ABSTRACT
Objective: planning the clinical and epidemiological profile of patients with traumatic brain injury. Method: a descriptive study of informative type, from literature review carried out through the selection of scientific papers published in journals indexed in the database LILACS and Scielo virtual library. There were found through the search strategy 746 articles and after applying the inclusion and exclusion criteria remained eight articles for analysis. Results: men were the most affected. There was a higher incidence in the age group from 21 to 40 years old. The leading cause of traumatic brain injury was by motorcycle accidents. Sunday was the day of the week that was the largest number of requests. Conclusion: set up this study as an essential tool for implementation of prevention programs, especially national programs for prevention of car accidents and the training of specialized personnel in the rescue of accidents, being also important the development of treatment protocols in hospitals. Descriptors: Brain Injuries; Epidemiology; Profile.

RESUMO
Objetivo: traçar o perfil clínico e epidemiológico de pacientes com traumatismo cranioencefálico. Método: estudo descritivo, do tipo informativo, a partir de revisão de literatura realizada por meio da seleção de artigos científicos publicados em periódicos indexados na base de dados LILACS e biblioteca virtual Scielo. Foram encontrados por meio da estratégia de busca 746 artigos e após a aplicação dos critérios de inclusão e exclusão restaram oito artigos para a análise. Resultados: o sexo masculino foi o mais acometido. Houve maior incidência na faixa etária dos 21 aos 40 anos. A principal causa de traumatismo cranioencefálico foi por acidente motociclista. O domingo foi o dia da semana em que ocorreu o maior número de atendimentos. Conclusão: configurou-se esse estudo como essencial instrumento para implementação de programas de prevenção, com destaque para os programas nacionais de prevenção de acidentes de trânsito e pela capacitação de pessoal especializado no resgate de acidentes, sendo importante também na elaboração de protocolos de tratamento nas unidades hospitalares. Descritores: Traumatismos Encefálicos; Epidemiologia; Perfil.

RESUMEN
Objetivo: delinear el perfil clínico y epidemiológico de los pacientes con traumatismo craneoencefálico. Método: estudio descriptivo del tipo informativo, de la revisión de la literatura llevada a cabo a través de la selección de artículos científicos publicados en periódicos indexados en las bases de datos LILACS y Scielo biblioteca virtual. Se encontraron a través de las estrategias de búsqueda 746 artículos y después de aplicar los criterios de inclusión y exclusión restaron ocho artículos para su análisis. Resultados: los hombres fueron los más afectados. Hubo una mayor incidencia en el grupo de edad de 21 a 40 años. La principal causa de traumatismo craneoencefálico fue por accidente de motocicleta. El domingo fue el día de la semana en que ocurrió el mayor número de llamadas. Conclusión: creó este estudio como una herramienta esencial para la implementación de programas de prevención, especialmente los programas nacionales para la prevención de accidentes de tráfico y la formación de personal especializado en el rescate de accidentes, siendo también importante en el desarrollo de protocolos de tratamiento en unidades hospitalarias. Descritores: Lesiones Cerebrales; Epidemiología; Perfil.
INTRODUCTION

Traumatic brain injury (TBI) is an injury not degenerative or of congenital nature; it is caused by an assault or initiated by an acceleration of movement or high energy of brain go-slow within the skull, resulting in anatomical damage or functional impairment of the scalp, skull, meninges or brain. It is considered as a dynamic mechanism, since the consequences of its nosological image may insist and progress over time. Victims who survive TBI may have disabilities that are temporary or permanent, interfering with the individual's ability to perform his duties.\(^1\,2\)

In different locations the leading cause of TBI varies, so that the traffic accidents, falls and assaults are among its most frequent causes.\(^3\) In parallel with the evolution of humanity it has been the increasing number of victims of mechanical trauma, which establishes the growth of violent spoken deaths, currently classified as major causes of sequelae and death,\(^4\) and with the emergence of new technologies, modern society won faster ways of locomotion, but as a negative factor in this situation, the number of TBI increased, beginning to have important repercussions today, both socially and economically.

At each 100,000 inhabitants 200 to 300 people are hospitalized due to a head injury and 3-4 times more cases are examined of urgency, without being hospitalized. It is the most common disease of the nervous system and is also the main cause of mortality in young people aged 15 to 24 years old, with prevalence in males. Each year in Brazil, half a million people need hospitalization due to TBI, so that 75 to 100 thousand people die over the course of hours, whereas other 70 to 90 thousand irreversibly develop a neurological loss of function.\(^5,6\)

The first 72 hours are of particular relevance in the evolution of TBI victims and provide important information about their prognosis because of pathophysiological events that take place during this period, so that the variability of the clinical condition of TBI victims in the first hours post-trauma is connected to the physiological changes that occur due to anatomical injury, and the scores of the Glasgow Coma Scale (GCS) summarize the clinical manifestations of the evolution of injury.\(^7\)

The severity of trauma should be evaluated from the traumatic event until the arrival of the patient to hospital and maneuvers should be set for the basic maintenance of life in order to reduce mortality. It is important to the existence of pre-hospital care a team properly prepared to hold a physiological assessment focusing on the initial approach to the patient and serving as an aid tool for the screening of the victims.\(^8\)

The TBI represents an illness of modern society, being evidenced in the literature as “the silent epidemic” and “disease of the century”. Today it is considered one of the main causes of death among adolescents and young adults, also standing out the various admissions in healthcare facilities around the world, increasing the exorbitantly costs for the treatment and rehabilitation of those involved.

The characterization of patients and the improvement of resource use in hospitals in Brazil is a current and relevant topic, as advantage in recognizing the clinical and epidemiological profile of traumatic brain injury patients suffering from it to explore variables not analyzed further and provide essential information for plan and organize care in these units in an attempt to provide knowledge to professionals and health managers about the profile and result of patients for more precise planning of human and material resources and facilitating the organization of a strategic plan aimed at improving the quality of the assistance provided.

This study aims to tracing the clinical and epidemiological profile of patients victims of traumatic brain injury.

METHOD

This is a descriptive study of informative type, from literature review through selection of scientific papers published in journals indexed in the LILACS database and virtual library SciELO, and the search took place between the months of September and October 2014, using the descriptors extracted from Descriptors in Health Sciences (DeCS): traumatic brain injury, epidemiology, profile.

The selection of the articles found with the search in different databases was performed in six steps. The 1\(^{st}\) was the subject of the identification and selection of the research question. The 2\(^{nd}\) was the establishment of inclusion and exclusion criteria. The 3\(^{rd}\) was the identification of pre-selected and selected studies; conducting a careful reading of the titles, abstracts and descriptors of all complete publications located to determine if they were according to the inclusion criteria of the study. The 4\(^{th}\) step was the categorization of the selected studies. The 5\(^{th}\) was the analysis and interpretation of results, and the last and 6\(^{th}\) step was the presentation...
of the review/synthesis of knowledge for the preparation of the article. 10

To guide this study there was prepared the following question: What is the clinical and epidemiological profile of patients with head trauma? To collect the information it was organized a guiding script with the following: gender, age, education level, type of accident, day of week, length of stay, rehabilitation time, gravity.

The study included case studies or intervention, quasi-experimental, cross and epidemiological studies published in Portuguese between 2004 and 2014. There were excluded from the research literature review articles, abstracts, dissertations and theses.

Table 1 describes the number of articles found in the database search, and virtual library. So it was recorded a total of 25 studies in SCIELO and 721 in LILACS database (Figure 1).

<table>
<thead>
<tr>
<th>Database/Virtual Library</th>
<th>Descriptors</th>
<th>The number of articles found</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIELO</td>
<td>Brain Trauma</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma and Epidemiology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma and Profile</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma and Profile and Profile</td>
<td>0</td>
</tr>
<tr>
<td>LILACS</td>
<td>Brain Trauma</td>
<td>654</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma and Epidemiology</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma and Profile</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Brain Trauma, Epidemiology and Profile</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>746</td>
</tr>
</tbody>
</table>

Table 1. Number of articles found according to the descriptors and databases.

There were found through the search strategy 746 articles; after reading the titles and the observation of the publication year, 358 articles were excluded, leaving 388 articles. Regarding the articles in English there were excluded 328, leaving 60 articles. After reading the abstracts there were excluded more 32, getting 28 that, after the full reading, have resulted in the use of eight articles for review.

RESULTS
In this research there were found studies reporting the clinical and epidemiological profile of patients victims of traumatic brain injury. All selected articles were cross.

<table>
<thead>
<tr>
<th>Author</th>
<th>Objective</th>
<th>Participants</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silva et al.11</td>
<td>Evaluating the quality of life (QOL) of patients with TBI after rehabilitation and identifying sociodemographic characteristics and clinics directly associated with the QOL.</td>
<td>120 victims</td>
<td>There was a prevalence of males (79.2%) over females (20.8%); the average of overall age was 30 years and seven months old, ranging from 25 to 36 years old (median of 29 years old of men and 27 of women). Among the causes of TBI, the most frequent was traffic accidents (65.1%), where predominated motorcycle accidents (26.0%), among men and women. Median rehabilitation times and coma were respectively 27.5 months and 21 days; only 11 patients (9.2%) were not comatose.</td>
</tr>
<tr>
<td>Vieira et al.12</td>
<td>Describing the quality of life (QOL) of victims of TBI residents in Aracaju, after six months of the traumatic event, and to verify the relationship between the results observed and the socio-demographic and clinical data, return to the productivity of those individuals.</td>
<td>47 victims</td>
<td>Most victims were men (91.5%) young, of an average age of 29 years old (SD = 8.9 years), 51.1% single, 57.4% did not complete primary school. Regarding the type of trauma, the vast majority was affected by blunt trauma (93.6%), due to transport accidents (61.7%). These victims stayed on average of 30.5 days (SD = 37.0 days) hospitalized due to trauma.</td>
</tr>
<tr>
<td>Faria et al.13</td>
<td>Meeting the epidemiological profile of moderate and severe traumatic brain injury picked up at the Hospital das Clínicas of the Federal University of Uberlândia and its association with the</td>
<td>139 victims</td>
<td>Approximately 60% of patients with severe and moderate TBI arrived on Friday, Saturday and Sunday (42.9% of the days of the week). There was a greater prevalence on Saturdays, with 24.5% of patients admitted. Concerning the entry time in the service, the greater frequency of arrival was in the period from 16 to 23 o'clock (52.5%). Of the total cases with TBI severe and</td>
</tr>
</tbody>
</table>
use of cocaine and canabinoides, as well as specific determinants for brain injury.

Settervall et al. Checking and comparing the performance of scores of the Glasgow Coma Scale (E/G) observed in the first 72 hours after brain contusion trauma (TCEC), to predict the hospital mortality. 277 victims

Moura et al. Help in the knowledge of the epidemiological characteristics of TBI. 101 victims

Moderate, 119 (85.6%) were male and 20 (14.4%) were female. The patients’ ages ranged from 18 to 89 years old, with an average of 40.73 years old. The higher frequency of severe and moderate TBI occurred with victims of traffic accidents, mostly aged 30 to 39 years old.

It was noted variation of age between 14 and 92 years old, emphasizing that the majority were male (85.9%). The average age was of 37.7, with a standard deviation of 16.6 years old, prevailing young people aged 14 to 34 (52%). Regarding external causes, traffic accidents were more frequent (60.3%), followed by falls (32.1%). Among the victims, 43% had mild TCEC indication, 16.2% moderate and 40.8% severe, according to E/G scores after the initial treatment. The average length of hospitalization of the victims was of 15.9 days with a standard deviation of 30.7 days. The minimum period of hospitalization was <1 day and a maximum of 290 days. There was a predominance of patients who were hospitalized between 2 and 7 days (40.1%).

Males were the most affected, with 87 cases (86.14%), and 14 cases (13.86%) were females. There was a higher incidence in the age group from 21 to 40 years old, totaling 51.49%. The leading causes of TBI were: 45 cases (44.55%) by motorcycle accidents. Regarding the severity of TBI, 54 (53.47%) were mild, 26 (25.73%), moderate and 21 (20.8%), serious. The main clinical signs presented were: altered level of consciousness with 38 cases (37.62%) and headache with 17 cases (16.83%). Sunday was the day of the week that occurred the largest number of visits for TBI. The most frequent injured cranial area was the front, with 24,75%. Regarding the type of treatment provided, 71,29% of cases received medical treatment, while 28,71% received surgical treatment. The average detention time of each patient was of 5,99 days. Regarding the outcome, 88,12% of cases were discharged, while 7,92% had a fatal outcome.
Ramos et al.\textsuperscript{15} Evaluate the main epidemiological aspects and factors related to this injury in victims of TBI met in the Emergency Department of the Regional Hospital of the city of Caruaru-PE in the period from 2006 to 2007, describing the socio-demographic characteristics of these victims.

There was a predominance in the male population, unmarried and age group of highest incidence was 25-40 years old. The leading causes of TBI are falls first, followed by motorcycle accidents. Vascular lesions (55%) were the most common, followed by bone (39%) and nerve (34%). The score of Glasgow Coma Scale at admission was of 11 ± 4. Alcohol consumption was associated with TBI in 20 (11.7%) who suffered accident. The length of stay ranged from one to 302 days, with an average of 8.7 ± 22.9 days, with a median of 5 and style of 2 days. Of the 171 hospitalized patients, 147 (86%) were in the infirmary, 23 (13.5%) in the ICU. Regarding the treatment performed, a total of 65 (38%) required surgery and 106 (62%) went through the conservative treatment.

Reis et al.\textsuperscript{16} Verifying that the failure of extubation influences the length of stay in hospital and in INTENSIVE CARE, hospital and mortality in ICU and the functional result at the time of hospital discharge and ICU in patients with TBI.

The average age of the patients was of 35.7 ± 13.8 years old. Of the 311 patients, 287 (92.3%) were male. The most frequent type of accident was the motorcycle, 33.8%; followed by various causes, 23.5%; automotive/trampling, at 18.0%; physical aggression, 16.4%; drilling by firearms in 5.8%; and stab wound, at 2.6%. Among the 311 patients, 232 (74.6%) underwent surgical treatment and 79 (25.4%) to conservative treatment. The median duration of mechanical ventilation was 7 h. The extubation failure occurred in 43 patients (13.8%). The reasons for reintubation were respiratory failure in 18 patients (41.9%).

Araujo et al.\textsuperscript{17} Examining some aspects of the epidemiology, clinical presentation and radiological patients with the diagnosis of traumatic extradural hematoma that have undergone neurosurgical procedure.

The traumas were more frequent in patients of the fourth decade of life. Male gender was more affected than female, respectively 89.2% and 10.8%. The main trauma mechanisms were: fall, pedestrian accidents, motorcycle accidents, physical aggressions, traffic accidents and unknown mechanism. On admission 102 patients (49%) presented with a Glasgow Coma Scale (GCS) between 13-15, 41 patients (19%) had ECG between 9-12 and 32% had severe TBI with ECG between 3-8. In 33% of patients there was associated intracranial injury, and that cerebral injury accounted for 46.9% of these lesions. Eighty-six patients (40.7%) were discharged after seven days of hospitalization, 32% of patients between 7-14 days. The mortality rate found was of 15.5%.

Table 3. Clinical and epidemiological profile of traumatic brain injury patients according to databases.

**DISCUSSION**

TBI appears among the three leading causes of death in the general population second only to neoplastic diseases and cardiovascular. The stage at which it is most common the occurrence is among young adults with prevalence of males where 30-80% of these victims are related to excessive use of ethyl alcohol and the lack of care in traffic,
either for speeding, by type vehicle: car, bike or motorcycle; and the items covering driver safety as helmets, seat belts, etc. The extremes of age, as elderly patients are also affected, but lower percentage.\textsuperscript{5,18}

Study\textsuperscript{19} shows that in the United States the average age of patients with traumatic brain injury is of 45 years old, since men are the most affected (80% of cases), while their study confirms the predominance of males analyzing 555 medical records of victims of traumatic brain injury patients in a referral hospital in Bahia, registering 83% of cases; however, there is a difference in age as in his study most patients comprised between 21 and 30 years old (23,2%). This difference in age distribution arises from the differences between the laws of traffic and the organization/supervision of Brazil, for the United States, as young Americans start to drive later, allied to greater punishment and incorruptibility of implementation forces.

Similarity statistical occurred in another study\textsuperscript{20} in 80,4% (82/102) of TBI patients were male and 79,4% (81/102) of the victims were under 50 years old, ensuring that this does occur due to high exposure of male victims with risk factors for TBI, such as violence and motor vehicle accidents, ie the man has greater access to cars and often performs work activities outside of their homes, exposing themselves more dangerous conditions. Equally, a higher incidence in males is related to locations with the highest rate of urban violence and reducing the incidence of TBI in groups composed of adults over 50 years old (20,6%); referring to the fact that lower exposure to external factors such as traffic accidents and violence.

The main cause of severe TBI in Trauma Sector in Aracaju/SE was traffic accidents (105 cases, 78%) from the analysis of 135 records. Of these, 60% (81 patients) were victims of car accidents and 18% (24 patients) of trampling. The second leading cause was the fall height (18 cases; 13%). Other causes of severe TBI were 40% aggression, followed facial trauma (30 patients, 30%) and thoracic (12 patients, 13%).\textsuperscript{4}

The increasing number of motorcycles has led to the increased accident rate. It is estimated the proportion of 90% for motorcycle accidents and 9% for other vehicles. Theories of behavior have some informative hypotheses for the fact that adolescents and young adults are most affected by accidents and violence. Inexperience, search emotions, impulsiveness, nice to experience risk of sensation and abuse of alcohol or drugs are associated elements to behaviors that may contribute to the higher incidence of traffic accidents in these age groups. For being an agile vehicle, economic, cost-effective and low cost maintenance more and more people use motorcycles as a means of work.\textsuperscript{8,15}

Among all causes primarily responsible for head injuries is traffic accident, stressing the motorcycle accidents.\textsuperscript{19} This is due to lack of attention, high speed, alcoholism, the non-use of protective equipment and the lack supervision and poor planning of traffic routes, factors accounted for study in large Brazilian cities such as Sao Paulo and Brasilia.

In a study\textsuperscript{4} conducted from a survey of 68 medical records department of traumatology of the Emergency Department of the Bases Hospital Sao Jose do Rio Negro in TBI patients by motorcycle accidents from December 2007 to February 2008, reveals that day more accidents with TBI victims was on Saturday, with 25% of the victims; Thursday showed the lowest number of accidents occurred on weekdays. In their study also revealed that the month of December had 44,1% of accidents with TBI claiming to be the festive month of December with an increase in the consumption of drugs and alcohol and more congested traffic because of Christmas shopping, further increasing the risk of such accidents. The night shift had high percentages of accidents (54,4%) explained by fatigue of drivers related to factors linked to the environment (less visible), speeding and disregard for traffic lights.

Other research\textsuperscript{4}, based on 496 patients suffering from TBI, the day revealed more victims of TBI was the Saturday with 79 cases (15,9%), accompanied by the Sunday and Thursday with 77 (15,8%); Wednesday 76 (15,3%); Tuesday and Friday with 67 (13,5%); and in last place, Monday with 53 (10,0%). There was no significant difference between the days of the week with the occurrence of TBI. On weekends, during which the population more demand travel, entertainment media and consume more alcohol than on other days showed no significant increase in TBI, so the victim's relationship with the days of the week did not show a significant relationship. However, in the survey of other study\textsuperscript{2} by 1205 forms with the medical diagnosis of traumatic brain injury, it was analyzed that the highest incidence of events that caused the TBI victims occurred on weekends, which prevailed in Sunday (300/24,9%) and Saturday (244/20,2%).

Regarding the level of awareness of TBI victims, from the analysis of 298 patient
records at the Hospital Santa Barbacena Mercy House between January 2008 and January 2011, it was observed that the average value obtained on the Glasgow Coma Scale (GCS) was of 12.2 ± 3.4, and the lowest value was three, and the greatest value 15. The frequency ECG > 13 was higher in those patients where there was no tomographic change, demonstrating that the lower traumas gravity are closely related to the lower frequency of tomographic findings.21 On the other hand, moderate and severe trauma (ECG ≤13) were more prevalent in those with CT findings.

The score of the ECG is a variable that has been thoroughly studied to estimate the prognosis of TBI in the medium and long term.22 Researches18 results indicate that among different instruments and variables studied to reach the prognosis of patients with brain lesions, the ECG stands out to estimate the evolution of these victims. The ECG is a tool used to conduct the evaluation of the level of consciousness; however, it should not be considered a complete neurological examination. In addition to it, one should also consider the evaluation of pupil functions, motor, sensory, cerebellar and cranial nerves, thus constituting a complete evaluation of neurological function. An assessment on grounds only in ECG becomes narrow, because it only allows to identify the level of awareness of users, which limits the assessment when the examiner does not claim to analyze the severity of the injury and harm to the patient's health.

Analyzing the clinical aspects from the trauma on the serviced, 630 TBI patients in the Neurology Department/Neurosurgery from the northern State of Ceará, study23 found that the decreased level of consciousness (415 cases; 65.9%) predominated. Also considered as the most common symptom and depends on the degree of injury. Among other clinical signs highlights were headache (175 cases; 27.8%); vomiting (149 cases; 23.7%); otorhea (147 cases; 23.3%); rinorrhea (125 cases, 19.8%); disorientation (80 cases; 12.7%); motor deficit (20 cases; 3.2%); agitation (18 cases; 2.9%) and seizures (17 cases; 2.7%), so the same study confirms the clinical aspects as an important variable because the initial clinical manifestation is a strong indicator of the severity of the primary injury and secondary associated with TBI and the need to the attention of health professionals to these signs and symptoms more present in order to assess possible brain injury after trauma.

The assessment of severity of trauma and the creation of basic maneuvers to maintain life at the event can set up the possibility of survival for trauma victims until their arrival at the hospital. Even at this stage through the screening system becomes possible adjustment of human and material resources to the actual victim's needs and can thus exert influence on mortality and morbidity, in addition to the high mortality rates, TBI's own ability to generate motor, cognitive, behavioral and psychological sequelae. Thus, as the case is led from the first events after the accident affects mainly the final consequence.

The most frequent sites of injuries in blunt trauma are the basis of the frontal lobe and the temporal lobe. The base of the frontal lobe is the most frequent place to the formation of bruises due to its uneven surface and for being the support region of the brain both the rotational movements as in the translation associated with the trauma and the most affected location in the TBI in hematoma level is the subdural space, because it is associated with the acceleration mechanism and slowdown in large kinetic energy trauma and in brain diffuse lesions.

The use of appropriate diagnostic methods is essential to minimize costs and improve the result of treatment to be instituted to traumatized patient, being central to the establishment of clinical therapeutic measures and/or surgical, even when any diagnostic method is established; it is essential continuing clinical monitoring of the patient. Although there are injuries that are not detected by CT scan, it is currently the fastest way to detect early lesions requiring surgical intervention.

Surgical treatments weighs in the financial plan of public health, for the recovery of such patients is more time consuming, requiring more intensive care and specialized treatment. Therefore, effective strategies for accident prevention and care, associated with the training health professionals and the general public in the care of multiple trauma have been identified as elements that reduce significantly the high morbidity and mortality rates in Brazil.23

It was observed in study21 that the average hospital stay was 7.2 ± 6.3 days, and 16 (5.3%) remained in hospital for 01 day, 183 (61.4%) for 02-07 days, 67 (22.4%) for 08 to 15 days, 29 (9.7%) for 16 to 30 days, and 03 (1%) for 31 to 45 days. The minimum number of days of hospitalization was 01 and a maximum of 43 days.

The patient with brain trauma must continue under observation for at least 24 hours in the emergency room/emergency so
this way, health professionals may be aware of the worsening of clinical signs, how to present disorientation, seizures, headache, between other characteristic symptoms of TBI. The TBI patients have severe injuries and risk of death. To reduce brain damage resulting from traumatic injury and create appropriate conditions for the recovery of patients usually becomes necessary early treatment in the Intensive Care Unit (ICU). In Intensive Care Units (ICUs) in Brazil the average time a patient stays reported by the 2nd Brazilian Census ICU is one to six days, and in international ICUs average is 5.3 ± 2.6 days of hospitalization. With the continued development of new technologies the seriously ill patient is kept for a long time in these units, even when death is inevitable, causing high financial, psychological and moral costs for all concerned.

A study also shows that the growth of TBI rates from external causes has increased considerably within one year and two implications may result from this: 1) public spending is turned more for treatment than for public policies on prevention of external injuries; 2) the company suffers a certain socioeconomic impact with the loss of part of the economically active population. There is also to consider the individual material losses and the temporary or permanent loss of productivity of individuals that burden public spending. However, another factor to be considered is the severity of TBI, which can lead to higher expenses and professional resources in an attempt to preserve the life of the individual, featuring the ECA as a serious public health problem.

The results presented in this review partially reflect the clinical and epidemiological profile of the victims; some articles that have been found as the application of selected descriptors were not freely available.

CONCLUSION

There was a high prevalence of males, especially among individuals in the productive age group, emphasizing the high frequency of traffic accidents resulting from the significant increase in motorcycles, considering the nighttime and Saturday as the day of the week most frequent. Regarding the most frequently injured cranial area showed the frontal bone. Among the clinical findings the highlights were the decreased level of consciousness and headache and the study also revealed a considerable number of deaths.

Given the human, financial losses and due to the scarcity of epidemiological studies to plot a profile of patients who have suffered TBI, one can configure this study as an essential tool for implementation of prevention programs, especially national programs for prevention of accidents traffic and through the training of specialized personnel in the rescue of accidents also important being the development of treatment protocols in hospitals, giving health professionals a better understanding of the reality of these events, seeking to encourage their participation in an attempt to reduce or minimize systems and strategic planning for the high prevalence of this important condition in the society.

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