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ORIGINAL ARTICLE

SOCIODEMOGRAPHIC AND CLINICAL CHARACTERIZATION OF FOREIGN ADULTS / IMMIGRANTS IN A HOSPITAL

CARACTERIZAÇÃO SOCIODEMOGRÁFICA E CLÍNICA DE ESTRANGEIROS/ IMIGRANTES ADULTOS INTERNADOS EM UM HOSPITAL

CARACTERIZACIÓN SOCIODEMOGRÁFICA Y CLÍNICA DE EXTRANJEROS / INMIGRANTES ADULTOS INTERNADOS EN UN HOSPITAL

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ABSTRACT

Objective: to carry out the sociodemographic and clinical characterization of foreigners / adult immigrants. **Method:** quantitative, retrospective, descriptive study, composed of 46 medical records of foreign adults hospitalized in a school hospital. The data collection was done from records in these medical records, seeking sociodemographic and clinical information through a collection instrument constructed based on the hospital admission form and the report on the request for a Hospital Inpatient Authorization (HIA). The data was tabulated in Excel® for Windows 2007 and analyzed in the XLStat2016® program. **Results:** the majority of the patients were men, with a mean age of 36 years, single, full-grade, white, Catholic, Paraguayan, fluent in Portuguese, maintenance and repair workers. They entered the hospital through SIATE and MECS with frequent diagnoses for injuries, poisoning and other external causes. Most progress to hospital discharge. **Conclusion:** the study led to the characterization of a specific population served in the service. **Descriptors:** Emigration; Immigration; Border Areas; Epidemiology; Delivery Of Health Care; Hospitalization.

RESUMO

Objetivo: realizar a caracterização sociodemográfica e clínica de estrangeiros/imigrantes adultos. **Método:** estudo quantitativo, retrospectivo, descritivo, composto por amostra de 46 prontuários médicos de adultos estrangeiros internados em um hospital escola. A coleta de dados foi realizada a partir de registros nestes prontuários, buscando-se informações sociodemográficas e clínicas por meio de instrumento de coleta construído com base no formulário de internação hospitalar e no laudo para a solicitação de Autorização de Internação Hospitalar (AIH). Os dados foram tabulados no Excel® for Windows 2007 e analisados no programa XLStat2016®. **Resultados:** a maioria dos pacientes era formada por homens, com idade média 36 anos, solteiros, com 1º grau completo, brancos, católicos, paraguaios, fluentes em português, trabalhadores da área de manutenção e reparação. Adentraram o hospital pelo SIATE e SAMU com diagnósticos frequentes para lesões, envenenamento e outras causas externas. A maioria evolui para a alta hospitalar. **Conclusão:** o estudo propiciou a caracterização de uma população específica atendida no serviço. **Descritores:** Emigração; Imigração; Áreas de Fronteira; Epidemiologia; Assistência à Saúde; Hospitalização.

RESUMEN

Objetivo: realizar la caracterización sociodemográfica y clínica de extranjeros / inmigrantes adultos. **Método:** estudio cuantitativo, retrospectivo, descriptivo, compuesto por muestra de 46 prontuarios médicos de adultos extranjeros internados en un hospital escuela. La recolección de datos fue realizada a partir de registros en estos prontuários, buscando informaciones sociodemográficas y clínicas por medio de instrumento de recolección construído con base en el formulario de internación hospitalaria y en el laudo para la solicitud de Autorización de Internación Hospitalaria (AIH). Los datos se tabularon en Excel® para Windows 2007 y analizados en el programa XLStat2016®. **Resultados:** la mayoría de los pacientes estaba formada por hombres, con edad media 36 años, solteros, con 1º grado completo, blancos, católicos, paraguayos, fluentes en portugués, trabajadores del área de mantenimiento y reparación. Adentraron el hospital por el SIATE y SAMU, con diagnósticos frequentes para lesiones, envenenamiento y otras causas externas. La mayoría evoluciona hacia alta hospitalaria. **Conclusión:** el estudio propició la caracterización de una población específica atendida en el servicio. **Descriptores:** Emigración; Inmigración; Zonas fronterizas; Epidemiología; Prestación de Atención de Salud; Hospitalización.

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INTRODUCTION

This research was motivated by the visible increase of immigrants / immigrants in the city of study coming from Brazil - Paraguay / Argentina border countries, as well as from other countries, since, geographically, Cascavel / PR is a city of transit route for these to access other states of the country. However, many remain in the city in search of work opportunities in local industry and commerce, using the state apparatus in terms of access to education, health, social assistance, among others. In the hospital under study, it has been empirically observed in the last years an increase in the care of this population, triggering the interest in knowing the characteristics of the same.

In this context, immigration is defined as a displacement of people in space and time; however, this displacement in physical space is determined in the social, economic, political, and cultural sense which, in turn, is marked by language, by beliefs and values and knowledge. The foreigner is given the name of the person who carries out the immigration, and the latter, for various reasons, enters into another country.¹

Brazil offers a universal health system and, based on this, the right to health extends even to the immigrant / foreigner. This establishes a logic that is behind the whole system and makes the service can not be denied. In the Unified Health System (UHS), there are no financial costs for the patient and the immigrants are not differentiated in relation to the Brazilians, all are equally patients in search of health care. But, by an explicit logic, this does not mean that there are no barriers to immigrants' access to health in Brazil, and more than the establishment of the right to health in the Constitution is necessary. The implementation of the policies that guarantee this right in Brazil is still a challenge for public managers.²

When studying the rights of minorities, there is a need to establish multicultural public policies that face the inequalities observed in the daily practices of foreigners/immigrants. The heterogeneity with the presence of individuals and collectivities that share other cultural matrices, such as foreigners/immigrants, present new challenges for public managers in the processes of implementation of government policies and programs in all sectors of society.²

In this context, the health of foreigners/immigrants is a challenge for public managers regarding the guarantee of the right of access

to health services, as well as the need to create policies and strategies for promotion, prevention and cure.

Thus, the guiding question of this study was: who are the foreign / immigrant patients hospitalized at a school hospital in the west of Paraná and its sociodemographic and clinical characteristics? In this sense, this research provides knowledge about the subject, still deficient in the scientific literature, and is of paramount importance, since this population uses the SUS and needs access and assistance in an integral and egalitarian way.

OBJECTIVE

- To carry out the sociodemographic and clinical characterization of foreigners / adult immigrants.

METHOD

A quantitative, retrospective, descriptive study that presents the sociodemographic and clinical characterization of foreigners / adult immigrants hospitalized at a School Hospital in western Paraná (PR), Brazil. This hospital has 210 active beds³, being a reference in the region for trauma care and covering the 25 municipalities of the 10th Health Regional of the Health Secretariat of the State of Paraná - PR (SESA-PR).

The study sample consisted of 46 medical records of foreigners / adult immigrants who met the criteria for inclusion, of a total of 52 medical records obtained in the electronic medical records system Tasy Philips (health management system) and handbooks accessed in the sector of Medical and Statistical Archives Service (MSAS) of the Hospital for the period from 2011 to 2016.

Inclusion criteria were all foreign / adult immigrant patients hospitalized at a school hospital in western Paraná. Those of exclusion, were all foreign women who hospitalized for obstetric causes, as well as children, and incomplete and non-localized medical records in SAME and Tasy Philips.

The data collection was done from the records in these medical records, seeking sociodemographic and clinical information pertinent to hospitalizations. The data collection instrument was constructed based on the hospitalization form of the institution being investigated and the report for requesting the Hospital Inpatient Authorization (HIA). This included: gender; age; schooling; marital status; bearer SUS card; profession; nationality; municipality of residence; reason for hospitalization; main diagnosis; length of hospital stay; internment

due to external causes; specialty of service; hospitalization unit; laboratory and imaging exams; medicines; procedures; ducts and outcomes.

For the variable age, a classification of age group was used every ten years. For schooling, adopted the classification available in Tasy Philips electronic medical record system. For the profession, the Brazilian Classification of Occupations was used ⁴ and for the main diagnosis, the International Statistical Classification of Diseases (ICD10) was registered in the patient's HIA.⁵

It should be noted that, for the laboratory, imaging, medication, and procedures examinations, only the first records of each of these were recorded in medical records. The drugs were grouped according to the *Anatomical Therapeutic Chemical* (ATC) classification system for the main group and first classification level.⁶

The information was tabulated in Excel® for Windows 2007 and all statistical analyzes performed in the XLStat2016® program. The sociodemographic characterization was performed by means of descriptive statistics (absolute and relative percentages, means and standard deviation and Chi square test for Adherence) for the variables of the general profile of the foreigners / immigrants. For the clinical characterization, the absolute and relative frequencies were obtained and, later, the Chi-square test for Independence was performed for each group of variables (laboratory tests, imaging tests, therapeutic drugs, comorbidities, procedures), for to verify a significant difference in the frequencies of the response categories of the same. Chi Square for Adherence was performed for the following variables: characteristics of hospitalization; medications at the level of anatomical group classification; ducts and outcomes.

The test decision level was $p = 0.05$, where $p < 0.05$ indicates that the categories are statistically different, ie "p significant", and $p > 0.05$ indicates that the categories are not statistically different, are equal, ie, "non-significant p".

The research was developed respecting all ethical precepts according to Resolution 466/12 of the National Health Council (NHC), with favorable opinion of the Research and Ethics Committee (REC) of the Unioeste under No. 1,664,856, CAAE 57044616.6.0000.0107 and signed a term of commitment for the use of data by researchers.

RESULTS

46 manual and electronic medical records of foreign / immigrant patients hospitalized at a school hospital in western Paraná were analyzed. The results were grouped in sociodemographic and clinical characterization.

◆ Sociodemographic Characterization

The results indicate that, of the total of 46 medical records analyzed, the majority of foreign / immigrant patients hospitalized were men (69.57%, $n = 32$). The minimum age was 18 years and the maximum was 82, with mean and standard deviation of $36 + 18$ years. The majority of the patients were single (43.48%, $n = 20$) and married / amassed (32.61%, $n = 15$). It was noted that, for 17.39% ($n = 8$) No Record (NR) for this variable. In relation to schooling, 23.91% ($n = 11$) had 1st grade of complete schooling, but in 41,30% ($n = 19$) NR. The majority were declared white (69.57%, $n = 32$), followed by pardos (15.22%, $n = 7$) and blacks (13.04%, $n = 6$). As for religion, Catholics prevailed (45.65%, $n = 21$), followed by evangelicals (19.57%, $n = 9$) and NR to 13.04% ($n = 6$).

In the country of origin, about half of the hospitalized patients came from Paraguay (50%, $n = 23$), followed by Argentina (13.04%, $n = 6$) and Haiti (13.04%, $n = 6$). However, the majority had fluency in the Portuguese language (80.43%, $n = 37$) and 10.86% ($n = 5$) NR about this variable. More than half (54.35%, $n = 25$) did not carry the UHS Card. The municipality of residence of the majority was Cascavel (71.74%, $n = 33$).

In the variable profession, only 50% ($n = 23$) of the records were recorded, according to the occupational groups of the Brazilian classification of occupations, ⁴ the groups of "Maintenance and repair workers" (15.22%, $n = 7$), "Workers in the production of industrial goods and services" and "Service workers, retailers in stores and markets" (10.87%, $n = 5$) respectively. All variables had a significant difference between their frequencies ($p < 0.05$), except for the variable age group ($p = 0.384$) and UHS card ($p = 0.553$).

◆● Clinical Characterization

◆ Characteristics of hospitalization

The most frequent entrance door at the school hospital in the west of Paraná occurred through the Integrated System of Attention to Trauma and Emergencies (SIATE), (21.74%, $n = 10$), followed by the Emergency Care Unit (ECU), (19.57%, $n = 9$). Transfer of ECU, with patients transported by the Mobile Emergency Care Service (MECS) and free demand

accounted for (17.39%, $n = 8$), respectively. The majority of patients remained hospitalized for up to seven days (58.69%, $n = 27$), followed by 08-14 days (21.73%, $n = 10$) and with more than 21 days of hospitalization (13.04%; $n = 6$). There were more hospitalizations in the years 2015 (41.30%, $n = 19$), 2014 (21.74%, $n = 10$) and 2013 (19.57%, $n = 9$).

Among the types of hospitalization, 39.13% ($n = 18$) of these were due to external causes, such as traffic accident (19.57%, $n = 9$), work accident (10.87%, $n = 5$) and violence (8.7%, $n = 4$). The rest of the hospitalizations occurred for other reasons, being the most frequent those referring to the gastrointestinal tract (17.39%, $n = 8$), Neurological System (8.79%, $n = 4$) and Respiratory System (6.52% $n = 3$). The specialty with the greatest number of hospitalizations was Traumatology and Orthopedics (41, 30%, $n = 19$), followed by Clinical Surgery (34, 78%, $n = 16$) and Neurology (13.04%, $n = 6$). The unit with the highest number of hospitalizations was the emergency department (54, 35%, $n = 25$), followed by the emergency room and the surgical unit (13.04%, $n = 6$) respectively, and the Intensive Care Unit UTI (10.87%, $n = 5$). All variables presented significant difference between their frequencies ($p < 0.05$), except for the hospitalization variable due to external causes ($p = 0.1403$).

In this study, there were no statistically significant differences between the frequencies of the main diagnoses, since a great variety of these occurred among the patients ($p > 0.05$). However, when these were analyzed by ICD 10, ⁵ groups, statistical significance ($p < 0.05$) was found, with the group "Injuries, poisoning and other external causes" (50%; $n = 23$), followed by digestive tract (13.04, $n = 6$), "infectious and parasitic" (10.87%, $n = 5$), and "abnormal clinical and laboratory findings" (8.70%; $n = 4$). The remainder of the patients' diagnoses ($n = 8$) distributed between the circulatory system, respiratory apparatus, subcutaneous tissue and the musculoskeletal system and connective tissue, neoplasias and genitourinary apparatus. (Table 1).

Regarding hospitalization reasons, those that prevailed were related to musculoskeletal and cutaneous lesions (41.30%, $n = 19$), followed by gastrointestinal (17.39%; $n = 8$), polytrauma and neurological disorders 8.70%; $n = 4$ each, hospital infection and respiratory system, with 6, 52%; $n = 3$, cranioencephalic trauma and genitourinary system, with 4.35%; $n = 2$.

♦ Laboratory and Imaging Exams

Around 50 types of examinations were requested and performed in inpatients. Among the different types of tests, 259 (59.82%) biochemical exams were observed; 76 (17.55%), haematological; 34 (7.86%), immunological; 33 (7.62%), microbiological; ten (2.31%) of urine; seven (1.62%), hormonal; five (1.15%), coprological; five (1.15%), pathological; two (0.46%), mycological; one (0.23%), toxicological and one (0.23%) pleural fluid, totaling 433 (100%) requested tests.

It was possible to observe significant statistical differences for the tests Bilirubin, Chlorine, Uric Acid, Lactic Dehydrogenase, Lactic Acid, Creatinofosfoquinase, Alkaline Phosphatase, Calcium, Phosphorus, Magnesium, Pro Calcitonin, Gasometry, Fungi Research, Paracoccidioidomycosis Serology, Pleural Fluid Routine, Toxin A / B Toxin A / B Toxin A / B Toxin A / B Toxin A / B Toxin Acid Bacillus, Human Chorionic Gonadotrophin, Free Thyroxine, Serology for Hepatitis C, Deoxyribonucleic acid Antibody, FNA, Serology for Human Immunodeficiency Virus (HIV), Prostate Specific Antigen (PSA), Cytomegalovirus serology, serology for Simple Herpes, serology for Hepatitis B, serology for Leptos ($p < 0.05$), but, these were not the most frequently performed.

Despite the studies of Creatinine, Potassium, Sodium, Urea, C Reactive Protein (PCR), Prothrombin Time (PT), Partial Activated Thromboplastin Time (PATT), Transaminase Aspartate Aminotransferase (TGO / TAA) and Alanine Transaminase Aminotransferase TGP / ATA) and glucose did not present statistical differences ($p > 0.05$), but these were considered the most frequent among foreign patients. The only test considered statistically significant and more frequent among these patients was the hemogram ($p < 0.05$).

Approximately 106 (100%) imaging studies were performed on inpatients, including chest X-ray, with 18 (16.98%) requests; skull tomography, with 13 (12.26%); the Right Upper Limb RX (RUL), with nine (8.49%) and the ECG, with eight (7.55%), among others.

It was possible to observe significant differences for the X-ray (RX) imaging studies, thoracic spine, RX lumbar spine, RX sacral spine, RX pelvis, RX Lower Left Limb (LLL), RX Lower Right Limb (RX) (MSE), RX Upper limb RL, upper abdomen RX, skull tomography, thoracic tomography, cervical spine tomography, lumbar spine tomography, lower abdomen tomography, upper abdomen

tomography, ultrasonography (USG) of total abdomen, electrocardiogram (ECG), transthoracic echography and transvaginal ultrasonography ($p < 0.05$). The only exam that did not present a significant difference was the chest X-ray ($p = 0.1403$), however, it was the most carried out exams..

♦ Medications - Medication Classification Anatomical Therapeutic Chemical (ATC)

According to the ATC classification (6) for the main group, the following anatomical groups predominated: A - Food and metabolism; B - Blood and hematopoietic organs; C - Cardiovascular Apparatus; D - Dermatological drugs; H - Hormone preparations for systemic use; J - General anti-infectives for systemic use; M - Musculoskeletal System; N - Nervous System; R - Respiratory System. These groups refer to the organ or system in which the drugs act. It was possible to observe that there was a statistical difference in the distribution of frequencies between the classes ($p < 0.05$), indicating a higher consumption of

medications related to the Musculoskeletal System (70%) and Blood and Hematopoietic Organs (62%).

Second-level drug classes, in which the therapeutic subgroup is concerned, presented a significant statistical difference ($p < 0.05$) for: A02- Antacids; A07- Antidiarrheals, anti-inflammatory agents, intestinal anti-infectives; A10- Medicines used in diabetes; B05 - Blood substitutes and solutions for infusion; C01- Heart therapy; C02- Antihypertensives; C03- Diuretics; C05 - Vasoprotectants; C08 - Calcium channel blockers; C10- Lipid modifying agents; D04- Antipruritics including antihistamines; H02- Corticosteroids for systemic use; J04- Antibacterials (Tuberculosis); J05- Antivirals; M01- Anti-inflammatory; N01- Anesthetic; N02- Analgesic; N05- Psychoepileptics; N06- Psicoanapléticos and R06- Antihistaminic for systemic use. A03- Anti-emetic agents, anti-nauseants ($p = 0.1403$), and B01- Antithrombotic agents showed no difference ($p > 0.05$) (Table 1).

Table 1. Absolute (FA) and relative (%) frequencies of drug use (yes) or (no). P value of the Chi-square test of Independence. Cascavel (PR), Brazil, 2016.

Detailed classes of medications (n = 46)	Yes		No		p-value
	FA	%	FA	%	
A02 - Antacids	30	65%	16	35%	0.039*
A03 - Antispasmodic, anticholinergic and propellant agents	29	63%	17	37%	0.0768
A04- Antiemetics and anti-nausea	18	39%	28	61%	0.1403
A07- Antidiarrheals, anti-inflammatory agents, intestinal anti-infectives	1	2%	45	98%	<0.001*
A10- Medications used in diabetes	4	9%	42	91%	<0.001*
B01- Antithrombotic agents	19	41%	27	59%	0.2381
B05- Blood substitutes and solutions for infusion	38	83%	8	17%	<0.001*
C01- Heart Therapy	6	13%	40	87%	<0.001*
C02- Antihypertensives	2	4%	44	96%	<0.001*
C03- Diuretics	7	15%	39	85%	<0.001*
C05 - Vasoprotectants	3	7%	43	93%	<0.001*
C08 - Calcium channel blockers	1	2%	45	98%	<0.001*
C10- Lipid modifying agents	2	4%	44	96%	<0.001*
D04- Antipruritics including antihistamines	1	2%	45	98%	<0.001*
H02- Corticosteroids for systemic use	4	9%	42	91%	<0.001*
H03- Thyroid Therapy	1	2%	45	98%	<0.001*
J01- Antibacterials for systemic use	30	65%	16	35%	0.039*
J02- Antimycotics for systemic use	1	2%	45	98%	<0.001*
J04- Antibacterials (Tuberculosis)	4	9%	42	91%	<0.001*
J05- Antivirals	3	7%	43	93%	<0.001*
M01- Anti-inflammatory	32	70%	14	30%	0.0079*
N01- Anesthetic	8	17%	38	83%	<0.001*
N02- Analgesic	45	98%	1	2%	<0.001*
N05- Psychoepileptics	9	20%	37	80%	<0.001*
N06- Psicoanapléticos	2	4%	44	96%	<0.001*
R06- Antihistamine for systemic use	2	4%	44	96%	<0.001*

♦ Comorbidities

Only eight patients had one or more comorbidities, and none of them had a significant difference ($p = 0.880$) and with the most common comorbidities being HIV (10%; n

= 3), Diabetes Mellitus (10%; n = 3) (6%, n = 2) and arterial hypertension (6%, n = 2).

When assessing the association between the different types of comorbidities of these patients and their respective hospitalization diagnoses, ^(ICD 10), there was no relationship

between comorbidities and the diagnosis of these patients ($p = 0.448$).

◆ Procedures

All procedures presented significant differences ($p < 0.05$), except for delayed bladder catheterization ($p = 0.3763$) and surgery ($p = 0.7680$). The most frequent procedures were peripheral venous puncture, surgery, and delayed bladder catheterization.

◆ Conduits and Outcomes

For both ducts and outcomes, there were significant differences ($p < 0.05$). Surgical treatment (surgery, thoracic drainage, sutures and tracheostomy) was the most used procedure (73.91%, $n = 34$), followed by clinical treatment (21.74%, $n = 10$), and only one individual (17%) in surgical and clinical treatment and another patient (2.17%) in stabilization. Regarding the outcome, the patients, were discharged from the hospital 67.39%, $n = 31$; hospital discharge 15.21%, $n = 7$; hospital transfer 8.69%, $n = 4$ and death 8.69%, $n = 4$).

DISCUSSION

◆◆ Sociodemographic Characterization

This study does not aim to recognize a profile of the actual demand of the population, but to verify the characteristics of a specific demand, without inferring the magnitude of the problem and, rather, how it presents itself in the scope of a school hospital in the west of Paraná. It should be noted that, in a literature review about the subject matter, there was a low scientific production, which made it difficult to discuss the results. In order to do this, we searched for the available framework that was closer to the studied reality.

The results of the sociodemographic characterization indicate that the majority of foreign / immigrant patients admitted to the hospital were men, with a mean age of 36 years, single, with a first degree of complete schooling, whites and Catholics.

The greater number of hospitalizations of men may be related to their greater vulnerability to external causes, sometimes as an author or a victim, and also because of the greater propensity for chronic diseases due to risk factors and neglect of self-care.⁷

The mean age found may also be related to greater risk exposure, considering this a time of life where the individual is of productive age. Low levels of schooling can influence health care and, in the case of foreigners, cause cultural problems and social inclusion. Regarding skin color and religion aspects,

these may be related to discrimination of the foreigner / immigrant.⁸

About the country of origin, about half of the patients admitted to the hospital were from Paraguay and did not carry the UHS Card. Most of these patients, had fluency in the Portuguese language, and resided in Cascavel.

Knowing the country of origin and the municipality of residence of the inpatients makes it possible to know the flow of them in the local health system, the diagnosis of possible problems and distortions, and the evaluation of referrals in the various points of attention to health.⁹

In Brazil, the right to health is universal and, thus, any individual, regardless of nationality, may have access to the UHS, and it is extremely important to have the UHS Card, also popularly known as "UHS card." However, the process for obtaining such a document has become a barrier to access to medical services, especially for foreigners. In this research, it is noted that about half of the foreigners/immigrants hospitalized at the hospital studied did not have the card, but received hospital care.²

The dominance of the language of the receiving country, by foreigners/immigrants, contributes to their acculturation and, consequently, to a better perception of the medical needs and the search for formal health treatments.²

In the variable profession, it was recorded in half of the medical records, with the predominance of "Maintenance and repair workers". Many foreigners/immigrants, especially newcomers, are subjected to unstable and low-paid jobs, because of fewer opportunities for language and local culture, legal documents and social isolation. Associated with this, it is worth emphasizing that foreigners face conflicts of values in the family, school and work, economic difficulties and precarious housing, becoming more socially and economically vulnerable.⁸

In this context, these are more vulnerable and make up a group whose access to health services is hampered by several factors that pose a greater risk to health.

◆◆ Clinical Characterization

◆ Characteristics of hospitalization

Internment is defined as a set of services intended for situations in which health care is provided to the individual from the moment he is admitted to the hospital service.¹⁰ The entrance door to this service may vary according to the form of regulation of the access and characteristics of the region. In

this study, it can be seen that the majority of foreign / immigrant patients entered the system through prehospital care, ie, SIATE and MECS.

The verification of the entrance door to the service constitutes an important observatory of the health condition of a given population, because when identifying the origin of the patient, it makes possible to program improvements of the service network and the resolubility of the health system.⁹

Another variable that is directly related to the question of resolubility and quality of care in the institution providing care to the patient, is the length of hospital stay, with the majority being hospitalized for up to seven days, followed by eight to 14 days of hospitalization.

The length of hospital stay, especially in university hospitals, may be prolonged hospitalization periods, which are higher than regional and national averages, ranging from 4.5 to 6.8 days. The complexity of the hospital, the role of hospital admission via emergency room, the clinical profile of the patients and the type of procedures offered are factors that interfere with the patient's stay in the institution.¹⁰

Regarding the number of hospitalizations, it was observed that there was a gradual increase in hospitalizations between 2011 and 2015. This search for foreigners / immigrants for health care may be a difficult factor for the management, since the resources of UHS to municipalities and health services, the traveling population is not accounted for but, per capita.¹²

Among the types of hospitalization, the following were the ones due to external causes (traffic accident, work accident and violence). This finding corroborates the results observed for other variables analyzed in this same study, as for the specialties where there was a greater number of hospitalizations in orthopedics, surgical clinic and neurology; for the classification of the ICD 10 groups, in which the highest frequency of the group "Injuries, poisoning and other external causes" was found, and the main reasons for hospitalization, were those related to musculoskeletal and cutaneous lesions, gastrointestinal tract involvement and polytrauma.

The hospitalizations due to external causes generate an economic impact on the health system, in which it reflects negatively, generating a burden for the increasing increase of hospitalizations, which, in some cases, are of long permanence, due to the

degree of complexity, as well as burden for the patient since can cause damage, injury, disability and in some cases, even death.¹³

Among external causes, traffic accidents and violence represent the main causes of hospitalization. Its occurrence is related, in most cases, to attitudes and postures that lead to the increase of risks and, to situations related to them, being necessary the epidemiological surveillance of these causes. Surveillance aims to subsidize actions to address the determinants and constraints of external causes, with a view to preventing health.¹⁴

Internations due to external causes most often characterize trauma, which is defined as the set of disturbances or any injury to tissue, organ or part of the body caused suddenly by a physical agent of etiology, nature and extent varied and predominantly from external sources. It represents a serious public health problem of growing relevance, as it causes important social and economic consequences, in addition to the imminent risk of death or disability, temporary or permanent. The high cost of recovery and worsening of quality of life are challenging factors for the UHS.¹³

At this juncture, the foreigner is more vulnerable, as he is subjected more often to unhealthy work activities, low wages, poor housing conditions, and more exposed to tensions, conflicts, violence, diseases and social exclusion.⁸

Also, it was verified that the unit with the greatest number of hospitalizations was the first aid (PS), which indicates a possible low turnover of beds in the institution, generating overcrowding in this sector, both justified by the fact that the hospital is a reference for traumatology and orthopedics . It is noteworthy that in the routine, of the institution, the patient is submitted to a surgical procedure and returns to the PS and remains hospitalized until the hospital discharge, which ends up uncharacterizing the emergency unit, which must provide the first care and destine the patient to a final conduct in another unit.⁹

♦ Laboratory and Imaging Exams

The laboratory tests of Creatinine, Potassium, Sodium, Urea, PCR, Time of Prothrombin (TAP), KPTT (TTPA), TGO, TGP and Glucose were considered the most frequent among the foreign patients, however, do not present a significant difference ($p < 0,05$). The only laboratory test considered statistically significant and more

frequently performed among patients was the hemogram ($p < 0.05$).

Laboratory tests help in the diagnosis, treatment and proper management of patients. The interpretation of blood biochemistry, in the routine of patient care, is extremely important, since many biochemical tests help in detecting changes in the body against different diseases.

Exams identified in this study, such as creatinine and urea, are used for the evaluation of renal function; potassium and sodium, for the detection of hydroelectrolytic alterations; PCR, as a marker of infection / inflammation; TAP and KPTT, for evaluation of hemostasis; AST (TGO) and ALT (TGP), for the evaluation of hepatic function and glucose, for glucose changes. The hemogram is undoubtedly the most requested exam in the medical surgical clinic, since it allows the evaluation of any systemic disease.¹⁵

Laboratory tests are more frequently requested in units such as ER and ICU, and in this study, the highest number of hospitalizations occurred in these sectors. In a study carried out in an emergency unit of a teaching hospital, the most requested exams by the medical team were laboratory examination (blood), diagnostic imaging (X-rays, ultrasound and tomography), urinary tape and electrocardiogram.¹⁶ In another study in the ICU of a university hospital, the most commonly requested tests were sodium, potassium, calcium, phosphorus, magnesium, serum urea, prothrombin time (TAP), activated partial thromboplastin time (APTT), lactic acid, arterial blood gas, capillary glycemia, fasting blood glucose, blood count and platelets.¹⁷ In the case of imaging tests, it was possible to observe significant differences for several exams. The chest X-ray examination was the most performed, followed by cranial tomography; however, chest X-ray showed no significant difference ($p = 0.1403$).

Imaging examinations allow rapid diagnoses of patients for treatment in acute situations, as well as assist in the follow-up and treatment of the chronic patient. The X-ray, known as X-ray, is used for the diagnosis of various clinical and surgical conditions, the first imaging exam being performed in an emergency unit, since it is usually painless and inexpensive. Computed tomography, also an X-ray technique, due to the use of contrast, increases the capacity of differentiation between tissues, facilitating the visualization of lesions when compared to previously unrecognized images, and with

that, to follow the evolution of the patient and intervene more effectively.¹⁸

In this study, it was observed that, regarding the reasons for hospitalization, those related to musculoskeletal and cutaneous lesions, gastrointestinal tract impairment, polytrauma and neurological system prevailed, which could justify the higher frequency of imaging tests involving these physiological systems.

It is also, worth noting that this study was carried out in a school hospital where there are no guidelines for requesting exams, which makes it difficult to further analyze the results found.

◆ Medications - Medication Classification Anatomical Therapeutic Chemical (ATC)

It was possible to observe that there was a statistically significant difference in the distribution of frequencies between the drug classes, according to the anatomical group ($p < 0.05$), indicating a higher consumption of Medications related to the Musculoskeletal System (70%) and Blood and Hematopoietic Organs (62%), which corresponds to the previous findings of this study, in which the main reasons for hospitalization are osteomuscular and cutaneous lesions, involvement of the gastrointestinal tract and polytrauma.

Second-level drug classes in the therapeutic groups presented a significant statistical difference ($p < 0.05$) for several classes, as shown in table 1, among which the following drugs with statistical significance and higher frequency were: N02 - Analgesic (Dipyrone, tramal and nalbuphine); B05 - Blood substitutes and solutions for infusion (0.9% sodium chloride solution) and M01 - Anti-inflammatories (ketoprofen). Again, these results corroborate with those presented previously, in which most hospitalizations due to trauma and more than half submitted to surgical management are evidenced, which justifies the use of these medications.

In the emergency sector, care due to external causes such as accidents and violence prevails, and pain is one of the main signs in cases of trauma, and its control is extremely important.¹⁹ Another important result for this discussion is the fact that more than 50% of the foreign patients have undergone surgical procedures during hospitalization, which frequently signals pain, which reinforces the use of analgesics and anti-inflammatories. In both emergency and surgery, volume replacement is necessary to maintain the patient's hemostasis, justifying the use of

solutions for infusion such as saline sodium chloride 0.9%.

In this context, a study carried out in a hospital in the south of Brazil obtained similar results regarding the use of analgesics and anti-inflammatories, with the most commonly used being ketoprofen, a non-steroidal anti-inflammatory drug (NSAID) not opioids. Still, the only opioid used was tramadol, often associated with dipyrone, paracetamol or other. These drugs are commonly used in the emergency sectors.²⁰ In the research institution, there is no protocol or standardization of the use of analgesia in traumatized and post-surgical patients, nor an instrument for the measurement of pain in the emergency department. Establishing protocols is extremely relevant in order to create well-structured work processes, seeking to offer quality patient care and assessing their specific needs.

◆ Comorbidities

The most common comorbidities among foreign patients / immigrants hospitalized were human immunodeficiency virus (HIV), Diabetes Mellitus, Smoking and Hypertension, all of which did not present a significant difference. Moreover, when the comorbidities of these patients and their respective hospitalization diagnoses (ICD 10) were associated, there was no relationship between these patients. Although there is no such relationship, the knowledge of comorbidities becomes relevant insofar as these can interfere in the health care of these individuals.

HIV causes a primary deficit in cellular immunity, weakening the immune system and, consequently, giving rise to opportunistic infections, neoplasias, and compromised nervous system. HIV infection does not distinguish between sex, ethnicity, age group or social class and is directly related to risk behaviors. The knowledge of such comorbidity detected in the study is important because immunocompromised individuals have peculiar needs and characteristics, demanding strategies and actions specific to the health services.²¹

A study carried out in a Unit of Communicable Diseases of a University Hospital of Londrina-PR, on the epidemiological profile of hospitalized HIV / AIDS adults, revealed a considerable prevalence of infection in single males, with low level of schooling and income. Regarding the clinical conditions among the main reasons for hospitalization, tuberculosis, oral moniliasis / candidiasis and

neurotoxoplasmosis were the most frequent; with an average of 9.4 days of hospitalization; with a predominance of female deaths and, among the terminal causes of death, septic shock and multiple organ dysfunction.²¹

It is emphasized that diseases such as diabetes and arterial hypertension constitute the first cause of hospitalizations in Brazil. Diabetes is a chronic disease that has multisystemic repercussions of a vascular and non-vascular nature, accounting for 9% of worldwide deaths. This is often accompanied by dyslipidemias, hypertension and metabolic changes that culminate in cardiovascular and neuropathic diseases. Hypertension is considered a chronic and degenerative disease that deteriorates several organs, besides being a risk factor for cardiovascular diseases and cerebrovascular accidents, being cause of fatal and non-fatal events.¹⁸

In this study, smoking was also observed as one of the comorbidities recorded in medical records. The main risk factors for the development of chronic noncommunicable diseases (NCDs) include smoking, excessive consumption of alcoholic beverages, inadequate diets and physical inactivity, with a high prevalence of smoking. This is related to the development of cardiovascular diseases, diabetes, neoplasms and chronic respiratory diseases. The prevalence of smoking is higher among males, race / black color, coming from a rural region, with a lower level of education and with a lower income.²²

◆ Procedures, Conduct and Outcomes

During the hospitalization period, patients underwent several invasive and non-invasive procedures, according to their clinical specificities. It was possible to verify, in statistical analysis, that all procedures presented significant differences ($p < 0.05$), except for the bladder catheter of delay ($p = 0.3763$; $n = 20$) and surgery ($p = 0.7680$; $n = 24$), although the most frequently performed procedures were peripheral venous puncture ($p < 0.01$, $n = 46$).

A study carried out in a university hospital presented similar results, where 70% of the patients underwent the bladder catheterization procedure and 70.8% underwent some kind of surgery.²³ In this study, peripheral venous puncture was not counted, however, this is a routine procedure in the hospital, since the medications, for the most part, are administered intravenously.

When analyzing the procedures variable, it was possible to verify that the result is in agreement with the medical conducts for the

treatment of patients, mainly surgical treatment (73.91%; n = 34), to which it is still possible to link the fact that majority of foreigners '/ immigrants' hospitalizations was due to trauma associated with external causes and attended by the orthopedic specialty.

The scenario presented in this study, on the health of the immigrant / foreigner in the hospital environment, shows impact for the Unified Health System (UHS), for society and for the individual himself who is outside his social context. The impact on the health system can be verified from the expenses incurred in emergency room and emergency room care, intensive care unit attendance, high hospital admission rates and post-discharge hospital discharge. In addition, the highest expenditure on health care is related to high complexity care, that is, hospitals such as this one, where complex procedures are performed that require an adequate structure and professional staff prepared and trained 24, as well as special preparation for individualized assistance, in order to meet the specificities demanded by the foreign / immigrant public.

In the outcome of hospitalization of foreign / immigrant patients, it was found that the majority of these patients were discharged from hospital, few continued to be followed up at the outpatient clinic of the hospital itself, and only four died.

CONCLUSION

Studies that provide knowledge about the characteristics of a particular population that uses UHS health services constitute instruments for health planning, as well as subsidizing health professionals to provide quality assistance to this clientele.

The underreporting of information in the medical record was one of the factors that hindered the development of this research, since, as stated, some variables were not included in the complete registry for all patients. In this way, the importance of registering patients' personal data, as well as notes of health professionals about the procedures, behaviors and intercurrents during the hospitalization period is reinforced. Continuing education actions with the entire health care team about the failure found are necessary for patient service and safety improvements.

Moreover, the shortage of studies on the subject limited the discussion of results and pointed out the need to broaden the research on the subject. Also, since the health of the immigrant is a relatively new topic in Brazil,

the relevance of this study to the increase of clinical practice, teaching and research is highlighted.

It is understood from the study that knowing the characteristics of a specific population served by health services is extremely important for health planning and for the search for alternatives that minimize the difficulties faced by immigrants in accessing these services, as well as the search for a quality service.

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Rigo DFH, Ross C, Alves DCI et al.

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