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DESCRIPTIVE ANALYSIS OF THE NUMBER OF ACCIDENTS OCCURRED AND RECORDED IN BRAZILIAN REGIONS IN THE PERIOD FROM 2018 TO 2022

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Abstract: The objective of the work is to make a descriptive analysis of the number of accidents that occurred and were registered in the Brazilian regions in the period from 2018 to 2022. In addition, it has the construction of graphs for better data analysis. Studies show that the southeast and south regions have the highest accident rates during the period. In addition, the importance of having an efficient emergency care system was noted, with the aim of reducing response time. Thus, the importance of the subject in public health became clear, as the lack of control of the situation would cause an overload of the UPA's.
Keywords: Traffic-accidents. SAMU. Response time.

INTRODUCTION

Traffic Accidents (TA's) constitute an important public health problem in the world; in Brazil – with the fifth highest number of TAs, it is evidenced as one of the main causes of death, point out data from the Department of Informatics of the Unified Health System (DATASUS), of the Ministry of Health (MS) (MELO & MEDONÇA, 2021). According to the Pan-American Health Organization, around 1.3 million deaths worldwide are caused by accidents that could have been avoided and around 50 million people are injured as a result of being involved in TA's (PAHO/ WHO, 2021). These events, which are greatly influenced by the disorganized urbanization process, by the imprudence and bad habits of pedestrians, drivers of motorized and non-motorized vehicles and any other character that makes up the phenomenon,(RIOS et al., 2020).

With regard to the participation of disorganized urbanization, it is known that the urgency to form new roads is greater than the ideal time for planning, construction and maintenance of them, which gives life to a misaligned urbanization, often poorly signposted, poorly lit and that do not fulfill their role: to ensure safe passage. In addition, Brazilian traffic education, in many capitals, generates drivers who do not obey traffic rules and laws. These factors, associated with information on the lack of beds - whether due to quality, lack of material or overcrowding in Urgency and Emergency units and reference hospitals, are fundamental for thinking about public health in an integral way (MARINHO et al, 2019; SILVA, SILVA, MORAES, 2019).

However, the bad behavior, recklessness and negligence of drivers, even if they have reduced, summarize, at the top of their numbers, the ingestion of alcoholic beverages and other drugs when driving. This habit, along with sleep restriction and anxiety to meet goals, corroborate to changes in the level of consciousness, motor coordination, reflexes and awareness in general, is still frequently seen – as in the case of truck drivers who live with sleep restriction, and motoboys who deal with deliveries and deadlines, even with the most severe control measures, such as supervision with the breathalyzer test carried out by the National Traffic Department (DENATRAN) and labor laws in relation to care with quality of life. life of these professionals(BARROSO JUNIOR; BERTHO; VEIGA, 2019)(DE OLIVEIRA QUEIROZ; SÉRGIO SARDINHA; DE AQUINO LEMOS, 2019).

In addition, high-speed driving on prohibited roads; traffic in inadequate spaces; disrespect for crosswalks, cyclists and any other delimited area, in addition to using a cell phone while transiting are predisposing factors to TA's, as they require other skills from those transiting to follow the path. Whether more attention, better reflexes and response time, multitasking or problem solving, the cited habits associated with cognitive and motor demands resort to an urgency that

causes many accidents that can be avoided (SILVA, 2020).

It must be noted that among the main victims identified are young adults, men and motorcyclists; regarding the situation of occurrence, accidents at night and in the late afternoon prevail, in situations of intense flow of vehicles or on weekends (MELO & MEDONÇA, 2021; SILVA, 2020; ZUGE, 2019.). Among the main consequences, in addition to the high rate of hospitalization, pedestrians being run over by children and the elderly, injuries to the lower and upper limbs, fractures and spinal injuries stand out. In view of the above, it is evident that TA's are important numbers for morbidity and mortality rates and, therefore, their influence on public health is emphasized, since, in addition to the human impact, these events influence health expenditures, social security, in material damage and resulting production losses (SILVA, 2020; et al, 2020).

Therefore, due to the great repercussion that traffic accidents have had in recent years and the fact that the subject is a public health problem, the objective of this work is to carry out a descriptive analysis of the number of accidents registered and that occurred in the period from 2018 to 2022. in the Brazilian regions.

METHODOLOGY

The study is descriptive and analytical, that is, we take into account the integrative and elaborate analysis of data with collection plans, tabulations and analysis of numerical data, where we are concerned with the organization, description, analysis and interpretation of collected data. The bases for collection were documents, in the case of the SCIELO and BVS (Virtual Health Library) database, from which scientific articles related to the themes of traffic accidents, rescue time, SAMU efficiency, privatized and public roads were removed., use of narcotics by drivers. As an inclusion criterion, we selected those that address such keywords and were published within the period of up to 5 years ago, excluding others that did not fit into such time criteria and unrelated to the key words above. In addition, from the data contained in the National Registry of Accidents and Traffic Statistics, those referring to the number of accidents that occurred in the period from 2018 to 2022 in the Brazilian regions were selected, which were tabulated in graphs, which gathered both the separation by states and by regions.

RESULTS AND DISCUSSION

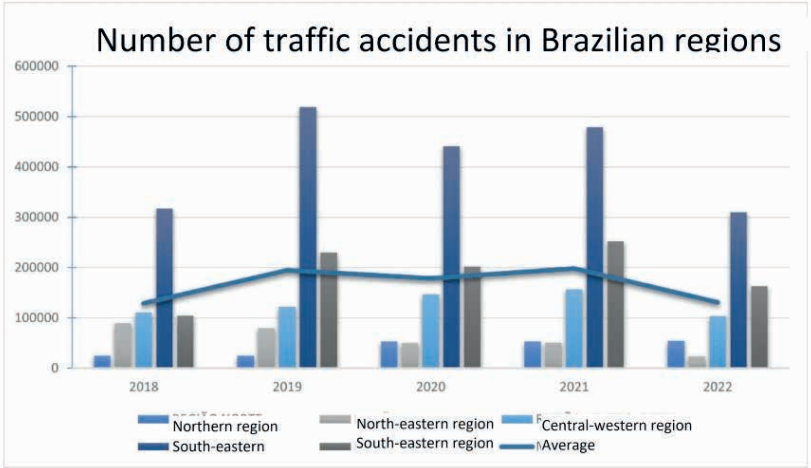

Figure 1: Number of traffic accidents in the Brazilian regions in the period from 2018 to 2021.

In a first analysis, from Figure 1, it was possible to determine that the Southeast, South and Midwest regions were the regions that had the highest numbers of traffic accidents in the country during the year 2021. However, when comparing the data with the In 2018, there was a large increase in the percentage of the number of accidents, with the South region showing a growth of 143%, followed by the Southeast and Midwest regions with increases of, respectively, 51% and 43%. Thus, such an increase can be justified by factors related to meteorological conditions, by the increase in the Brazilian population, in which this fact can lead to an increase in the flow of cars on the highways, by the precariousness of the infrastructure on the highways and also by the imprudence of drivers (DA SILVA, 2018).

According to the 25th edition of the CNT survey of highways, carried out and published in 2022, 55.5% of public roads, that is, those maintained by the government, were classified in fair, poor or very poor condition, while for private roads, only 5.2% of these obtained the same classification. With this, it can be inferred that this fact corroborates the increase in the number of traffic accidents on public highways, as they are more precarious, confirming the survey carried out by Fundação Dom Cabral in 2022, based on data obtained by the Highway Police system Federal (PRF), in which it concludes that of the accidents that occurred in the period from 2018 to 2021, 79.7% occurred on public highways and only 20.3% on private highways. This way, it becomes clear the need to allocate more financial resources to public highways, with the aim of reducing traffic accidents in Brazil.

Furthermore, it is important to emphasize the influence of the main BR's, BR-101 and BR-116, in the number of accidents recorded in the period from 2018 to 2022, precisely because they present a large flow of cars and for connecting large economic centers throughout their history. extension, such as Rio Grande do Sul, São Paulo, Rio de Janeiro, Minas Gerais, Ceará and Maranhão, causing a large number of traffic accidents on the highways. Furthermore, according to the survey carried out by the NDTV program, in 2020, in the period from 2010 to 2020, the flow of cars transiting the BR-101 increased from 1.7 million cars to 2.7 million, a considerable increase of 50%, this fact can lead to an increase in the number of accidents, justifying the popular name "highway of death". Therefore,

In addition, the number of accidents becomes a public health issue, as care for victims needs to be provided by an efficient and orderly system in which it needs to be prepared to ensure a shorter response time in care, in order to reduce sequelae. Therefore, this service will be carried out by the SAMU (Mobile Emergency Care Service) which has a rescuer doctor and a nurse, specialized in trauma care, who are prepared to provide care in the shortest possible time, as some emergencies, such as cardiorespiratory arrest, need a quick intervention, as it generates a severe hypoxia condition in the patient, in which, the delay in the intervention, leads to brain damage(FORASTIERI FILHO et al., 2022). Therefore, the large flow of cars can make it difficult for the ambulance to arrive at the accident site and, consequently, increase the response time, which may lead to the appearance of sequelae or even the death of the patient.

In addition, it is worth noting that the SUS is primarily responsible for controlling the injuries caused by traffic accidents, using the Emergency Care Units (UPA) as a service institution, responsible for commanding ambulances to the accident sites, in order to carry out pre-hospital care, which is important for controlling the patient's survival, with a possible reduction of sequelae. At the same time, important data discusses the

importance of efficiency and agility in care, as research indicates that the time elapsed between the accident and hospital care is a crucial factor in reducing mortality and the occurrence of sequelae, since 40% of deaths occur in the prehospital phase (MELO WA, 2021). For how much, It is worth noting that the precarious infrastructure of the UPA's interferes in obtaining an adequate response time, i.e., contributes to the possible death of patients.

CONCLUSION

It is clear, therefore, that from the data collected, the number of traffic accidents is increasing more and more, and the main factors associated with these accidents are: recklessness on the part of drivers, road infrastructure, including signaling and quality of highways and, also, the lack of investment in these highways, mainly in public ones. In addition, it is worth emphasizing the importance of maintaining a well-synchronized and efficient emergency care, as this is responsible for the first out-of-hospital care after a trauma, being responsible for reducing possible sequelae. Therefore, during the investigated period, specifically during 2019-2020, the number of accidents declined due to the lockdown, a measure created to combat the coronavirus pandemic. This way, the importance of keeping the roads always well structured was highlighted, in order to avoid serious accidents and, consequently, the overload of emergency units.

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