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Reflection Article

Responsible hospital discharge for older adults hospitalized with Covid-19: a reflective theoretical study

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ABSTRACT

Objective: To build reflections on responsible hospital discharge with older adult patients hospitalized with COVID-19. **Method:** This is a theoretical-reflective study, built on the basis of current scientific studies, which refer to responsible hospital discharge of older adults hospitalized with COVID-19. **Results:** Research demonstrated that functional disabilities associated with hospitalization and COVID-19 generate serious consequences for patients and their families, in order to compromise their quality of life and execution of their occupational roles in the return to their homes. **Conclusion:** We hope that this text incorporates responsible hospital discharge planning in health care of older adults with COVID-19 diagnosis, providing the minimization of insecurities in the return to active and functional life, enabling expanded, safe and effective care, respecting the self-care process and quality of life after discharge.

Descriptors: Aged; Patient Discharge; COVID-19; Health Education.

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INTRODUCTION

According to the Pan American Health Organization, Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is the virus that causes the disease COVID-19, first identified in Wuhan, China, in December 2019. Since the beginning of the cases, the World Health Organization has been monitoring the evolution of the disease, and the COVID-19 pandemic status was later declared. The clinical spectrum of this infection can vary from asymptomatic cases and clinical manifestations considered mild, to moderate, severe and critical cases, which require specialized hospital care[1].

Moreover, studies carried out in several countries indicate other factors that this disease may favor or highlight in the clinical history of people affected by it such as: provoke or accentuate malnutrition among hospitalized patients around 49.11%, showing that mortality with COVID-19 was more than 10 times likely compared to those who were well nourished; show that some elements, such as Down syndrome, kidney or lung transplantation, kidney disease undergoing dialysis, diabetes, obesity, hypertension, a history of cardiovascular disease, chronic respiratory disease, active cancer and neurodegenerative disease, can be strong risk predictors for the development of its severe forms, in addition to social factors (housing, number of family members in the house, transportation, occupation, among others) [2]. The pandemic reinforced the idealization that older adults have their own unique and authentic characteristics, in addition to all the diversity/plurality/complexity of human aging. In this context, despite the fundamental concepts of epidemiology, virology, immunology and many other necessary and recurring concepts, it becomes important to emphasize the foundations of gerontological theory and practice that promote the differential for the adoption of effective measures in the protection of the risk group of older adults[3].

In a study on follow-up after hospital discharge, it is noteworthy that symptomatic clinical features, such as fever, cough, sore throat, fatigue, progressive lymphopenia or neutrophilia, may occur in the immediate future in patients who were discharged after the period of hospitalization, including reactivation of

SARS-CoV-2[4].

After acute infection, among the main problems reported by COVID-19 survivors with worsening in quality of life, fatigue or muscle weakness, difficulty sleeping and anxiety or depression stand out, in addition to dyspnea, joint pain and chest pain. These results support the need for post-discharge care for those patients who have been affected with the severe condition of the disease [2].

Post-intensive care syndrome involves a series of functional impairments, in addition to physical, but also cognitive and mental dysfunctions. These dysfunctions and impairments can lead to a decline in patients' quality of life and functional independence. Thus, multidisciplinary monitoring becomes essential to promote adequate progress in order to restore affected patients' quality of life[5].

As the global COVID-19 pandemic continues and patients experience functional consequences from the disease, it becomes necessary for reference health systems to be aware and strategically prepared to deal with the impact of this disease on the functionality and quality of life of their patients. However, given this pandemic context, gaps in health services and support for patients who needed long-term care were revealed [6].

When they are ready to be discharged, the information provided can cause great anxiety without understanding why they are being advised to go home when they are potentially compromised due to COVID-19. Anxiety can impair their ability and that of their families to understand and process new information. From this perspective, the health team has the important role of listening, teaching and reassuring them about self-care strategies [7].

Considering the above, there is a need to carry out this reflection, as it is considered that older adult patients' functional impairment, resulting from the diagnosis of COVID-19, associated with the long period of hospitalization, may affect directly the process of transition from responsible hospital discharge, if there are gaps regarding information oriented to patients/family members/caregivers, about the main care needed at home.

Therefore, this article seeks to answer the following guiding question:

What should a responsible hospital discharge look like for older adult patients diagnosed with COVID-19? In this sense, we aimed to build reflections on responsible hospital discharge with older adult patients hospitalized with COVID-19. In the end, it is expected that such reflections may favor the deepening of the theme, facilitating the visualization of the problems identified, contributing to arouse the reflection and interest of readers about the development and implementation of certain strategies in favor of a responsible hospital discharge, focused on health care and quality of life of older adults with COVID-19.

METHOD

This is a study that used the theoretical-reflective essay method, following the assumptions of a literature review, in search of information on specific issues from a body of knowledge and discussion on a specific topic with different points of view, theoretical and/or practical[8]. The reading and analysis were built based on current scientific materials, which reference the COVID-19 pandemic, hospitalized older adults, health education and responsible hospital discharge.

Controlled descriptors with terminology in English and Portuguese, extracted from the Health Sciences Descriptors (DeCS) and Medical Subject Headings (MeSH), were used for the operationalization and search of scientific materials, namely: "COVID-19", "Older adults" and "Patient Discharge". Subsequently the search, it occurred in certain databases: Latin American and Caribbean Literature in Health Sciences (LILACS), in addition to the Public MEDLINE or Publisher Medline (PubMed) portal, Google Scholar academic search engine and Scientific Electronic Library Online (SciELO) journal directory.

The bibliographic survey and the reading of the texts obtained became an important phase for the reflection on basic information after hospital discharge after COVID-19 hospitalization and on the number of materials that refer to functional impairments to patients who were in hospital, due to COVID-19.

In order to carry out an adequate analysis of the results found, these were grouped into three relevant axes for the development of reflections on the subject, as well as to support the theoretical and the valorization on the selected main points, named: *COVID-19*

and functional impact on hospitalized patients; *Educational information in health*; *Responsible hospital discharge and older adults*.

RESULTS AND DISCUSSION —

The scientific texts collected in this study on the subject in question, made it possible to identify and reflect on three relevant axes, for the dissemination of the importance and knowledge about responsible hospital discharge of patients affected by COVID-19 and also their respective needs and potentialities. Therefore, the main points analyzed were shown as important for the construction of this reflective study.

COVID-19 and functional impact on hospitalized patients

It was identified that COVID-19 negatively affected patients who required hospitalization for the treatment of this disease, especially those considered to be in a serious clinical condition and with persistent symptoms, even after hospital discharge. Such involvements potentially interfered in the functionality, independence and quality of life of these patients, reflecting on the well-being and impact related to functional performance in performing their daily activities.

Regarding the impact of COVID-19 after hospital discharge, patients reported persistent symptoms in almost all post-discharge assessments; 95% of them had at least one symptom including dyspnea (83%), cough (54%) and chest pain (27%). The persistence of symptoms has been, in most cases, a nuisance and an obstacle to returning to daily activities, with a direct impact on quality of life, including the extent of too many mental impacts (mood, sleep and stress) [9].

Furthermore, long hospital stay due to COVID-19, especially in patients inserted in Intensive Care Units (ICU), corroborates the high risk of post-intensive care syndrome and post-hospital syndrome, which imply loss of functional capacity of hospitalized patients due to a severe clinical condition. These impairments can interfere with returning to work, drastic lifestyle changes, and the ability to engage in basic activities of daily living. Therefore, we can see the need and consideration of interventions aimed at prevention and treatment of post-intensive care and post-hospital syndrome [10].

Then, even after hospital discharge, patients have prolonged effects of this disease. In addition to this, readmission also becomes another important indicator of the severity of

this disease and the health system quality. The readmission and discharge mortality rates reported in scientific literature indicate an urgent need to develop and implement practical guidelines and interventions for a safe discharge [11].

Given the high number of COVID-19 survivors, it is extremely important to characterize and analyze these post-discharge symptoms, as well as their functional impacts, their persistence and/or future remission, for the implementation of therapeutic interventions aimed at prevention and/or rehabilitation[9].

Older adult patients and those with pre-existing conditions may be more susceptible to the effects of serious illness; therefore prevention and rehabilitation strategies can be especially helpful in maintaining their previous level of independence and autonomy [4].

Most patients with COVID-19 eventually recover and are discharged from the hospital with an improved discharge report after completing the procedures carried out by the team at this level of health care; however, in some situations, there is still a need for continuity of care, even after discharge, according to patients' clinical needs [6].

Thus, the potency of this outbreak should not be underestimated, as COVID-19 remains a significant and alarming pandemic; hospital discharges should not be seen as a monitoring endpoint for precautionary and prevention measures. From discharge to long-term follow-up, all aspects and functional impacts of the disease should be investigated in a timely manner [4].

The Ministry of Health stipulates that rehabilitation services should support users affected by COVID-19 after the hospitalization period with functional deficits. Among the services offered, the demand for preparing patients for discharge should be included, coordinating complex hospital discharges and ensuring continuity of treatment [12].

Older adult patients recovered from COVID-19, after hospital discharge, will commonly need this discharge planning with a rehabilitation character, due to the functional impairments presented with a high index of motor, mental and social vulnerability [13-14]. However, little is found in the literature on studies that encourage the practice of implementing actions in favor of prevention and maintenance of health, through multidisciplinary guidelines for hospital discharge, in addition to information regarding the necessary moment of directing to the health service, in seeking rehabilitation assistance.

It is noteworthy that health services need to have a consistent resolution of educating patients to minimize the impact of COVID-19 disease by discharging them home, through training with written instructions, from admission to discharge. Possible educational guidelines for these patients permeate even after vaccination, seeking to favor self-care strategies, such as symptom monitoring, adequate and frequent hand hygiene, cough etiquette, social distancing and self-isolation. Adapted standardized discharge instructions turn to improve their quality of life in the remote future [7].

In the current context of a global pandemic, further in-depth studies informing patients recovering from COVID-19 are needed to investigate the possibility of standardizing and systematizing hospital discharge criteria, containing the spread of the disease during social insertion and even improving the functional prognosis [15]. Understanding the importance of establishing hospital discharge criteria for patients with COVID-19 may become an important support and reference tool for health service users, who need support in the face of their functional impairments resulting from the disease.

Educational information in health

One of the points observed in the analyzed scientific materials addresses the need to implement strategies based on educational health information, aimed at patients with COVID-19 after hospital discharge. Such results are similar to the importance of effective communication in hospital care (team-patient-family/caregiver), through the provision of guidelines carried out by the health team, within the scope and objective of reducing insecurity in continuity of care after hospital discharge, improving care for patients with dependence and reducing further complications resulting from the disease.

Family members and caregivers have highlighted the difficulty in the process of assimilating information regarding diagnoses, provided by the hospital team at the time of discharge, especially in clinical conditions such as chronic diseases, which demand greater dependence on care [16].

It is therefore imperative that hospitals review the strategy used in the communication channel between their professionals with patients, family members and caregivers, around effective communication, that favors a better understanding of the guidelines offered in the hospital discharge process, especially for patients with a

level of dependence on more intensive care, as well as reviewing the technologies used in this process.

Following the guidelines for hospital discharge and care for patients and families, it is established that people who have been discharged within seven days of the onset of illness must be informed about the possibility of the reappearance of signs and symptoms and complications, such as fever, elevation or recrudescence of fever or respiratory signs, tachycardia, pleuritic pain, fatigue, dyspnea. The worsening of symptoms indicates the need for patients to return to the health service immediately[7].

Providing education-based information and training is a challenge in this COVID-19 pandemic context, because there is a possibility that the reference team is not qualified or does not have enough time to provide the necessary basic education, whether in person or at a distance. However, patients are still called upon to understand that during the pandemic, communications and hospital discharge information can be reduced and minimized to a brief exchange, leaving them uncertain about what to do when they return home[8].

Thus, it is necessary for hospitals to ensure that patient and family receive all adequate information about safe care to prevent the spread or transmission of COVID-19. Discharge planning should focus on ensuring that patients are discharged from the hospital to an appropriate location with necessary information and health care goals. In reference to this discharge planning, the implementation of multidisciplinary guidelines for patients in the hospital-level transition process for the other levels of care contributes to quality of care in the transition period and can reduce the number of hospital readmissions and worsening of prognosis[15].

The basic recommendations provided during the hospital discharge process for home, aimed at patients hospitalized with COVID-19, are relevant when there is no need to refer them to a specialized health service for rehabilitation. Therefore, patients, family members and caregivers should be informed about the basic care procedures needed, following the hospital discharge planning process principles, to ensure continuity of care in the home environment, through guidelines that favor patient autonomy in carrying out activities for their self-care, based on the perspective of disease prevention and health promotion through health education[17].

One of the main strategies to promote health care is education itself, addressing methodologies that favor disease prevention, but also the

development of individual responsibility to promote patients' autonomy and quality of life. In this context, it is up to health education to promote healthy lifestyle habits by articulating technical guidelines aimed at health promotion, mainly aimed at older adults[18].

Seeking to update themselves, together with the growing needs to dynamize the process of guidance in the field of health, health professionals have been implementing several tools that favor the process of caring and educating, through educational technologies (ET) as a model of knowledge construction during care practice, aiming at providing health care improvement, in addition to favoring an active participation of the subjects involved in the active, attractive and easy to understand educational process, based on scientific evidence[19].

Thus, the importance of introducing gerontogeriatric educational technologies, aimed at older adults, should be widely discussed and introduced in the health scenario as a form of innovation capable of producing favorable changes in the healthy aging process, mainly with a focus on empowerment, autonomy and quality of life for older adults[18].

A study based on the implementation of a qualified discharge project at the Hospital de Base de São José do Rio Preto/SP resulted in a Singular Therapeutic Plan and a Care/Discharge Plan for hospitalized patients with a dependency profile. Such plans were based on health education and the planning of a multidisciplinary team to work with patients and their families and prepare them for the new stage of home care (residence/Long Stay Institution/municipal network follow-up), as well as subsidizing the necessary referrals for continuity of treatment in the health care network with multidisciplinary care (physiotherapy/speech therapy/psychology/nutrition/nursing/social service), aiming at comprehensiveness and continuity of users' health care[16].

According to the World Health Organization (WHO), in reference to patients with COVID-19, it is recommended that users gain access to follow-up care if they experience persistent, new, or changing symptoms. Furthermore, these guidelines on the need for post-hospital follow-up are clear about the possibility of clinical risks related to the interruption or reduction of rehabilitation on a temporary basis or transfer of patient to another location. Therefore, it is necessary to take several measures to

support discharge and prioritize patients who will receive rehabilitation and continuous follow-up[1].

The principle of comprehensiveness in the Unified Health System (SUS - *Sistema Único de Saúde*) requires that professionals internalize and adopt the expanded concept of health in the care of patients with a certain degree of dependence. In this process, the multidisciplinary team's work is fundamental in guiding and training family members and/or caregivers for the responsible hospital discharge plan, in order to guarantee safe dehospitalization and autonomy of users[2].

Hospital discharge planning based on users' and family's history is a health measure that, in addition to providing correct information to family members and caregivers, continues care and aims at its co-responsibility in health care during and after hospital discharge [20]. In this context, the possibilities offered to older adult patients, as well as to their family and caregivers, based on the strategy of educational technologies (therapeutic groups, conversation circles, dynamics, lectures, booklets, pamphlets, videos, applications for mobile devices, and/or manuals) are effective in promoting older adults' health, as they improve knowledge, making it possible to understand their clinical condition and health promotion[18-19].

Thus, the WHO states that if facilitated early discharge from a hospital or rehabilitation service is required in the care of patients with COVID-19, access to: maximum education of patients and their caregivers is necessary; self-management and home exercise programs where safe and appropriate; assistive products (devices, equipment, instruments or software); adaptive equipment and guidelines for its use and clear guidelines on complications as well as contact information (phone numbers and hotlines) and instructions on when to call in case of concern[21].

Such WHO guidelines for the safe transition from a healthcare facility to home provide a patient education format that will facilitate the hospital discharge of those with a positive diagnosis of COVID-19, based on written instructions, which educate patients on the steps necessary to obtain a safe discharge before returning home. Therefore, it is believed that this patient education strategy can be shared with family and others in the home as well as outside it, allowing everyone to play a significant role in the recovery process and maintaining health, in addition to limiting the spread of the disease [7].

The WHO report on patient therapeutic education [21] concomitant with health education in the hospital discharge process, which can be

directed to patients hospitalized with COVID-19, corroborate some essential objectives to be used by the multidisciplinary team, including: 1- Allow patients to understand their clinical condition; 2- Prevent complications; 3- Support them by providing instructions and guidance; 4- Help them make more effective use of health services available in the health care network and 5- Manage stress, providing them with comfort, through knowledge of specific recommendations[7].

Educational technologies departing from technical-scientific advances are considered important tools that facilitate humanized care, besides potentiating education and methodological strategies for the health care education process [19]. They add to health care, including patients diagnosed with COVID-19, in addition to contributing to the construction of knowledge and the empowerment of older adults in their self-care process.

Responsible hospital discharge and older adults

Regarding the issue of responsible hospital discharge and older adults with COVID-19, the literature presents a wide discussion about the too many functional impacts and limitations resulting from this disease.

It is possible to identify, the appeal and the urgency to adopt assistance and preventive measures, around the reduction of major complications for older adults with COVID-19, in addition to the need to develop strategies and reflections in search of a differentiated approach that encourages quality of life and well-being.

Relating this context specifically to older adults, it is known that, given the period of hospital stay, such a patient may experience loss of function as a result of the disease that led to hospitalization. Some factors are considered multifactorial and cumulative predictors of functional deterioration during hospitalization, such as previous clinical conditions, procedures to which older adults are being submitted, advanced age, sociodemographic characteristics such as race, bed rest (resulting in reduced mobility), acute confusional state and malnutrition, cognitive impairment, delirium, polypharmacy, history of falls and comorbidities[6].

Despite the limitations resulting from studies on functional decline in hospitalized older adults, previous data show that, on average, 35% of these people do not recover functionality at the time of their hospital discharge process. Other data estimate that about

28% of them had a worse functional condition 30 days after discharge compared to the 15 days before admission[17-22].

Considering the results found, there is a need for the adoption, on the part of hospital units, as well as their multidisciplinary team, of greater planning of hospital discharge, so that there is an improvement in health care of older adults diagnosed with COVID-19.

The Brazilian National Hospital Care Policy (PNHOSP - *Política Nacional de Atenção Hospitalar*) assumes the concept of responsible hospital discharge as a care transfer strategy, guiding patients and family members on continuity of treatment, strengthening the autonomy of subjects and providing self-care, in addition to enabling the articulation of continuity of care with the other points of attention in the Health Care Network (RAS - *Rede de Atenção à Saúde*) and the implementation of de-hospitalization mechanisms, aiming at alternatives to hospital practices [23].

Due to specific characteristics of aging, older adult patients may present greater loss of function, due to the disease that caused hospitalization, compared to people of other age groups[17,23]. It is noteworthy that, in most cases, care does not cease after hospital discharge and on return home, as it will be necessary to change habits and adapt the family's daily life to the various limitations and resulting treatments, i.e., it means that hospital discharge brings insecurity and, if not properly oriented, may lead to re-hospitalization [11].

Given these considerations and recognizing that health is a multidimensional construct, guidelines can and should be prescribed by a multidisciplinary team, each with its own knowledge, which includes doctors, physiotherapists, nurses, occupational therapists, pharmacists, psychologists, among others.

Among some examples that involved multidisciplinary teams in the guidance of patients recovered from COVID-19, a study carried out in China was identified showing that, if considered together, problems of patients recovered after discharge deserve attention as well as the role of exercises in their rehabilitation. In this regard, exercise proved to be important to promote the rehabilitation of these patients, as it directly increased lung function and improved immunity, correcting cytokine imbalances in the body [22].

Another study conducted in

China considered the experience of patients with COVID-19 after discharge, involving 72 participants, of which 36 patients underwent respiratory rehabilitation and the remainder had no rehabilitation intervention. It became evident that six-week respiratory rehabilitation improved respiratory function, quality of life, and anxiety in older adult patients with COVID-19, but showed little significant improvement in their depression [3].

In Italy, a study carried out with patients who survived the pandemic and were discharged from hospital showed that the psychopathology of survivors must be carefully assessed and, also, that further research on inflammatory biomarkers is needed in order to diagnose and treat emerging psychiatric conditions[24].

One year after hospitalization for COVID-19, a cohort of Chinese survivors had mainly muscle fatigue and insomnia, lung structural abnormalities and lung diffusing capacities were highly prevalent in survivors. Therefore, it is necessary to intervene in this population for its long-term recovery [25].

Such results and considerations show that there is a need to implement health promotion strategies with guidelines on activities that favor quality of life and self-care as well as show the importance of providing guidelines that direct patients to identify the need to go in search of specialized rehabilitation service.

Given the above, it is clear that there are many problems related to patients who were discharged from hospital, after hospitalization due to COVID-19.

Disabilities associated with hospitalization have serious short-term consequences for older adult patients and their families, as those with a certain degree of dependence need assistance from caregivers to remain active at home, especially in carrying out their daily activities.

In this way, hospital discharge planning should be done as soon as patients are admitted to the health service and, during the qualified discharge process, health professionals must fully support in a responsible way, welcome, involve the user and the family in decision-making related to treatment and the provision of specific referrals to care during hospitalization [16].

According to Ordinance 3,390 of December 30, 2013, which establishes the PNHOSP within the scope of SUS, Art. 16 establishes that responsible hospital discharge, understood as a

It should be clarified that hospital discharge becomes an important process of transition period of specific responsibilities and care that provides for continuity of care at home, concomitantly, through health education strategies aimed at patient and family, involved in self-care[27].

However, it is known that the disadvantages of this orientation process still concern a standardized practice in depriving the client as an active agent within the responsible hospital discharge process, mainly with their singularities and their specific learning needs, tending to be excluded from the process, or often disregarded of such importance [28-29]. In the field of health for older adults, Ordinance 2,528 of October 19, 2006 of the Ministry of Health also considers that there is a shortage of intermediary care structures for older adults in SUS, i.e., qualified support structures for older adults and their families aimed at promoting safe intermediation between hospital discharge and going home[3,30].

Interventions based on this methodology of health education guidelines should follow actions articulated among professionals, patients, family and health network. Additionally, they must be evidenced and supported in practice for the purpose of improving health care of patients hospitalized with COVID-19, particularly if they are an older adult, as well as the prevention of complications and/or comorbidities recommended in accordance with the PNHOSP of the Ministry of Health.

FINAL CONSIDERATIONS

Functional disabilities associated with hospitalization and COVID-19 can have serious consequences for patients and their families, especially those who are older adults, in a way that compromises their quality of life and the performance of their occupational roles upon returning to their homes. These disabilities must be analyzed and monitored in a timely manner from the moment of admission to post-discharge, allowing the integration of strategic actions that provide educational information for the preparation of a responsible hospital discharge. In fact, to provide an opportunity for reflection so that health professionals themselves in the reference to COVID-19 understand that educational guidelines can be considered key points to ensure the maintenance of care after hospitalization.

Thus, it is assumed that this reflective literature survey will allow the reader to observe and recognize the relevance of planning robust health education strategies in the process of preparing for responsible hospital discharge. They should pay particular attention to developing guidelines aimed at older adult patients with COVID-19 and their family members/caregivers who, given the information reported, present a high rate of impairments and functional limitations resulting from the persistence of symptoms, hospitalization and multifactorial predictors.

We aimed to incorporate responsible hospital discharge planning in health care of older adults diagnosed with COVID-19, providing the minimization of insecurities and fear in the return to active and functional life, enabling expanded, safe and effective care, respecting the self-care process and quality of life.

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