JLP, Pedreira LC.

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Discussion of the results: Santos JLP, Pedreira LC, Amaral JB, Silva VA, Pereira A, Aguiar ACSA.

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### CONFLICT OF INTEREST

There is no conflict of interest.

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