ADAPTATION OF THE ELDERLY AT HOME AFTER INTENSIVE UNIT DISCHARGE

ABSTRACT

Objective: to investigate how the adaptation of the oldest old at home occurs after discharge from the Intensive Care Unit. Method: this is a descriptive bibliographic study, integrative review, between 2013 and 2017, in the Databases: LILACS, MEDLINE via PubMed, CINAHL. Content analysis was used to categorize the data. Results: ten studies were selected from which three thematic categories originated: Survival and mortality; Functionality; Difficulties, facilities and needs of the long-term returnee after discharge from the Intensive Care Unit. Conclusion: it was concluded that the elderly who experience hospitalization in critical units need specific and continued care after return home, formal and informal caregivers, support from health care networks, and transition care during the process of hospitalization.

Descriptors: Elderly of 80 Years and Older; Intensive Care Unit; Transitional Care; Nursing; Hospitalization; Elderly Health.

RESUMEN

Objetivo: investigar como ocurre la adaptación del anciano de 80 años y mayores al hogar después de alta del hospital. Método: este es un estudio bibliográfico descriptivo, revisión integradora, entre 2013 y 2017, en las bases de datos: LILACS, MEDLINE via PubMed, CINAHL. El análisis de contenido se utilizó para clasificar los datos. Resultados: se seleccionaron diez estudios de los cuales se originaron tres categorías temáticas: Supervivencia y mortalidad; Funcionalidad; Dificultades, facilidades y necesidades del longevo que retorna al domicilio después de alta de la Unidad de Terapia Intensiva. Conclusión: se concluyó que los longevos que vivencian la internación en unidades críticas necesitan de cuidados específicos y continuados después de alta al domicilio, de cuidadores formales e informales, del apoyo de redes de atención a la salud, además de cuidados de transición durante el proceso de hospitalización. Desencritos: Anciano de 80 o Más; Unidad de Terapia Intensiva; Cuidado Transicional; Enfermagem; Hospitalización; Saúde do Idoso.

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INTRODUCTION

They are defined as long-lived elderly aged 80 and over, and these constitute the fastest growing group of elderly in Brazil. It was estimated that in 2015, the elderly aged 80 years or older represented 1.62% of the Brazilian population and that this number should reach 6.63% by 2050, which is equivalent to 15,010,245 inhabitants, evidencing the considerable increase of these people.1

In studies carried out in the intensive care units (ICUs), the growing percentage of the oldest old admitted to these units is highlighted. It was identified in two studies conducted in Brazil that 18.2% of patients admitted to the intensive care unit were long-term and among the main causes of hospitalizations and deaths were non-communicable chronic diseases (NCDs).2-3

It is inferred that the aggravation of chronic problems has increased the need for hospitalization in these units and may culminate in palliative care and interventions aimed mainly at comfort and rehabilitation of disabilities. It is admitted that these situations contribute even more to the increased occupation of beds by long-term people and to the need for specific and exclusive care that, generally, the intensive care team is not prepared or unable to offer.4

It is observed that the increasing frequency of this public in these units demands greater attention from the health team to the hospital-home transition care in order to provide subsidies that preserve independence and favor the adaptation of longevity to home return. It is noteworthy that such measures provide humanized integral care, focusing on well-being, quality of life, health recovery and rehabilitation, reducing the need for readmissions.5

It is pointed out that the elderly have a longer hospital stay when compared to other age groups and a shorter significant survival, mainly due to senescence-related weaknesses added to the disease process.6-8

It is known that, at the time of hospital discharge, the elderly may present injuries that did not have in their pre-hospitalization state, such as loss and reduction of functional capacity, and lower tolerance to physical activity. It is noteworthy that functional impairment prior to ICU admission may represent a determining condition for an unfavorable outcome in the elderly.2

In an ICU survey in Canada, octogenarians who underwent cardiac surgery with prolonged hospitalization were found to have high rates of early rehospitalization and that access to health services after hospital discharge was a factor influencing their survival.9

Given the need to know the difficulties experienced by longevity after hospital discharge, as a way to enable new strategies that provide better quality of life for these elderly, the need to deepen the studies that deal with the process of hospital-home transition was observed for this audience.

OBJECTIVE

- To investigate how the adaptation of the oldest old at home occurs after discharge from the ICU.

METHOD

This is a bibliographic study of the integrative literature review type.10

It was based on a drawing that had six stages: elaboration of the research question; establishment of inclusion and exclusion criteria for searching the literature; definition of the information to be extracted from the studies selected for the formation of the research corpus; evaluation of the material included; interpretation of results and presentation of the review.11

The research question arose: “How does the adaptation of the elderly at home after discharge from the ICU?”. Data were collected from January 3 to 30, 2018 in the following databases: LILACS (Health Sciences Literature in Latin America and the Caribbean); MEDLINE (Medical Literature Analysis and Retrieval System Online); CINAHL and the PubMed repository, using the descriptors registered in the Health Science Descriptors (DeCS) and the Medical Subject Headings (MeSH / PubMed): “Patient Discharge”; “Aged, 80 and over” and “Intensive Care Units” alternate throughout the search with the Boolean operator “AND”.

Inclusion criteria were: full-text articles published in English, Portuguese and Spanish from 2013 to 2017 that dealt with readaptation or adaptation of the elderly at home after ICU admission and discharge, even if the study population also involved elderly people from other age groups. Excluded were theses, dissertations and books; articles that had a population other than the elderly or that did not address longevity; review articles and duplications.

The articles were independently searched by two people who later discussed the findings so that there was agreement on the selected material.

The articles included in the computer were stored in folders for later reading, which followed a script to search for the following information: title of the included paper; database to which it was linked; journal and impact factor; authors; country and year of publication; age of the elderly people investigated in the studies, as well as how the adaptation of the oldest old investigated at
home after ICU admission and hospital discharge occurred. The impact factor of the studies was obtained from the Journal Citation Reports (JCR), dividing the total number of citations of articles in a journal by the total number of journals entered in the Institute for Scientific Information (ISI) database. This total is divided by what has been published by this magazine in the last two years.12

Two synoptic tables were constructed to organize and describe the information about the selected articles, which were identified with codes from A01 to A10. Data was analyzed by the Content Analysis technique, respecting the three phases: pre-analysis, material exploration and treatment of results, with inference and interpretation of these.13

It was succeeded, in the pre-analysis and exploration of the material, the organization of the information in two figures, which constituted the research corpus. In the results regarding how longevity adaptation occurs at home after ICU admission and hospital discharge, a thorough reading for the formation of the analysis categories was observed, respecting the homogeneity and similarity related to the themes found in each of the results. The other information was used to confront the analysis categories. In the results treatment step, inference and interpretation were performed based on what was found in the selected studies.13

The following categories were created from the search for how longevity adaptation occurs at home after ICU admission and hospital discharge: 1. Survival and mortality of homeless people after returning to the ICU and hospital discharge; 2. Functioning of homeless people on return home after ICU admission and hospital discharge; 3. Difficulties, facilities and needs of long-term returnees after ICU admission and discharge. This was a secondary data analysis, so it was not necessary the approval of the Ethics Committee, being respected the copyrights according to the decree nº 8.469 / 2015.14

From the searches performed with the descriptors, 1656 articles were found that, after applying the inclusion and exclusion criteria, resulted in a total of ten articles selected to compose the sample. Figure 1 shows the process of searching and selecting the articles included in the sample.
The selected studies were characterized according to code, title, database, journal, impact factor and year of publication, authors, country, age of the investigated elderly and objective, which are shown in the following figure.
Among the selected articles, one was published in Spanish (A03); one in Portuguese (A04) and the others in English. In the journals, it was noted that the greatest impact factor of the studies included in the sample was the Intensive Care Med, with an impact factor of 10.125.

It was found that most of the selected studies applied the follow-up method to continue monitoring the elderly after discharge from the ICU and hospital. In these studies, links were made every three, six, and even one year after discharge (A01; A02; A03; A04; A05; A06; A07; A08; A10). Only one study used the follow-up method through questionnaires via mail (A09).

Regarding the age of the included elderly, it was revealed that two had only the oldest old as a sample (A08; A09) and the others had both the young and the old aged, emphasizing comparative indicators between these groups.

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Survival and mortality of long-term returnees after ICU discharge and hospital discharge

In this category there has been a considerable increase in the proportion of sick old-people in the last five years. The prognostic index (PI), which measures the severity of the disease and predicts the likelihood of death following ICU discharge and discharge from hospital, the Acute Physiology and Chronic Health Evaluation (APACHE), was used in most studies. Older adults admitted to the ICU have poor short-term outcomes after hospital discharge, with high mortality rates. Good long-term results were found in those who survived for over a year.

It was evident from a survey conducted in Norway that the long-term health-related quality of life of survival when returning to the ICU after discharge from the home was similar to that of the general octogenarian population group. This result was corroborated by other research, showing that age, as an isolated factor, was not an independent risk factor for mortality.

In a study conducted in the Netherlands, it was found that elderly patients undergoing urgent cardiothoracic surgery admitted to the ICU have high survival rates when they return home. Contrary to this, it was shown in another study that survival in the ICU admitted for emergency surgery was lower than in those who had previously scheduled surgeries.

Urgent surgeries impact the survival of these people because, due to the process of senescence and senility, they are more exposed to risks of adverse events and more vulnerable when there is no opportunity for preoperative preparation with risk approach performed by the care team.

With regard to the fragility of ICU hospitalized old-age, the Fried scale was used. Longevity of frailty was associated with mortality of up to six months after hospital discharge through the following variables: mortality in up to six months, disability in one month and incidence of disability after one month, indicating that, in addition to the prevalence of frailty since the 4th day of hospitalization, after six months at home, 41% died.

It was observed that the clinical condition of longevity, at the time of discharge, determined to go to the family home. A quarter of those who were moderately or severely debilitated at the beginning of the study were found to have returned to another household, such as close relatives, due to disabilities acquired after hospitalization in the Intensive Care Unit.

We compared the clinical outcome of severely ill elderly aged 80 years and older and aged 60 to 79 years, identifying that, although the oldest old have a higher number of comorbidities (Diabetes Mellitus, metastatic carcinoma and myeloma), greater severity and need for intensive care in the unit, they were discharged to the home in greater numbers and lower mortality rate after 180 days.

It was shown in one research that of the 75 to 85-year-old group who survived prolonged ICU admission, 75% lived in their own homes before admission. It is known that, for the long-term, changing environments can make their adaptive process even more difficult, as it will already present difficulties inherent to the recovery process itself and will also have to face it in an environment that is not the same. It is understood that all this can culminate in sadness, longing and generate an ineffective adaptation behavioral response.

Longevity functionality on homecoming after ICU admission and hospital discharge

In most of the studies analyzed, the Barthel scale and Katz index were used to assess the functionality of the elderly with regard to instrumental activities of daily living (IADL) and basic activities of daily living (BADL), respectively. It was concluded that there was no difference in the loss of functional capacity between the younger elderly (60 to 79 years) and the oldest old (≥ 80 years) in the first six months after discharge. It was revealed that all the elderly individuals investigated showed great losses in functional capacity in relation to their situation before hospitalization and half of them became dependent.

It was identified, in a study at the university hospital of Paraíba with the elderly, that increased functional capacity is correlated with increased resilience and, therefore, better coping with the disease.

Upon returning home from the hospital, young and long-lived elderly who were admitted to the...
ICU reported tiredness, exhaustion, pain, poor circulation in the legs after surgery, dyspnea, inappetence, gastric and intestinal problems such as constipation. In another study, it was found that young older people had better functional and mortality outcomes on return home compared to octogenarians after elective surgery. Further studies were recommended to explore long-term the functional capacity of the elderly at home after hospital discharge and the potential economic impact on health.

Mortality and functional status of elderly patients over 75 years old in an Intensive Care Unit for more than 14 days were determined, revealing that longer hospitalization was related to worsening functional capacity at discharge and at home follow-up compared to the elderly in the group with shorter length of stay. Worsening functional capacity before and after ICU admission was found to be an independent factor associated with short-term mortality after discharge from another hospital study.

The functional status of ICU hospitalized elderly was compared to the functional status after one year of hospital discharge using the Barthel scale. It was concluded that the oldest old suffered significant deterioration in functional status after hospitalization and, although recovered during the following year, did not return to basal status. It was also noted that short ICU stay was associated with better recovery and functional status after hospital discharge.

It was evidenced in a study of 80-99 year-old survivors in 22 Canadian hospitals, that of the 505 ICU hospitalized survivors, only 26% returned to their basal state after 12 months of follow-up. It was pointed out that the physical recovery outcome was associated, among others, to younger age, lower APACHE II score and comorbidity score, lower frailty index, ICU admission diagnosis and better previous functional capacity.

It was noticed that during the ICU stay, the risk of significant deterioration is high, causing difficulties for the accomplishment of the activities previously performed, with significant changes in autonomy and functional capacity when returning home.

**Difficulties, facilities and needs of long-term return home after ICU admission and discharge**

As for the difficulties faced by the elderly after discharge from the ICU on their return home, it was found that the elderly most often needed caregivers compared to the other younger elderly investigated due to functional decline in three months and lower level of physical activity at six months after discharge.

In the same study, it was found that, in the first three months, the elderly needed to make more adaptations at home and returned to the emergency more frequently compared to younger elderly people. It was proposed a reflection about the need to rethink the hospitalization of young and long-lived elderly in this unit, given the chance of impairment in functional capacity and independence, often generated by hospitalization, making them need the help of a caregiver, not always in reality, especially the long-lived, as the limitations and functionality are greater.

Older people with preserved basal physical function have been found to be more likely to survive after ICU admission and hospital discharge. On survival, on average, they have better long-term physical function compared to those with low baseline physical function.

Through the International Physical Activity Questionnaire (IPAQ), it was documented that the number of older people who did not perform any physical activity after three and six months after ICU admission and discharge was higher compared to the young elderly; In addition, with the questionnaire, the authors noted that the number of very active older people in this period was lower compared to the group of elderly aged 61 to 79 years. Difficulty was found in performing their daily life activities, requiring support from others.

Prolonged length of stay in the ICU is known to expose the elderly to a higher risk of mortality, cognitive and functional dependence, and staying in the critical care unit may increase the percentage of referral of the elderly to other specialized care and rehabilitation units.

It was found that, when leaving these units, the elderly declared to postpone domestic tasks and feel the need to hire a formal caregiver to perform and / or assist them in their daily activities, and others adjusted to their conditions with the help of informal caregivers like neighbors and family.

It was identified that, after ICU admission and discharge from home, the elderly demanded other care that was not part of their routine, requiring the support of family and friends in the return home. Due to the limitations acquired during hospitalization, these were restricted in activities that previously performed, especially social activities, causing isolation. Many elderly people reported, especially the elderly, difficulties and lack of support in the hospital-home transition, with consequent difficulty in adapting to new routines.

On the other hand, among the facilities found in homecoming, on the other hand, the home is a welcoming and extremely important space for the long-lived and its prompt return gave meaning to their lives, improving their autonomy, independence and functionality.

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This review presents the urgency and relevance of the creation of support programs for the elderly, family members and caregivers in the hospital-home transition, and also articulates here the health care network to accompany the adaptation, provide monitoring and care to these people in primary care. The risk-benefit to the quality of life of these people should be evaluated, critically evaluating their admission and permanence in critical units.

CONCLUSION

It was found that the studies included in the review highlighted data related mainly to the survival and mortality of the elderly, including the elderly, in the return home after ICU discharge; the functional capacity of these people and the difficulties, facilities and needs of the long-term after such hospitalization.

It has been found in the literature that most of the long-lived people hospitalized in this unit, after returning home, acquire new routines and need specific and continuous care from family, formal caregivers and friends to perform daily activities.

It is noteworthy that these caregivers and the structure of the home often do not meet the needs of the long-lived elderly in this situation, also requiring support from health care networks to favor this adaptation and avoid the need for readmissions.

It is emphasized that it is essential for the health team to establish a transitional care plan for each long-term patient still during hospitalization, aiming to meet the needs of these elderly after hospital discharge and contribute to the better recovery and rehabilitation of the elderly at home which will provide a more favorable adaptation.

REFERENCES