

Prevalence of care for road traffic accident victims during the COVID-19 pandemic

Prevalência de atendimentos às vítimas de acidentes de trânsito durante a pandemia de COVID-19
Prevalencia de la atención a las víctimas de accidentes de tráfico durante la pandemia de COVID-19

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Abstract

Objective: To analyze the prevalence of traffic accidents attended at an urgent and emergency referral hospital, in the context of the COVID-19 pandemic. **Methods:** Cross-sectional study with a sample of 364 adult victims of traffic accidents, aged between 18 and 60 years, of both sexes. A sociodemographic characterization form and accident characteristics were used to collect data. The variables were analyzed using descriptive statistics, bivariate analysis, and Fisher's Exact test, with a significance level of 5% ($p < 0.05$). **Results:** In the sample, there was a predominance of male patients (77.1%), drivers (71.1%), involving motorcycle (68.6%) and without the use of protective equipment (73.3%). The predominant injuries in accidents were fractures (70.8%). **Conclusion:** Although the prevalence of emergency care for traffic accident victims during the COVID-19 pandemic decreased from 0.77% (2019) to 0.34% in 2020, it was noticed that the variables still remained predominant. Therefore, the findings comprise an important tool for prevention and health promotion policies, aiming at reducing deaths, injuries and disabilities.

Descriptors: Accidents, traffic. Emergency medical services. Epidemiology. COVID-19

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What is already known on this?

Road traffic accidents are a health problem that affects the overload of services and has high costs in care actions. It is one of the main causes of mortality.

What this study adds?

With social isolation due to the spread of COVID-19 there has been a reduction in the number of traffic accidents. However, there was an increase in unsafe driving behavior.



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Resumo

Objetivo: Analisar a prevalência de acidentes de trânsito atendidos em um hospital de referência de urgência e emergência, no contexto da pandemia de COVID-19. **Métodos:** Estudo transversal, com amostra de 364 adultos vítimas de acidentes de trânsito, com idade entre 18 a 60 anos, de ambos os sexos. Utilizou-se um formulário de caracterização sociodemográfica e as características do acidente para coletar os dados. As variáveis foram analisadas por meio da estatística descritiva, análise bivariada e pelo teste Exato de Fisher, com nível de significância de 5% ($p < 0,05$). **Resultados:** Na amostra, observou-se predomínio de pacientes do sexo masculino (77,1%), motoristas (71,1%), envolvendo motocicleta (68,6%) e sem a utilização do equipamento de proteção (73,3%). As lesões predominantes nos acidentes foram as fraturas (70,8%). **Conclusão:** Apesar da prevalência de atendimentos de urgências às vítimas de acidentes de trânsito durante a pandemia de COVID-19 ter diminuído de 0,77% (2019) para 0,34% em 2020, percebeu-se que as variáveis ainda permaneceram predominantes. Logo, os achados compreendem uma ferramenta importante para as políticas de prevenção e promoção à saúde, visando a redução de mortes, lesões e incapacidades.

Descritores: Acidentes de trânsito. Serviços médicos de emergência. Epidemiologia. COVID-19

Resumen

Objetivo: Analizar la prevalencia de accidentes de tráfico atendidos en un hospital de referencia de urgencias y emergencias, en el contexto de la pandemia de COVID-19. **Método:** Estudio transversal con una muestra de 364 adultos víctimas de accidentes de tráfico, con edades comprendidas entre 18 y 60 años, de ambos sexos. Para la recogida de datos, se utilizó un formulario de caracterización sociodemográfica y las características del accidente. Las variables se analizaron mediante estadística descriptiva, análisis bivariante y test exacto de Fisher, con un nivel de significación del 5% ($p < 0,05$). **Resultados:** En la muestra, predominaron pacientes del sexo masculino (77,1%), conductores (71,1%), implicados en motocicletas (68,6%) y sin uso de equipos de protección (73,3%). Las lesiones predominantes en los accidentes fueron las fracturas (70,8%). **Conclusión:** Aunque la prevalencia de atención de urgencia a víctimas de accidentes de tránsito durante la pandemia de COVID-19 disminuyó de 0,77% (2019) a 0,34% en 2020, se observó que las variables aún permanecen predominantes. Por lo tanto, los hallazgos comprenden una herramienta importante para las políticas de prevención y promoción de la salud, con el objetivo de reducir las muertes, lesiones y discapacidades.

Descriptoros: Accidentes de tránsito. Servicios médicos de urgencia. Epidemiología. COVID-19

INTRODUCTION

Traffic accidents (TA) are an important cause of death, injury, and disability, causing a considerable impact on the health sector, mainly due to the overload in urgent and emergency services, specialized care, social assistance, and rehabilitation, in addition to high costs for treatment. TA can occur due to aspects such as high speeds, trauma mechanics, poor adherence to the use of safety equipment, among others.⁽¹⁻²⁾

In turn, Land Transport Accidents (LTA) correspond to one of the main causes of morbidity and mortality worldwide, causing about 20 to 50 million injuries and 1.2 million deaths every year.⁽³⁾

Brazil is the fifth country with the most traffic deaths, according to 2018 data, preceded by India, China, the United States (US) and Russia, and followed by Iran, Mexico, Indonesia, South Africa, and Egypt. Together, these ten nations account for 62% of TA deaths.⁽⁴⁾

In line with the Global Status Report on Road Safety released by the World Health Organization (WHO) in December 2018, the annual number of road traffic deaths reached 1.35 million cases. Such accidents include both pedestrians, cyclists, motorcyclists and those who use cars, with the highest rates related to developing countries.⁽¹⁾

In a data survey carried out between 1990 and 2015, it was identified that the only state to show an increase in the mortality rate due to traffic accidents was Piauí, with a 9.7% increase. In fact, in 2015, this state reached the second highest mortality rate (36.3/100 thousand inhabitants).⁽⁵⁾

According to the Institute for Applied Economics Research, in 2019 there were 32,879 TA deaths in Brazil. In Piauí, this number reached 882.⁽⁶⁾ In addition to the complexity that involves TA, in 2020, the coronavirus pandemic printed a new reality for the world population, with recommendations from health agencies based on social isolation, testing of the population and expansion of Intensive Care Unit beds.⁽⁷⁾

Regarding isolation restrictions due to the spread of the coronavirus, it is evident that traffic volumes have been reduced. However, vehicle speeds have been projected to increase by 6-11%. The most frequent precipitated accelerations are episodes of sudden braking (increase of up to 12%) and use of cell phone (increase of up to 42%), referring to the period of March and April 2020.⁽⁸⁾

Nevertheless, measures associated with the worsening of the pandemic may have critical repercussions on the social, economic and psychological spheres of the population.⁽⁹⁾ In addition, the COVID-19 pandemic may imply changes in the number of TA. In this context, there are few studies that analyze whether there is a relationship between adherence to social isolation and a decrease in motor vehicle accidents as a result of the reduction in the flow of people and cars on the streets.⁽¹⁰⁾

TA with victims are the second largest cause of patient admission to the Teresina Emergency Hospital, the main public reference in the care of polytraumas in the capital, in addition to attending

possible cases referred from the 224 municipalities of Piauí. Thus, the sector responsible for assisting most patients is orthopedics, which represents 62% of the surgeries performed at the hospital.⁽¹¹⁾

With the coronavirus pandemic, there was social isolation in order to prevent the transmission of this virus and this contributed to the reduction of traffic on urban roads. However, traffic accidents are a complex event, which requires specialized attention and occurs frequently in Brazil, causing several deaths, in addition to social and economic impacts. Moreover, the number of TA mortality in Piauí is still high compared to other capitals in the country. In view of this, the research aimed to study the prevalence of care for victims of traffic accidents in Teresina-PI, during the COVID-19 pandemic.

Given these assumptions, the following guiding question was elaborated: what is the prevalence of TA in the context of the COVID-19 pandemic in an urgent and emergency reference hospital?

Thus, the objective of the study was to analyze the prevalence of patients who suffered TA treated at an urgent and emergency referral hospital, in the context of the COVID-19 pandemic.

METHODS

This is a cross-sectional, descriptive and retrospective study, carried out in an emergency hospital considered a reference in trauma care, located in the city of Teresina, capital of the State of Piauí, in the Northeast Region of Brazil.

The collection period was from September to November 2021. The study population consisted of clinical records of patients admitted as victims of TA in an urgent/emergency hospital, from April to December 2020. The age of the patients, of both sexes, ranged from 18 to 60 years.

The selected age group is justified because it comprises people who are in the labor market, according to data from the 2019 National Household Sample Survey and the Brazilian Institute of Geography and Statistics.⁽¹²⁾

To calculate the sample, we used data from the period prior to the pandemic, from April to December 2019, in which 6,694 patients were admitted as victims of traffic accidents.⁽¹³⁾

Thus, based on this specific population, the calculation of the sample was performed with the Raosoft software, reaching 95% reliability and sampling error of 5%, and the sample consisted of 364 medical records.

The inclusion criteria were: medical records of adult patients, aged 18 to 60 years; victims of road traffic accidents, involving car, motorcycle, truck, bus, minibus, among others; from April to December 2020. Exclusion criteria involved medical records that did not include information on the data collection form or were filled out illegibly or incompletely.

Data were collected using a form based on the Violence and Accident Surveillance Survey, which aims to analyze the trend of accidents treated in the selected urgent and emergency units.⁽¹⁴⁾

The collection form included the following data: date of patient admission; date of accident; sociodemographic characterization (gender, date of birth, skin color, schooling and family income); and accident characteristics (condition of the adult, vehicle involved, protective equipment, part of the body affected, injuries caused by the accident and patient evolution).

Thus, the data from the forms were typed and stored in an electronic spreadsheet (Microsoft Office Excel version 20.0). For data analysis, descriptive statistics procedures were adopted, such as absolute (n) and relative (%) frequency distribution, and confidence intervals (CI_{95%}). To test the association between qualitative variables, a bivariate analysis was performed using Fisher's exact test at a significance level of 5% ($p < 0.05$).

It should be noted that the research was authorized by the Teresina's Emergency Hospital Professor Zenon Rocha - HUT and approved by the Research Ethics Committee of the Federal University of Piauí, with opinion number 5.000.777. For the use of medical records, institutional authorization was requested through the Data Use Commitment Term.

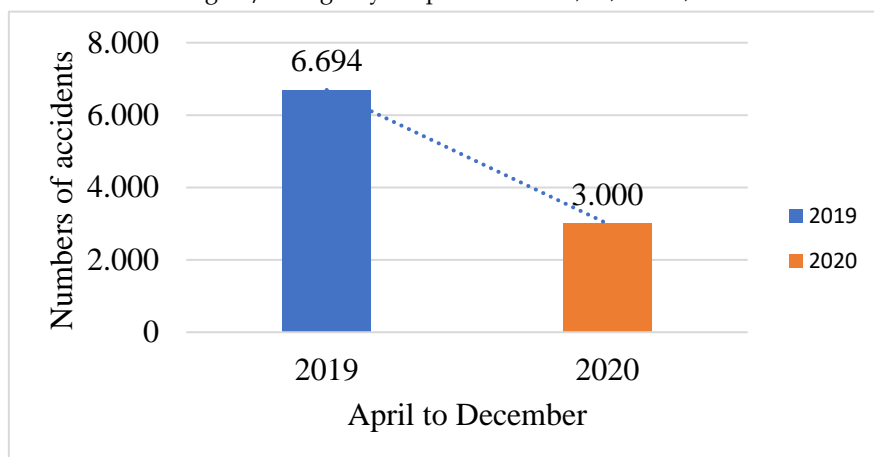
In addition, the ethical and legal principles of Resolution No. 466/2012 of the National Health Council⁽¹⁵⁾ were followed and the list of recommendations for cross-sectional studies, The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE), was used.

RESULTS

The research made it possible to analyze the prevalence of TA in an urgent and emergency hospital in the period before the coronavirus pandemic, in 2019, and in the period when it started, in 2020. The

prevalence of TA cases in 2020 was 0.34%, while in 2019 it was 0.77%. Given this reality, Graph 1 shows that there was a reduction in such accidents, in the age group of 18 to 60 years.

Graph 1. Numbers of traffic accidents from April to December 2019 and 2020, age group 18 to 60 years, in an urgent/emergency hospital. Teresina, PI, Brazil, 2021.



Source: research database (2021).

In view of the analysis of sociodemographic data, the study assimilated the predominance of males (77.1%), with a prevalent age group of 18 to 28 years (32.8%) and 29 to 39 years (25.9%); brown color (93.6%); and with elementary school (49.5%), as observed in Table 1.

Table 1. Sociodemographic profile of victims of traffic accidents in an urgent/emergency hospital. Teresina, PI, Brazil, 2021.

| Variables | n | % | CI _{95%} |
|-------------------|-----|------|-------------------|
| Sex | | | |
| Male | 280 | 77.1 | 72.4 – 81.2 |
| Female | 83 | 22.9 | 18.7 – 27.6 |
| Age | | | |
| 18 to 28 years | 119 | 32.8 | 28.0 – 37.9 |
| 29 to 39 years | 94 | 25.9 | 21.5 – 30.8 |
| 40 to 49 years | 81 | 22.3 | 18.2 – 27.0 |
| 50 years and over | 69 | 19.0 | 15.2 – 23.5 |
| Skin color | | | |
| White | - | - | - |
| Brown | 132 | 93.6 | 87.9 – 96.9 |
| Yellow | 6 | 4.3 | 1.7 – 9.4 |
| Black | 3 | 2.1 | 0.5 – 6.6 |
| Schooling | | | |
| Not literate | 4 | 4.3 | 1.4 – 11.2 |
| Literate | 4 | 4.3 | 1.4 – 11.2 |
| Elementary School | 46 | 49.5 | 39.0 – 60.0 |
| High School | 34 | 36.6 | 27.0 – 47.2 |
| Higher Education | 5 | 5.4 | 2.0 – 12.7 |

*CI_{95%} = 95% confidence interval

Source: Authors (2021).

Table 2 shows that, in relation to the type of accident, most victims were drivers (71.1%). As for the vehicle involved in the accident, motorcycles predominated (68.6%). Among those involved, 73.3% did not

use protective equipment during the accident and, of those who did (26.7%), about 88.9% wore a helmet. Of the 364 patients, 19 (5.2%) died; the rest were discharged (94.8%).

In addition, in relation to the injuries caused by the accident and the part of the body affected, it is noted that among the injuries caused by accidents, fracture (70.8%) and head trauma (22%) had a higher prevalence. With regard to the most affected body regions, Table 2 indicates the lower limbs (33.1%), upper limbs (32.8%) and head (26.4%).

Table 2. Accident characteristics of traffic accident victims in an urgent/emergency hospital. Teresina, PI, Brazil, 2021.

| Variables | n | % | CI _{95%} |
|--|-----|------|-------------------|
| Condition of the adult | | | |
| Driver | 258 | 71.1 | 66.1 - 75.6 |
| Passenger | 16 | 4.4 | 2.6 - 7.2 |
| Pedestrian | 50 | 13.8 | 10.5 - 17.8 |
| Other | 39 | 10.7 | 7.8 - 14.5 |
| Vehicle involved | | | |
| Car | 68 | 18.7 | 14.9 - 23.2 |
| Motorcycle | 249 | 68.6 | 63.5 - 73.2 |
| Bus/Microbus | 3 | 0.8 | 0.2 - 2.6 |
| Truck | 3 | 0.8 | 0.2 - 2.6 |
| Other | 40 | 11.0 | 8.1 - 14.8 |
| Protective equipment | | | |
| No | 74 | 73.3 | 63.3 - 81.4 |
| Yes | 27 | 26.7 | 18.6 - 26.7 |
| Which equipment | | | |
| Helmet | 24 | 88.9 | 69.7 - 97.1 |
| Seat belt | 3 | 11.1 | 2.9 - 30.2 |
| Injuries caused by the accident | | | |
| Fracture | 257 | 70.8 | 65.8 - 75.4 |
| Traumatic brain injury | 80 | 22.0 | 17.9 - 26.7 |
| Other | 28 | 7.7 | 5.3 - 11.1 |
| Polytrauma | 12 | 3.3 | 1.8 - 5.8 |
| Abdominal Trauma | 5 | 1.4 | 0.5 - 3.4 |
| Spinal Trauma | 4 | 1.1 | 0.4 - 3.0 |
| Body part affected | | | |
| Lower limbs | 120 | 33.1 | 28.3 - 38.2 |
| Upper limbs | 119 | 32.8 | 28.0 - 37.9 |
| Head | 96 | 26.4 | 22.0 - 31.4 |
| Face | 34 | 9.4 | 6.6 - 12.9 |
| Thorax | 16 | 4.4 | 2.6 - 7.2 |
| Spine | 7 | 1.9 | 0.8 - 4.2 |
| Abdomen | 6 | 1.7 | 0.7 - 3.7 |
| Multiple trauma | 6 | 1.7 | 0.7 - 3.7 |
| Hip | 4 | 1.1 | 0.4 - 3.0 |
| Other | 3 | 0.8 | 0.2 - 2.6 |
| Evolution | | | |
| Discharge | 344 | 94.8 | 91.8 - 96.7 |
| Death | 19 | 5.2 | 3.2 - 8.2 |

*CI_{95%} = 95% confidence interval.

Source: Authors (2021).

Table 3 shows that there was no direct statistical association between the variables gender ($p=0.160$), age ($p=0.420$), skin color ($p=1.000$) and schooling ($p=0.610$) in relation to patient evolution. Regarding gender, the majority were male, of which 4.3% died and 95.7% were discharged. The prevalent age was 18 to 28 years, with 4.2% of deaths and 95.8% of hospital discharges. Regarding skin color, brown people were the majority and had 4.5% of deaths and 95.5% of discharges. Regarding schooling, it is noted that most had elementary school, totaling 4.3% of deaths and 95.7% of discharges.

Table 3. Clinical outcome according to the sociodemographic profile of traffic accident victims in an emergency hospital. Teresina, PI, Brazil, 2021.

| Variables | Evolution | | |
|-------------------|-------------|-----------------|-----------------|
| | Death n (%) | Discharge n (%) | <i>p</i> -value |
| Sex | | | |
| Male | 12 (4.3) | 268 (95.7) | 0.160 |
| Female | 7 (8.4) | 76 (91.6) | |
| Age | | | |
| 18 to 28 years | 5 (4.2) | 114 (95.8) | 0.420 |
| 29 to 39 years | 3 (3.2) | 91 (96.8) | |
| 40 to 49 years | 5 (6.2) | 76 (93.8) | |
| 50 years and over | 6 (8.7) | 63 (91.3) | |
| Skin color | | | |
| Brown | 6 (4.5) | 126 (95.5) | 1.000 |
| Yellow | - | 6 (100.0) | |
| Black | - | 3 (100.0) | |
| Schooling | | | |
| Not literate | - | 4 (100.0) | 0.610 |
| Literate | - | 4 (100.0) | |
| Elementary School | 2 (4.3) | 44 (95.7) | |
| High School | 2 (5.9) | 32 (94.1) | |
| Higher Education | 1 (20.0) | 4 (80.0) | |

**p*-value = Fisher's exact test

Source: Authors (2021).

Table 4 shows that there was no direct statistical association between the variables condition of the adult ($p=0.274$), vehicle involved ($p=0.103$) and protective equipment ($p=1.000$), with regard to patient evolution. Regarding the condition of the adult, most are drivers, of which 4.7% died and 95.3% were discharged. The vehicle involved in the accident that achieved the highest rate was the motorcycle, with 3.6% of deaths and 96.4% of hospital discharges. Regarding protective equipment, most people do not use it, demonstrating that 6.8% evolved to death and 93.2% were discharged.

Table 4. Clinical outcome according to the characteristics of the accident of traffic accident victims in an emergency hospital. Teresina, PI, Brazil, 2021.

| Variables | Evolution | | |
|-------------------------------|-------------|-----------------|-----------------|
| | Death n (%) | Discharge n (%) | <i>p</i> -value |
| Condition of the adult | | | |
| Driver | 12 (4.7) | 246 (95.3) | 0.274 |
| Passenger | 2 (12.5) | 14 (87.5) | |
| Pedestrian | 4 (8.0) | 46 (92.0) | |
| Other | 1 (2.6) | 38 (97.4) | |
| Vehicle involved | | | |

| | | | |
|-----------------------------|----------|------------|-------|
| Car | 8 (11.8) | 60 (88.2) | 0.103 |
| Motorcycle | 9 (3.6) | 240 (96.4) | |
| Bus/Microbus | - | 3 (100.0) | |
| Truck | - | 3 (100.0) | |
| Other | 2 (5.0) | 38 (95.0) | |
| Protective equipment | | | |
| Yes | 1 (3.7) | 26 (96.3) | 1.000 |
| No | 5 (6.8) | 69 (93.2) | |

**p*-value = Fisher's exact test

Source: Authors, 2021.

DISCUSSION

With the restrictions implemented by the government to reduce the spread of the new coronavirus, a reduction in human mobility was witnessed, resulting in a decline in traffic volume in the first months of the pandemic.⁽¹⁶⁾

Despite the changes that have occurred in commuting due to this global problem, there has been an increase in unsafe driving behavior, such as speeding, dangerous driving maneuvers, cell phone use while driving, as well as alcohol and drug intake.⁽¹⁷⁻¹⁸⁾

In addition, another explanation for the occurrence of accidents is that social isolation has reduced traffic on avenues and highways and thus enabled acceleration and sudden braking.⁽¹⁹⁾

Drivers' speeding has been confirmed in some countries: in Spain, the increase was 39%; 16% in France; and in the United States, it went from 13% to 64% during the restrictions imposed by COVID-19.⁽²⁰⁾

The predominance of males is found in several studies of sociodemographic profile related to TA in the context of the COVID-19 pandemic, corroborating the finding of 77.1% of males in this study. This prevalence can be explained by the social and cultural behavior of the male population, due to the fact that they drive under the influence of alcohol, have greater aggressiveness in traffic, as well as the tendency to perform risky maneuvers and speeding.⁽²¹⁾

The age distribution of the cases was predominantly in the population aged between 18 and 28 years. Such data are consistent with a study conducted in Bahia, which found that the profile of the injured is young and that, from the age of 30, TA cases begin to decrease. In addition, the highest death rates occur in such age group.⁽²²⁻²³⁾

Regarding skin color, a predominance of brown patients was observed, which represented 93.6% of the study sample, indicating that this segment, as it constitutes the largest part of the population, is more prone to this type of accident.

It is noteworthy that a large portion of the medical records were without information regarding skin color. A study reports that the failure to fill in some fields of the medical records is related to the fact that the user is immediately taken to the care room, the team is committed to emergency care and the patient is unable or has difficulty responding to the questions.⁽²⁴⁾

Regarding schooling, it was found that most of the individuals surveyed had completed elementary school, which allows us to deduce that they had approximately seven to ten years of study.⁽²²⁾ Therefore, it is inferred that if the citizen has low schooling, this may reflect in the low understanding about the causes of traffic trauma and the need to use safety equipment.⁽²⁵⁾

About the condition of the adult at the time of the accident, in this study, most victims were drivers (71.1%). This data confirms that accidents among this group of vehicle drivers are more common, making them more vulnerable.⁽²³⁾

Motorcyclists are the main victims of TA. In due course, motorcycle use is growing in Brazil because it is an easy-to-acquire means of transportation, as well as being faster to get to work, whether or not associated with delivery services. It should be noted that this type of informal work has grown during the pandemic period, with motorcyclists who perform these services being paid according to the productivity/amount of deliveries made, which exacerbates the search for speed to the detriment of respect for traffic legislation and the practice of defensive driving.⁽²⁶⁾

In addition, motorcyclists have a higher mortality rate compared to other vehicle drivers.⁽²⁰⁾ In relation to this, in the state of Piauí, a study carried out in the period from 2000 to 2017 recorded 14,396

deaths due to TA. Most of them occurred with males, in the age group of 20 to 39 years, with almost half resulting from motorcycle accidents, which alludes to the findings found in the study.⁽⁵⁾

Regarding the use of protective equipment, the analysis of the study data showed that most individuals do not use it (73.3%). The non-use by victims, especially of the helmet, may influence vulnerability and the occurrence of Traumatic Brain Injury (TBI), among other serious injuries. This fact can lead to an increase in the hospitalization rate, in addition to sequelae and morbidity and mortality.⁽²⁷⁾

With respect to the most affected body parts, there was a predominance of Lower Limbs (LL), Upper Limbs (UL) and head in this study. Therefore, they are related to the most frequent injuries, which were limb fractures and TBI, which can lead to death.^(26,28)

The use of motorcycles allows a wider contingent of injuries in the lower limbs and upper limbs, which are more unprotected regions, since the safety equipment used offers protection only to the head. It is worth noting that this conclusion is restricted to the sample that uses motorcycles, since the population that makes use of cars does not need to wear helmets. With regard to trauma to the head, the non-use of helmets is particularly prevalent among victims who use motorcycles.⁽²³⁾

Regarding the clinical outcome of the patients, most of them were discharged from the hospital, and there were only 19 deaths (5.2%) among the cases. In view of this, with the predominance of hospital discharge, some studies validate what the survey presented.⁽²⁸⁾

In view of the above, it is conceived that TA is of multifactorial cause, that is, human, social, socioeconomic, road, vehicular and environmental. Furthermore, the COVID-19 pandemic has directly impacted accident statistics, affecting the health, economy and socioeconomic aspects of a population.⁽²⁹⁾

Concerning the assistance to TA victims, the nursing team acts in a comprehensive and qualified manner, in order to monitor vital signs, in the control of the respiratory, cardiac and neurological systems, among others, in addition to promoting homeostasis. Additionally, it performs other procedures, according to the patient's clinical condition. Furthermore, it promotes support and a guiding assistance to families and patients.⁽³⁰⁾

A limitation of this study is the existence of few publications on the subject under consideration in the state of Piauí, making it impossible to compare the data found, since it is a recent theme. Another limitation refers to the lack of information in the medical records about the self-declared color of the patients, which may have underestimated the percentages of skin color.

It is noteworthy that the study will contribute to the knowledge about the prevalence of traffic accidents in an urgent and emergency hospital before and during the period of the COVID-19 pandemic, in addition to building the profile of sociodemographic characterization and the characteristics of accidents. Thus, it can serve as tools for traffic safety campaigns and expansion of defensive driving training classes. Moreover, the results may foster new research, since this public health problem is still an ongoing event.

CONCLUSION

Therefore, although the prevalence of emergency care for victims of traffic accidents during the COVID-19 pandemic decreased from 0.77% (2019) to 0.34% in 2020, it was noticed that the variables still remained predominant in relation to being adult males, aged between 18 and 28 years, self-declared brown and with complete elementary school.

The victims were drivers who used motorcycles without the use of adequate protective equipment. The lower and upper limbs and the head were the most affected regions, and the prevalent injuries were fractures and TBI.

Thus, in addition to knowing the epidemiological reality of TA in adults in the pandemic context, this study offers itself as an inexcusable tool for prevention and health promotion policies, aiming at reducing deaths, injuries, and disabilities, thus reducing the impact of accidents on public health.

CONTRIBUTIONS

Conception or design of the study: Santos RR, Alencar LVC, Madeira MZA, Data collection: Santos RR, Alencar LVC, Ribeiro EES, Analysis and interpretation of data: Santos RR, Alencar LVC, Ribeiro EES, Writing of the article or critical review: Santos RR, Alencar LVC, Madeira MZA, Santos AMR, Santos JAF, Ribeiro EES, Final approval of the version to be published: Santos RR, Alencar LVC, Madeira MZA, Santos AMR, Santos JAF, Ribeiro EES.

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