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PROFILE OF ADULT PATIENTS IN INTENSIVE CARE UNITS IN A BRAZILIAN NORTHEASTERN

PERFIL DE PACIENTES ADULTOS EM UNIDADES DE TERAPIA INTENSIVA DO NORDESTE BRASILEIRO

PERFIL DE PACIENTES ADULTOS EN UNIDADES DE TERAPIA INTENSIVA DEL NORDESTE BRASILEÑO

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RESUMO

Objetivo: identificar o perfil sociodemográfico e clínico de pacientes adultos internados em uma unidade de terapia intensiva do Nordeste brasileiro, visando a construir uma visão acerca da natureza das unidades dos hospitais pesquisados. **Método:** estudo exploratório, quantitativo e transversal, realizado no período de outubro de 2016 a julho de 2017, com 126 pacientes adultos internados, sendo adotados os critérios de inclusão e exclusão para a seleção dos indivíduos aptos a participar da pesquisa. Os dados demonstrados foram descritos em médias, frequências e percentagens. **Resultados:** os pacientes internados nas unidades apresentaram um perfil correspondente com a literatura nacional, em que 64,3% eram do sexo masculino, com idade média de 44 anos, apresentando baixa escolaridade e renda, em união estável e em sua primeira internação na unidade. **Conclusões:** a necessidade de compreender o perfil de pacientes internados promove uma melhor assistência e ajuda no estabelecido de políticas públicas de saúde, conforme descrito em estudos anteriores. Os aspectos sociodemográficos e clínicos são de singular importância no auxílio aos gestores como forma de aprimoramento dos serviços de saúde, bem como na melhoria na qualidade da assistência prestada, como também as evidências epidemiológicas de funcionamento e da história da doença no contexto brasileiro.

Palavras-chave: Adulto; Unidade de Terapia Intensiva; Epidemiologia; Desenvolvimento Humano.

ABSTRACT

Objective: identify the sociodemographic and clinical profile of the adult's patients in the intensive care unit in Brazilian northeast, to aim a vision about the function of the intensive care units of the hospitals surveyed. **Method:** exploratory study, quantitative and transversal, realized between Oct/2016 to Jul/2017, with 126 adults patients in Intensive Care Units, have been adopted inclusion and exclusion criteria to select the able individuals to participate of the research. The demonstrate data were described in

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average, frequency and percentages. **Results:** the patients shows a profile correspondent to the national scientific research, which 64,3% was male, with an average age in 44 years old, low schooling and income, living as married and the first hospitalization in the unit. **Conclusion:** the need to understand the patient's profile promotes a better assistance and helps in establishing public health policies, as described in previous studies. The sociodemographic and clinical aspects are very important to support the health managers as a way to improve the health services, as well in the growth of the quality of the assistance/care, these epidemiology pieces of evidence help the function and the history of the disease in the Brazilian context.

Keywords: Adults; Intensive Care Units. Epidemiology. Human Development.

RESUMEN

Objetivo: identificar el perfil socioecodemográfico y clínico de pacientes adultos internados en una unidad de terapia intensiva del Nordeste brasileño, buscando construir una visión acerca de la naturaleza de las unidades de los hospitales investigados. **Métodos:** estudio exploratorio, cuantitativo y transversal, realizado en el período de octubre de 2016 a julio de 2017, con 126 pacientes adultos internados, siendo adoptados los criterios de inclusión y exclusión para la selección de los individuos aptos a participar de la investigación. Los datos demostrados se describieron en promedios, frecuencia y porcentajes. **Resultados:** los pacientes internados en las unidades presentaron un perfil correspondiente con la literatura nacional, en que el 64,3% eran del sexo masculino, con edad promedio de 44 años, presentando baja escolaridad e ingreso, en unión estable y en su primera internación en la unidad. **Conclusión:** la necesidad de comprender el perfil de pacientes internados promueve una mejor asistencia y ayuda en lo establecido de políticas públicas de salud, conforme descrito en estudios anteriores. Los aspectos sociodemográficos y clínicos son de singular importancia en la ayuda a los gestores como forma de perfeccionamiento de los servicios de salud, así como en la mejora en la calidad de la asistencia prestada, así como las evidencias epidemiológicas de funcionamiento y de la historia de la enfermedad en el contexto brasileño.

Palabras clave: Adulto. Unidad de Terapia Intensiva. Epidemiología. Desarrollo Humano.

INTRODUCTION

The Intensive Care Unit (ICU), with emphasis on the care of adult and elderly patients, is a specialized unit of the hospital system that aims to provide care for strict control of the patient's vital parameters and continuous assistance of the team. It is noteworthy that it is recognized in the literature and in the field of care practices as a unit permeated by state-of-the-art technology that involves emergency situations and the frequent need for agility and ability to care for the patient.[1]

Therefore, patients who have certain types of pathologies are included in risk groups of those who most often appear hospitalized in this unit. The most frequent reasons for hospitalization are infectious diseases, unstable angina, acute myocardial infarction, acute respiratory failure, acute pulmonary edema,

and other comorbidities that can affect patients.[2] It is still worth mentioning that this profile will be described according to the nature of these units, since they have become increasingly specific, such as Cardiology, Burns, Chronic Patients, Post-Operative, Urgency and Emergency, among others.

In this specialized sector of the hospital, information on the sociodemographic and epidemiological characteristics of the patients can help to define qualitative and quantitative strategies to improve patient care, especially in the prevention of complications, specialized care and access to rehabilitation.

The understanding of these particularities provides healthcare professionals with the planning of care, regardless of the health problem that led to hospitalization. As for example, knowing the most frequent gender and age of people who are admitted to a given ICU enables the team to prepare themselves to meet people with specific characteristics.

Thus, having knowledge about the most frequent types of injuries helps the team in the planning of actions of permanent education, acquisition of technologies and in the adaptation of the structure of the unit [1]. Other aspects that contribute to thinking about ICU patient care refer to the patient's origin, morbidity rate, length of stay, among others.[3]

The researches these characteristics of patients hospitalized in ICU (s) help consolidate and favor changes in care strategies. It is also possible to use the resulting information to help improve the management of the unit, be it from the human, structural, process, or even the management of care, [3] understanding the importance of emphasizing support strategies and care of these critical patients. [1-2,4-5]

Thus, this study is a cut of a master's research in which the objective was to trace the sociodemographic and clinical profile of adult patients hospitalized in an intensive care unit of a city in the Northeast of Brazil, aiming to construct a vision about nature of the units of the hospitals surveyed, as well as the possibilities of an improvement of the assistance provided to this public, now known in its profile and necessity.

METHOD

This article was elaborated from the master's thesis "Strategies of coping and social support in adult patients in intensive care unit" (6), of the Post-

Graduation Program in Psychology of the Federal University of Rio Grande do Norte. This study deals with exploratory, quantitative and transverse research.

The study was developed in the city of Natal, RN, Brazil, in two public hospitals, one general and one university. The general hospital is the largest hospital in the State responsible for urgent and emergency care and the university hospital is the reference for the treatment of chronic and cardiological diseases. At the two institutions, assistance, teaching, research and extension activities are carried out. Integrated to the Unified Health System (UHS), it serves a universalized and exclusive clientele of this system.

Intensive care units of hospitals are located in specific sectors. In the case of the general hospital, the research was carried out in four subdivisions of the ICUs, which are classified according to the profile of the hospitalized patient, thus totaling 37 beds. In the university hospital, there is only one unit in which there are 19 beds in total.

The study population consisted of all adult patients hospitalized in the ICU beds mentioned. The sample consisted of 126 patients who met the following inclusion criteria: a) patients between 20 and 59 years of age, regardless of race, class or social group; b) patients with preserved level of consciousness and self and alopsychic orientation; c) acceptance in participating in the research, through the signing of the Informed Consent Form; d) hospitalization for more than 24 hours in the ICU.

It is important to note that exclusion criteria were considered: a) patients in a state of mental confusion; b) presenting neurological or psychological disorder that makes it impossible to participate in the research; c) in the use of medications that induce the sedative process or promote alteration of the processes of cognition; d) unable to respond to the questionnaires proposed because of some limitation related to the clinical condition.

The proposal for the accomplishment of this study was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte (Opinion No. 1,620,034 / 2016). All patients were informed about the study objectives and invited to participate in the study. After agreeing to be a research volunteer, the patient signed the Free and Informed Consent Form (FICT), formalizing their participation and clarification of questions a posteriori.

The instrument that will be explored for the purpose of analysis in this study was the sociodemographic and clinical questionnaire, specially developed

for the study, based on the patient's medical records, as well as on the topics explored in scientific studies in the area. This instrument aims to evaluate the social, demographic, as well as the health and clinical conditions of these individuals. Included are data such as age, sex, naturalness, schooling / study time, marital status, religion, address and family income and clinical health characteristics (type of pathology, hospitalization, type of treatment already performed, , possible physical, emotional and social sequelae).

Data collection took place over a period of eight months. The research was presented to patients who are hospitalized in the intensive care unit and who meet the inclusion criteria. After the invitation and the initial acceptance of the proposal, the Free and Informed Consent Term was read, and any doubts that might have been. After agreement of all the described in the term, this should be signed by the patients before their consent to participate in this research. The data was tabulated in the SPSS (Statistical Package of the Social Sciences), version 24.0, and presented in tables. The study complied with all the provisions of Resolution 466 of December 12, 2012, of the National Health Council, which regulates research involving human beings, as well as following the principles governed by the Declaration of Helsinki, 1975, revised in 2000.

RESULTS

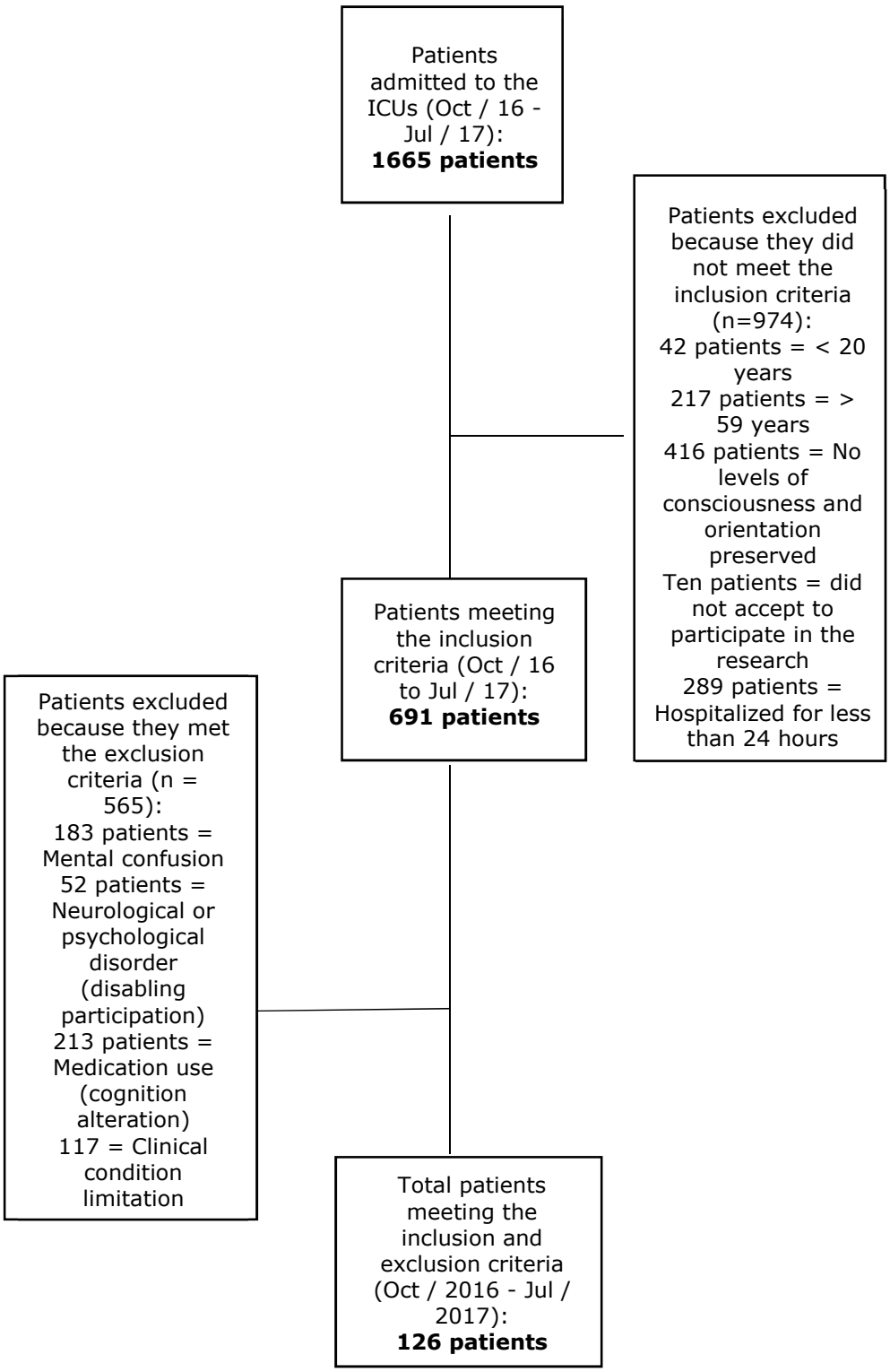
From October/2016 to July/2017, data collection was performed in the intensive care units of the two reference hospitals chosen. According to the National Register of Health Establishments (CNES), [7] it was verified that in the year 2015, the total number of hospitalizations accounted for 2218 hospitalizations in the ICU of both hospitals, which is equivalent to a monthly average of 185 admissions / month.

Obtaining the sample number occurred by means of a calculation that gives a reliable estimate of the population proportion. As the performed research was characterized by individuals of integer and non-continuous values, the result must be rounded. Using the rules of mathematical logic, the value was 126 subjects (63 in each institution).

In this sense, according to the inclusion and exclusion criteria adopted, it was possible to show that of the 1665 patients admitted to the ICU during this period, only 126 are able to respond to the battery of instruments, as shown in

figure 1. These numbers evidenced (25%) of patients who had a poor level of consciousness and/or orientation for participation in the study, as well as patients who were in the transition period (17.35%) in that unit after uncomplicated procedures and quick recovery.

Figure 1. Criteria for Inclusion and Exclusion of Patients.



Concerning the sociodemographic profile of the participants of this study, it was possible to perceive the high number of male patients (64.3%) to the detriment of female patients (35.7%), thus demonstrating a reality cut of these specific units that portrayed two aspects: 1 - most of the male population as representatives of patients who need more complex care; 2- most seriously ill female patients, which made it impossible to participate in the research. These aspects will be addressed in more detail in the discussion section.

Significant data was also collected regarding sociodemographic and clinical data, as shown in table 1.

Table 1. Socio-Demographic Characteristics.

Characteristics		N (%)
Age group	20 to 30 years	21 (16.7%)
	31 to 40 years	16 (12.7%)
	41 to 50 years	43 (34.1%)
	51 to 59 years	46 (36.5%)
Marital status	Married	37 (29.4%)
	Stable union	40 (31.7%)
	Single	33 (26.2%)
	Separated	9 (7.1%)
	Divorced	4 (3.2%)
	Widow	3 (2.4%)
City	Interior	75 (59.5%)
	Natal	48 (38.1%)
	Other states	3 (2.4%)
Schooling	Low Schooling (Up to Elementary School)	80 (63.5%)
	High Schooling (Starting from High School)	46 (36.5%)
Family income	Menos do que 1 salário mínimo	22 (17.5%)
	Up to two minimum wages	58 (46%)
	Between three and six minimum wages	41 (32.5%)
	Seven or more minimum wages	5 (4%)
Who they live with	Partner + Children	51 (40.5%)
	Partner	20 (15.9%)
	Big family	14 (11.1%)
	Alone	13 (10.3%)
	Others	28 (22.2%)
Responsible for hospitalization	Cardiology	53 (42.1%)
	General	17 (13.5%)
	Oncology	13 (10.3%)
	Neurology	11 (8.7%)
	Other specialties	32 (25.4%)
Number of hospitalizations - ICU	Once	89 (70.6%)
	Twice	25 (19.8%)
	Three times	7 (5.6%)
	Four or more times	5 (4%)
Reason for hospitalization	Postoperative recovery	66 (52.4%)
	Worsening of acute illness symptoms	30 (23.8%)
	Worsening of chronic disease symptoms	16 (12.7%)
	External causes	14 (11.1%)

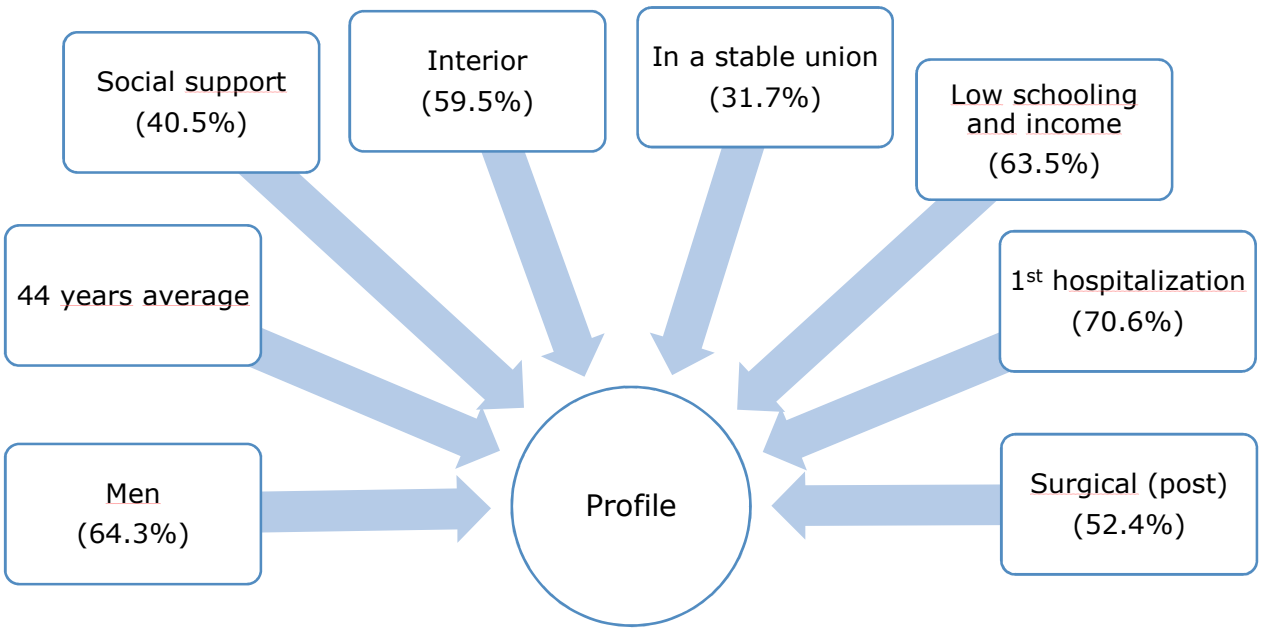
It is possible to highlight some of the relevant aspects of table 1, especially regarding the factor that is related to social support, since 61.1% of the respondents reported having a stable love relationship (married or in a stable union) 89.7% of the patients also claimed to have some kind of company in their dwellings with the majority of the percentage, and could thus enable an aid in activities of daily living that requested the help of third parties.

Another highlight, which can be considered, is related to the family income and the schooling of the respondents. According to the data shown in the table, most individuals (63.5%) had completed elementary school education (complete or incomplete) and, in relation to the family income of these individuals, approximately 46% of the patients received up to two minimum wages. It is important to note that individuals who responded received less than a minimum wage sometimes had no income whatsoever.

Regarding the clinical aspects, there was a great difference between the medical clinics responsible for the hospitalization of the patients, in which the Cardiology appears with 42.1%, corresponding to almost half of the total number of patients interviewed. In addition, in the characteristic related to the reason for hospitalization in the Intensive Care Unit, the postoperative recovery appeared with 52.4%, being, in fact, the majority of the reality of the patients hospitalized in these units visited for the research.

Thus, through the statistical findings of the representative population of patients admitted to the ICUs of a city in the Brazilian Northeast, it was possible to show the following admission profile in these units, as shown in figure 2.

Figura 2. Perfil Sociodemográfico e Clínico dos Pacientes.



From this figure 2, it is possible to develop a profile of patients hospitalized at the ICUs surveyed, thus demonstrating a way of systematizing the care given to UHS users. Because these are two reference public hospitals in the city and in the State, these data are relevant insofar as these cares reverberate in a state dimension of specialized health care at the tertiary level.[10]

Thus, health professionals working in the Rio Grande do Norte State network can predict the need for the use of certain inputs, for example, according to the profile of the patient who is statistically more involved in their health services, scientific-practical research in health environments, since, through this survey, it is possible to carry out improvements.

The care referred to in this study is in accordance with the National Humanization Policy (NHP), in which it is defined as the propitiator of the active exercise of autonomy of the sick subject. Thus, the premise of a humanized care is used, in which it is proposed the valuation of the different subjects involved in this health-disease process, recognizing the potentialities and demands of each one.[8] In this way, it is possible to discuss, in a critical-reflexive way, the sociodemographic and clinical data presented, in order to show how the existing literature talks (converging) or discusses (diverging) about the findings of this study.

DISCUSSION

The proposal of the article, in parallel with the sociodemographic and clinical data of patients hospitalized in the ICU, promotes an essential discussion about Epidemiology. This science studies the health-disease processes in populations and samples, making a critical analysis about the distribution and possible factors that can trigger certain pathologies, damages or events associated with collective health, proposing measures aimed at prevention, possible eradication of diseases and providing indicators that contribute to the support to the administration, the evaluation of the health actions and the planning.[9]

Through the characterization of the hospitalized population, a reflection process can be established about the information that has been collected, and the knowledge of these characteristics can provide elements, favoring, for example, the diagnosis, possible health care planning and the care provided. Thus, as described in the results, it was possible to show the percentage of patients who were hospitalized as a result of postoperative recovery in the ICU environment, corroborating the idea of improving basic sanitation services in Brazil, of people with infectious and transmissible diseases, with a change in the profile of patients who are hospitalized, with an increase in the number of patients who are chronic or linked to external causes, such as traffic accidents and violence.[9]

Through the readings, it was possible to show a still incipient literature about the sociodemographic profile of adult patients hospitalized in intensive care units and this evidence is even more alarmingly expressed when brought to the Brazilian Northeast context. The values referring to the obtained results can be compared to the reports of other regions of Brazil, considering the due epidemiological differences and characteristics of each hospital unit.

In a study carried out in the ICU of a public hospital in the interior of São Paulo, 64.9% were male, aged 40 to 49 years (20.1%), hospitalized from one to ten days in the ICU (62, 9%) and predominantly presenting respiratory and circulatory diseases.[11] This profile ends up resembling those found in this study, since it is within the same age range, as well as in the high percentage of male patients. Also in the context of the South-Southeast regions, a study carried out in an adult ICU of a university hospital in Rio Grande do Sul showed that the majority of patients were elderly (mean age 64.8 years).[12] Already in

the Northeast context, it was found, in records of medical records of a university hospital ICU in the State of Paraíba, that, of the 48 deaths recorded in that period, 23 were males and 25 females, demonstrating a slight trend of higher numbers of deaths in females.[13]

These results corroborate the data provided in a study carried out at an ICU in São Paulo, which compiles the literature on the sociodemographic profile, thus demonstrating that, in the various surveys carried out in general ICUs, whether public or private, there is a predominance of male patients.[11] However, through the discussions, it is important to reflect on the role of studies that trace a profile of patients hospitalized in intensive care units in order to understand beyond the severity of the disease and the therapeutic effectiveness, but that allow collaborating in the taking decisions in these units. According to data from the Ministry of Health in Brazil, there are studies to select the type of patient that occupies the ICU bed, since, by means of this, the resources will be destined in fact to the patients with realistic possibilities of recovery - since this should be the main target audience of these units due to the high investment of health, financial and technological assistance.[14]

CONCLUSION

In light of the reflections and the results obtained, the knowledge of these sociodemographic characteristics can promote an improvement in the care of patients and their families during hospitalization. In addition, it is an essential tool in assisting managers in improving health services. Regarding the context presented, it was possible to perceive similarities with those exposed in the national literature, and it is possible to establish the relationship between a certain group of people to the incidence of hospitalizations in intensive care units.

Because it is a research with defined inclusion and exclusion criteria, it may not have covered the population as a whole, given the established criteria. Thus, research is still needed that has as main and necessary emphasis the structuring of an even more reliable profile of this population in order to produce increasingly effective health indicators.

Studying and reflecting on sociodemographic and clinical elements of patients involved in research is of singular importance to characterize these

individuals and to promote studies that relate characteristics common to the more specific aspects of the research (such as scales, protocols, etc).

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