

**11 - PROFILE OF PATIENTS HOSPITALIZED IN THE ADULT INTENSIVE CARE UNIT**

MARIA LUIZA BARÉA

ELIZABETH APARECIDA DE SOUZA

JULIANA GUZZI MACHADO

NELSI SALETE TONINI

MARISTELA MARASCHIM

UNIPAR- Universidade Paranaense. Cascavel-Pr, Brasil.

[maria\\_luiza@hotmail.com;](mailto:maria_luiza@hotmail.com)[elizabethsouza@unipar.br;](mailto:elizabethsouza@unipar.br)[julianadule@hotmail.com;](mailto:julianadule@hotmail.com)[nelsitonini@hotmail.com;](mailto:nelsitonini@hotmail.com)[maraschin@unipar.br.](mailto:maraschin@unipar.br)

doi:10.16887/87.a1.11

**INTRODUCTION**

The lessons practiced and learned in battlefields during World War II and the conflict of Korea in the 20th century, showed that the care and therapeutic applied in severely wounded soldiers, led to an increase of survival of the military groups, and could be applied for the civilians with more complex health problems (VIANA, 2011).

Thus, concerning the space of the unit of intensive care/treatment, where doctors and nurses observe and treat severe patients 24 hours a day, in order to restore and maintain the vital functions, as well as increase the chances of survival, was created in December of 1953. The first Intensive Care Unit (ICU) was in Denmark and until the 60's, there was a great development, with numerous ICUs being created in several countries with a division into sub-specialties, as: adult ICU, pediatric ICU, neonatal ICU, among others (VIANA, 2011).

In Brazil, the first ICUs were implemented in the 70's and became specialized units, considered as high complexity. There was the need of trained professionals and also the obtainment of even more modern and sophisticated equipment (GARANHANI, et. al., 2008).

The ICU is a place where recoverable severe patients are sent to receive specialized care of nurses and doctors full time. There are equipment and materials needed for life maintenance, as: mechanical ventilators, pulse oximeters, multiparameter monitors, infusion pumps, vasoressors drugs, among others. The ICU aim is to receive, treat, take care and stabilize the hemodynamics of high-risk patients, using resources for an efficient, quick and human treatment, providing safety and comfort to patients (MURTA, 2006).

Some factors contribute to the development of special methods to the care of the hospitalized patient. Searching for a better treatment to be given to the critical patient, not just for their survival, but also to their reintegration to a normal existence, with the minimum of discomfort (GOMES, 1988).

Thus, the innovation of treatments, technological development, increase in life expectancy and increasing emerge of new chronic diseases that need intensive care, favor to a quick evolution of new specialties focusing on patients safety through a continuous and accurate monitoring, so the ICU arises as a specialized support to life assistance, involving the use of technological and top therapeutic resources (FAVARIN; CAMPONOGARA, 2012).

To Murta (2006), the professionals who work in an ICU must be prepared to team work, since an ICU requires a multidisciplinary group that bond the areas of Medicine, Nursing, Physiotherapy, Nutrition, Psychology and Pharmacy. Since the skills of critical thinking of these professionals allow to visualize the patient as a great board, analyzing their data, evaluating the problems that may arise from the critical environment and the determination of appropriate interventions (MORTON, et. al., 2007).

Faced with this theme, the aim of this study is to characterize the profile of patients hospitalized in the Adult Intensive Care Unit of a hospital in Cascavel-PR.

**MATERIAL AND METHOD**

It is a quantitative research with descriptive and retrospective documental study.

The quantitative research describe information and opinions through numbers, graphics and charts (MARCONI; LAKATOS, 2008).

The documental research is conducted through contemporary or retrospective documents, considered scientifically authentic, aiming to describe / compare social facts, establishing its characteristics or tendencies (PÁDUA, 2005).

The main objective of descriptive researches it is the description of characteristics of certain population or phenomenon or, the establishment of relationships among variables (GIL, 2009).

Retrospective studies explore past facts, and can be designed to return from the contemporary moment until certain point in the past, several years ago; or the researcher can set a moment in the past and conduct the research to the present, by documental analysis (MARCONI; LAKATOS, 2005).

The collection of material had as secondary data source, the electronic records. These were available in a computerized system (TASY), in which all information about the patient is recorded.

To data collection, a form containing seven variable questions about the study was built. Pádua (2005) defines form as a collection of questions that are asked and recorded by an interviewer. It is made of closed questions, and it is said to be a better-suited research tool referring to quantification, once they are easier to code and tabulate, offering comparisons with other data related to the theme.

The Intensive Care Unit where this study was carried out has high turnover of patients, an average of 74 individuals monthly. The research was conducted with medical records from January to April of 2015, resulting in 296 records. The population of this study consisted of patients who were hospitalized in an adult ICU by private health plans in a hospital from Cascavel-PR.

Data collection was conducted in June, after the approval of the Ethics in Research Committee (CEPEH) which involves Human Beings, from Universidade Paranaense/UNIPAR, according to resolution 466 of 2012 (BRASIL, 2012). This project had approval, through the number 1.087.026 on May 28th 2015.

A formal authorization to carry out data collection was requested to the institution prior to sending the project to the

Ethics Committee, and it was approved.

#### RESULTS AND DISCUSSIONS

As for gender of the patients, 161 (54.39%) were male and 135 (45.60%) female. A similar study conducted by França et. al., (2013), with 102 patients, showed that 57 (55.9%) were male and 45 (44.1%) female; a significant difference concerning this item. The demographic characteristics related to gender, confirm that nowadays, in the reality of health services in several countries, the number of men admitted in ICUs is higher than women. These evidences are seen in many countries, in which men are more commonly admitted in ICU and show higher possibility of receiving more aggressive support than women (FREITAS, 2010).

Regarding the age, there was a variation between 12 to 96 years. It was found that the largest share of hospitalization was between 70 to 74 years old with 38 hospitalizations (12.83%), followed by 65 to 69 years, 37 hospitalizations (12.50%); 75 to 79 years, 37 hospitalizations (12.50%); 80 to 84 years, 32 hospitalizations (10.81%); 55 to 59 years, 27 hospitalizations (9.12%); 60 to 64 years, 25 hospitalizations (8.44%); 50 to 54 years, 24 hospitalizations (8.10%); 85 to 89 years, 14 hospitalizations (4.72%); 45 to 49 years, 13 hospitalizations (4.39%); 90 to 94 years, 12 hospitalizations (4.05%); 20 to 24 years, 9 hospitalizations (3.04%); 40 to 44 years, 7 hospitalizations (2.36%); 30 to 34 years, 6 hospitalizations (2.02%); 35 to 39 years, 5 hospitalizations (1.68%); 25 to 29 years, 3 hospitalizations (1.01%); 10 to 14 years, 3 hospitalizations (1.01%); 95 to 99 years, 2 hospitalizations (0.67%); 15 to 19 years, 2 hospitalizations (0.67%).

In this study, it was reported that the elderly population was more prevalent, being 197 (66.55%) patients over 60 years old, who were hospitalized during the study. The World Health Organization defines as elderly the person of 65 years or older. For developing countries, as Brazil, this definition applies for people from 60 years and more (ALVES, et. al., 2009).

This population has an expressive use of health services, especially in intensive care units, and may correspond in more than 50% of admissions in this hospital sector. The demand of elderly for care in critical units tends to happen because of population aging, mainly in developing countries, which has been a topic of discussions in the areas of planning and health politics (SIQUEIRA et. al., 2004).

Of the researched sample total, it was found that 157 (53.04%) of the individuals hospitalized, are from Cascavel-PR, followed by Medianeira-PR with 14 (4.72%); Ubiratã-PR also with 14 hospitalizations (4.72%); in Cafelândia-PR, there were 12 (4.05%) hospitalizations; in Marechal Cândido Rondon-PR, there were 9 (3.04%) hospitalizations; Toledo-PR, 9 (3.04%) hospitalizations; in Palotina-PR, there were 7 hospitalizations; Quedas do Iguaçu-PR, 6 (2.02%) hospitalizations and other cities 68 (22.97%), among them, one patient was from Paraguay and another from Mato Grosso. Thus, it is possible to assert that the admissions from individuals coming from different cities, state and country, is due to the complexity of care and the existing specialties in the hospital, as well as the necessity of an advanced support, this of great reference in the region.

Regarding the time of stay, it was found variations since the minimum of 1 day to the maximum of 79 days. The majority of the patients remained in ICU for 1 day. The distribution was: 1 day, 104 patients (35.13%), followed by 2 days, 57 (19.25%); 3 days, 34 (11.48%); 4 days, 10 (3.37%); 5 days, 27 (9.12%); 6 days, 6 (2.02%); 7 days, 5 (1.68%); 8 days, 8 (2.70%); 9 days, 6 (2.02%); 10 days, 6 (2.02%); 11 days, 3 (1.01%); 12 days, 4 (1.35%); 14 days, 1 (0.33%); 15 days, 1 (0.33%); 16 days, 3 (1.01%); 17 days, 2 (0.67%); 19 days, 4 (1.35%); 20 days, 1 (0.33%); 22 days, 3 (1.01%); 24 days, 1 (0.33%); 25 days, 1 (0.33%); 27 days, 1 (0.33%); 28 days, 2 (0.67%); 30 days, 2 (0.67%); 35 days, 2 (0.67%); 71 days, 1 (0.33%); and 79 days, 1 (0.33%).

It is shown that, due to procedures such as cardiac catheterization and angioplasty, which need constant vigilance for 24 hours, after this period without complications, the patient is released to the ward. Thus, it is justified in this study the prevalence of a day for the time of hospitalization. In a similar study conducted by Melo; Meneguetti; Laus (2014) with 479 patients, it was seen that regarding the days of hospitalization in ICU the majority of the patients hospitalized in 2009 remained in the unit for only 24 hours (13.4%), representing a higher percentage of this variable.

Corroborating with the study, it was seen that the time of stay at ICU was an average of 8 days, varying between 2 and 52 days. In 51.7% of the admissions, the patients remained for a period of 1 to 5 days. Continuities between 6 and 7, and higher than 10 days were found in, respectively, 15.7% and 32.6% of admissions (DUCCI, et. al., 2004).

The main causes of hospitalization were for cardiovascular diseases, 129 (43.58%), followed by respiratory diseases, 47 (15.87%); neurologic, 43 (14.52%); gastrointestinal, 38 (12.83%); oncologic, 14 (4.72%); renal, 10 (3.37%); septicemia, 7 (2.36%); orthopedic, 2 (0.67%); without diagnosis, 6 (2.02%). Viana (2011) carried out a study in which it was observed the prevalence of cardiovascular and respiratory diseases in ICU hospitalizations. In addition, in a study of Bezerra (2012), it was pointed out that the main causes who lead ICU hospitalizations, during the period of the research, were related to cardiovascular diseases and respiratory diseases.

Regarding the evolution of ICU hospitalization, two options were taken into account: ICU release and death. During the period of research, the following results were obtained: 263 (88.85%) patients were released from ICU, while 33 (11.14%) patients died.

The deaths remained among men, being 22 deaths, and having as main causes, cardiovascular diseases, with 9 deaths, followed by oncologic, 4; neurologic, 1; respiratory, 1; sepsis, 3; orthopedic, 1; poly trauma, 1; chronic renal insufficiency, 1; and bariatric, 1. While among women, there were 11 deaths, and the causes were: cardiovascular diseases, 7; respiratory, 2 and oncologic, 2.

From the patients who died during the period of the research, 22 individuals were over 60 years old. Thus, we can see cardiovascular diseases as main cause of death, in both, men and women where the research took place. According to a study by France et. al., (2013), with 102 patients, there were 48 deaths. From those, 23 were men and 25 women. It was found no statistic difference in mortality related to gender. There were 48 releases and 6 transferences.

#### CONCLUSION

Through this short study, it is understood that the aim of this research was reached, once pertinent data was searched and studied, as well as the profile of the patients hospitalized in the adult Intensive Care Unit of a hospital in Cascavel/PR.

Regarding the index of various reasons that lead patients to ICU beds - and some of them having their lives taken – it was possible to see that the same results match with the statistics of the World Health Organization, in which cardiovascular diseases are in the ranking of mortality rate.

It was observed that concerning the evolution of these individuals, there was a great rate of releases; on the other hand, an expressive number of deaths, which prevalence was males and people with more than 60 years old.

Another interesting topic is that although the hospital characterize the ICU as an adult one, there were underage patients.

It is important to highlight that the profile of the socioeconomic conditions of these patients are not mentioned during

discussions. It is necessary to report that this public had favorable care to a good treatment, which is one factor that often determines a positive prognosis, once these patients were admitted by private health plans without the need to wait for ICU vacancies.

From the studied medical records from patients hospitalized in the ICU, it was observed a varied public in a matter of age, gender and geographic regions, although the prevalence of admitted patients is from people who live in the same city where the hospital is located.

The characterization of ICU patients may help in the admission guidelines and releases of this unit, because the knowledge of the profile of critical patients favors the establishment of objective criteria for this end, aiding the multidisciplinary team, the action plan and the optimization of services and physical / material resources.

Keywords: Intensive Care Unit; Assistance; Critical Care.

#### REFERENCES:

- ALVES, C. J.; FRANCO G. P. P.; NAKATA, C. T.; COSTA, G. L. G.; COSTA, G. L. G.; GENARO, M. S.; AGOSTINI, G.; LUZ, J. L.; LEITE, M. F. M. Evaluation of prognoses index for elderly patients in Intensive Care Unit. *Rev. Bras. Ter. Intensiva.* vol.21 no.1 São Paulo Jan./Mar. 2009. Available at: [www.scielo.br/scielo](http://www.scielo.br/scielo) > Access on Aug 12th 2015.
- BEZERRA, G. K. A. Intensive Care Unit – Admission Profile: Regional Hospital of Guarabira, Paraíba, Brasil. *Revista Brasileira de Ciências da Saúde.* Vol. 16, 2012.
- BRASIL. Ministry of Health. Resolution 466. Research with Human Beings. 2012. Available at: [www.conselho.saude.gov.br](http://www.conselho.saude.gov.br) >. Access on: Apr 23rd 2015.
- DUCCI, A. J.; PADILHA, K. G.; TELLES, S. C. R.; GUTIERREZ, B. A. O. Severity of Patients and Nursing Work Demand in Intensive Care Unit: Evolutionary Analysis according TISS-28. *Rev. Brasileira Terapia Intensiva.* Vol. 16, n1, 2004. Available at: [www.amib.com.br](http://www.amib.com.br) > Access on Sep 2nd 2015.
- FAVARIN, S. S., CAMPONOGARA, S. Profile of hospitalized Patients in Adult Intensive Care Unit of a University Hospital. *Rev. Enferm UFSM,* 2012 Mai/Ago;2(2):320-329. Available at: [www.cascavel.ufsm.br/revistas](http://www.cascavel.ufsm.br/revistas) >. Access on: Mar 22nd 2015.
- FRANÇA, C. D. M.; ALBUQUERQUE, P. R.; SANTOS, A. C. B. da C. Epidemiologic Profile of the intensive care unit of a university hospital. *InterScientia,* João Pessoa, v.1, n.2, p. 72-82, maio/ago 2013 Available at: [www.unipe.br](http://www.unipe.br) > Access on Aug 9th 2015.
- FREITAS, E. R. F. S. Profile and severity of patients in intensive care units: prospective application of APACHE II score. *Rev. Latino-Am. Enfermagem.* 2010; 18(3):317-23. Available at: [www.scielo.br](http://www.scielo.br) > Access on Aug 11th 2015.
- GARANHANI, M. L., MARTINS J. T., ROBAZZI, M. L. C. C., GOTELIPE, I. C.O Nursing work at intensive care unit: meanings for nursing technicians. *Rev. Eletrônica Saúde Mental Álcool e Drogas.* Ribeirão Preto, v. 4, n. 2, 2008. Available at: [www.pepsic.bvsalud.org](http://www.pepsic.bvsalud.org) > Access on Apr 21st 2015.
- GIL, A. C. How to develop research projects. 4th Ed. – 12 reimpr.- São Paulo: Atlas, 2009.
- GOMES, A. M. Nursing at Intensive Care Unit. 2nd Ed. rev. e amp. São Paulo. EPU, 1988.
- MARCONI, M. A.; LAKATOS, E. M. Scientific Methodology Basis. 6<sup>a</sup> ed. São Paulo, SP:Atlas, 2005.
- MELO, A. C. L.; MENEGUETI, M. G.; LAUS, A. M. Profile of Intensive Care: support for nursing staff. Ver. enferm UFPE online, Recife, 8(9):3142-8, set., 2014. Available at: file:///C:/Users/user/Downloads/4912-61712-1-PB.pdf Access on: Sep 14th 2015.
- MORTON, P. G., FONTAINE, D.K., HUDAQ, C. M., GALLO, B. M. Critical Nursing Care: A Holistic Approach. 8<sup>a</sup> Ed. Rio de Janeiro. Guanabara Koogan, 2007.
- MURTA, G. F. Knowledge and Practices: Guide to Nursing Teaching and Learning. Vol. 4. 2<sup>a</sup> Ed. ver. São Paulo. Difusão Editora, 2006.
- PÁDUA, E. M. M. Research Methodology: Theoretical Practical Approach. 11<sup>a</sup> ed. São Paulo, 2005.
- SIQUEIRA, A. B.; CORDEIRO, R. C.; PERRACINI, M. R., RAMOS, L. R. Functional impact of hospitalization of elderly patients. *Saúde Pública,* vol.38 no.5 São Paulo. 2004. Available at: [www.scielo.br](http://www.scielo.br) > Access on Sep 12th 2015.
- VIANA, R. A. P. P. Nursing in Intensive Care: Practice based on Evidence. São Paulo. Editora Atheneu, 2011.
- 1660, AFONSO PENA STREET – AP 201 – CENTRO, CASCAVEL – PR Zipcode 85810-100 PHONE +55 (45) 9971-6684 maraschin@unipar.br.

#### PROFILE OF HOSPITALIZED PATIENTS IN ADULT INTENSIVE CARE UNIT

**ABSTRACT:** The Intensive Care Unit (ICU) was developed in the 20th century, on the need to recover / stabilize seriously wounded patients. With the increasing life expectancy, the raise on chronic diseases and high complexity treatments, as well as invasive procedures, the ICU comes with a more qualified life bearer. The ICU is the appropriate place to recoverable severe patients, who need assistance and monitoring 24 hours a day. The aim of this research is to characterize the profile of patients hospitalized in the Intensive Care Unit of a hospital in Cascavel/PR. It was a quantitative, documental study of descriptive and retrospective approach. 296 medical records were studied from January to April 2015. The observed variables in this study were gender, age, city of origin, length of stay, main causes for hospitalization, release / death. Among the main findings, there is the prevalence of males, in both cases, number of ICU admissions and number of deaths. The main cause of death for women and men was the cardiovascular diseases and expressive prevalence of elderly, representing 66.55% of total admissions. The characterization of ICU patients can aid in the guidelines of admissions and releases of this unit, as the knowledge of critical patients' profile favors the establishment of objective criteria for this end, helping all multidiscipline team.

Keywords: Intensive Care Unit; Assistance; Critical care.

#### PROFIL DES PATIENTS HOSPITALISÉS DANS L'UNITÉ DE SOINS INTENSIFS DES ADULTES

**RÉSUMÉ:** L'unité de Soins Intensifs (USI) a été créée au cours du XXe siècle, pour la nécessité de récupérer / stabiliser les patients gravement blessés. Avec l'espérance de vie de plus en plus haute, l'augmentation des maladies chroniques et des traitements de haute complexité et des procédures invasives Les USIs émergent comme support de vie, de plus en plus qualifié. Celle-ci est l'endroit approprié pour les patients graves récupérables qui ont besoin d'assistance et de surveillance 24 heures. Cette étude vise à caractériser le profil des patients admis à l'Unité de Soins Intensifs des adultes d'un hôpital dans la ville de Cascavel, au Paraná. Il a été une étude quantitative, documental de caractère descriptif et rétrospective. Pour cette étude, 296 dossiers ont été étudiés de Janvier à Avril 2015. Les variables utilisées dans cette étude ont été le sexe; âge; ville d'origine; la durée du séjour; les principales causes d'hospitalisation; libération/décès. Parmi les principales conclusions, nous avons la prévalence des hommes, tant quando il s'agit du nombre d'admissions à l'Unité de Soins Intensifs, comme du nombre de décès.

La principale cause de décès dans les deux sexes ( masculins et féminin) a été les maladies cardiovasculaires et avec une significative prévalence des personnes âgées, représentant 66,55% du total des entrées. La caractérisation des patients en Soins Intensifs peut aider dans les directives des admissions et libérations de cette Unité de Santé, car la connaissance du profil des patients critiques favorise la mise en place de critères objectifs à cet effet, contribuant ainsi à toute l'équipe multidisciplinaire.

Mots-clés: Unités de Soins Intensifs; Assistance; Soins Intensifs.

#### PERFIL DE LOS PACIENTES INTERNADOS EN LA UNIDAD DE TERAPIA INTENSIVA ADULTA

**RESUMEN:** La Unidad de Terapia Intensiva (UTI) surgió en el siglo XX, frente a necesidad de recuperación de los pacientes gravemente heridos. Con la expectativa de vida cada vez mayor, el aumento de enfermedades crónicas y los tratamientos de alta complejidad y los procedimientos invasivos, para lo tanto surge la UTI como soporte de vida cada vez más cualificado. Siendo la UTI el lugar apropiado para los pacientes graves que pueden recuperarse, estos necesitan de asistencia y monitorio 24 horas. Estos estudios tienen como objetivo caracterizar el perfil de los pacientes internados en la Unidad de Terapia Intensiva Adulta de un hospital de la ciudad de Cascavel/PR. Fue un estudio de carácter cuantitativo, documental y descriptivo retrospectivo. Fueron estudiados 296 prontuarios en el periodo de enero a abril de 2015. Las variables observadas en este estudio fueron: edad; ayuntamiento de procedencia; tiempo de internación; principales causas de internación; alta/defunción. Entre los principales hallazgos tenemos la prevalencia del sexo masculino, tanto no que refiere al número de admisiones en la UTI, cuanto al número de defunciones, la principal causa de muerte tanto en el sexo femenino quanto en el masculino fueron las enfermedades cardiovasculares, prevalentes en los ancianos, representando 66,55% de la totalidad de dimensión. La caracterización de pacientes de la UTI puede auxiliar en las directrices de admisiones en alta de esas unidades, pues, el conocimiento del perfil de los enfermos críticos favorece en los establecimientos de criterios objetivos para esa finalidad, auxiliando así todo el equipo multidisciplinar.

Palabras Claves: Unidades de Terapia Intensiva; Asistencia, cuidados críticos.

#### PERFIL DE PACIENTES INTERNADOS NA UNIDADE DE TERAPIA INTENSIVA ADULTO

**RESUMO:** A Unidade de Terapia Intensiva (UTI) surgiu no século XX, diante da necessidade de recuperar/estabilizar pacientes gravemente feridos. Com a expectativa de vida cada vez maior, o aumento de doenças crônicas e os tratamentos de alta complexidade e procedimentos invasivos a UTI surgem como suporte de vida cada vez mais qualificado. Sendo a UTI o lugar apropriado para os pacientes graves recuperáveis, que necessitam de assistência e monitorização 24 horas. Este estudo tem como objetivo caracterizar o perfil dos pacientes internados na Unidade de Terapia Intensiva Adulto de um hospital da cidade de Cascavel/PR. Foi um estudo de caráter quantitativo, documental do tipo descriptivo e retrospectivo. Foram estudados 296 prontários no período de janeiro a abril de 2015. As variáveis observadas neste estudo foram sexo; idade; município de procedência; tempo de internação; principais causas de internação; alta/óbito. Dentre os principais achados temos a prevalência do sexo masculino, tanto no que diz respeito ao número de admissões na UTI, quanto ao número de óbitos, a principal causa de morte tanto no sexo feminino quanto no masculino foram às doenças cardiovasculares e expressiva prevalência de idosos representando 66,55% do total de admissões. A caracterização de pacientes de UTI pode auxiliar nas diretrizes das admissões e altas dessa unidade, pois, o conhecimento do perfil dos doentes críticos favorece o estabelecimento de critérios objetivos para essa finalidade, auxiliando assim toda a equipe multidisciplinar.

Palavras-chave: Unidades de Terapia Intensiva; Assistência; cuidados críticos.