Traffic Education involving Children in Latin America and Brazil.

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Abstract

The Traffic Education is currently a reality to be considered, considering that traffic accident is the main cause of death among children and adolescents, surpassing even homicides and any other "natural" cause of death, where it aims to preserve the life and physical integrity of humans beings in traffic situations. Thus, this article aims to present the contextualization of public policies for the reduction of accidents suffered by children from Early Childhood Education to Elementary School in Latin America and Brazil in the last decade. In conclusion, Traffic Education can contribute to the formation of adequate behaviors of children and adolescents, changing, in the medium and long term, the behavior of adults, where the school, family and government should be involved, emphasizing that this work should begin from an early age and extend to higher education.

Keywords: Education; Traffic; Training; Politics; Children.

1. INTRODUCTION

Traffic education is a way to combat traffic violence in the medium and long term, and should be introduced from elementary school, so that contact with the reality of traffic can be learned from the initial years of the student's training process.

In this sense, it seeks to form a more conscious citizen and involved with the issues related to traffic and its process of humanization in elementary school from a relationship with reality, without letting this process of training and awareness begin only with the age of obtaining the *National Driver's License* (CNH).

The consequences caused by the lack of specific educational public policies are particularly relevant among the negatives externalities produced by traffic, not only by the economic costs caused, but above all by the pain, suffering and loss of quality of life attributed to the victims, their families and society as a whole, which shows a picture, still worrying, especially when compared to developed countries.

Despite the gravity situation, which has been repeated for several decades, Latin America and Brazil have always relied on parameters derived from foreign research to assess the impacts of traffic accidents.

Thus, a methodology based on bibliographic research will be presented, aiming to present aspects about how traffic education has been treated, serving as parameters for new studies that reflect the importance of the theme as a mechanism for preventing traffic violence and valuing life.

Therefore, the approach of the theme will start from the study and analysis of knowledge of the reality of the environment and other facts that show the situation of traffic education in Latin America and Brazil, to better know this reality, creating subsidies for decision-making and implementations of actions, where the first step towards the change of this cruel situation, where the "road" problem was incorporated into people's daily lives, silent and impactful, should occur through education.

The scientific contribution of this work will allow the enrichment of theoretical-pedagogical knowledge in relation to the role of the school in the formation of the citizen child, as well as the importance of working the coexistence of the child within the transit system, thus rethinking the behaviors of individuals and how they interact in the teaching-learning process.

2. TRAFFIC EDUCATION IN LATIN AMERICA

> *We can't wait any longer to act when we know there are children dying on the roads.*
>
> (MANDELA, 2010)

In terms of road safety, Latin America continues to occupy one of the first places, in the sad world ranking of regions with the highest mortality rates from traffic accidents. According to Ambev, (2017):

> According to the WHO and the Pan American Health Organization (PAHO), the issue of road safety is also alarming in the Americas, whose death rate per 100,000 inhabitants is 15,9. In a specific report, the organizations recommend the region, characterized by strong income inequality and education, investment in infrastructure, reform of safety legislation and effective enforcement to improve the behavior of road users and reduce traffic casualties.

"This is a global epidemic. But the difference from other crises is that we know exactly what to do: strengthen safety limits, improve spaces for pedestrians and roads, make vehicles safer and raise awareness through **education**", Ambassador Mandela said.

> His words have a special meaning in Latin America, with the highest road accident rates in the world (19,2 deaths per 100,000 inhabitants). South America, for its part, is almost 2 points above the regional index and more than double that of the European. (CARRILLO, 2019)

Since 2011, the Ibero-American Observatory of Road Safety (OISEVI) has established bridges so that the different countries in the region can share their knowledge, while setting up a solid database on which it articulates efficient public policies.

At the same time, the first Ibero-American database on traffic accidents was created (OISEVI, 2019). This ambitious project, rooted in the Decade of Action for Road Safety launched by the United Nations, came true thanks to the efforts of countries in the regiom and the World Bank, which provided technical and financial assistance for its design and implementation, and served as an intermediary between institutions such as the Organization for Economic Cooperation and Development (OECD) and the **International Road Taffic and Accident Database** (IRTAD).

Each year, the lives of aproximately 1.35 million people are disrupted due to a traffic accident. Between 20 and 50 million people suffer non-life-threatening injuries, many of them resulting in disability. (PAHO/WHO, 2019)

The World Health Organization (WHO) estimates by 2030 that injuries from traffic accidents will be the fifth leading cause of death, even for diseases such as tuberculosis and HIV/AIDS.

Traffic injuries cause considerable economic losses for individuals, their families and countries as a whole. These losses arise from treatment costs (including rehabilitation and accident investigation), as well as from reduced/lost productivity. Traffic accidents cost most countries 3% of their gross domestic product (GDP).

In the study of Child Traffic Safety in cars in Spain and Latin America "Child Safety Seats", published by the MAPFRE Foundation (2016), presents the situation of child road safety in Latin America countries:

> **... children from the most deprived communities are the ones most at risk of suffering the consequences by the combination of impacts that traffic generates for health.** It is that millions of children in Latin America live in areas where the limits of air contamination exceed in a very dangerous way, the fact is that vehicle emissions contribute significantly.
>
> The report also highlights that **almost 50 children lose their lives on the region's roads every day.** At this point, it should be recalled that the most vulnerable are children living in poor neighborhoods and that in many countries children die more as pedestrians than as car passengers.

Reading again, because sometimes the numbers are cold. We are talking about thousands of Latin American children who would have no need to die if they took some road safety measures that already work in other countries.

The study also points to several measures to be considered, first, to improve the recognized information about accidents (including childhood accidents).

Unifying statistical criteria and improving data accessibility contributes to studies to identify possible areas for improvement. Moreover, it is an exercise of transparency that helps a better segment of the evolution of the problem.

More important here is to introduce specific legislation on the use of child restraint systems. Only Brazil and Puerto Rico there is a complete law on the use and technical requirements of child seating and

seat belts. At least five countries (El Salvador, Guatemala, Honduras, Peru e Dominican Republic) there is no legislation on this subject. In the other countries considered in the study, the regulations are partial.

Together with the improvements of the legislation, it is necessary to exercise a review of the measures implemented, to prove that they are fulfilled.

One recommendation is **to improve education and citizen awareness.** Brazil, Puerto Rico and Uruguay get the best score in this study, thanks to their permanent and far-reaching campaigns on the use of child safety seats. Argentina has campaigns considered medium-range, while Chile, Costa Rica, El Salvador and Mexico have one-off campaigns. In the ten remaining LAC countries included in the study, no campaign was found on child restraint in automobiles.

> Despite progress, traffic deaths continue to increase, with 1.35 million deaths annually. Traffic injuries are now the main causes of death for children and young people between 5 and 29 years old. Worldwide, of all traffic deaths, pedestrians and cyclists account for 26% and motorcyclists and passengers by 28%. The risk of death in transit remains three times higher in low-income countries than in high-income countries, with higher rates in Africa (26,6 per 100.000 inhabitants) and lower in Europe (9,3 per 100.000 inhabitants). (WHO, 2019).

The problem of traffic safety and its consequences worldwide has been charged for its degree of importance in the recent years, especially when it comes to making known figures from various sources such as the World Health Organization.

2.1 Educational Policies and Road Training.

> ... education is a way to improve the world in which we live and transform relationships between people in moments of learning, coexistence, respect and affection. (FREIRE, p. 1984)

Traffic education in schools is one of the key aspects in the human factor, which qualifies the behavior of future users. Likewise, in traffic training, understood as the specific training of the future driver is fundamental for his subsequent behavior, whether to include information about its regulation and

compliance (in cases where it is regulated, it is mandatory, even if numerous non-compliances are found in many countries). The most significant data are recognised in the following table:

Figure 1. Regulations related to traffic safety

Country	**Traffic Education in Schools** **Driver Training**
Argentina	It is present in schools, in a transversal way according to law 23.348 and law 24.449. There are no guarantees of its application. Numerous deficiencies in training are recognized. The improvements are regulated in the new Traffic Law No. 26,363, but so far there has been no practice.
Bahamas	Traffic education is present in schools through traffic safety discipline. It is regulated; there are no guarantees of compliance.
Barbados	In a transversal way it is regulated; there are no guarantees of compliance. There are no guarantees of its application.
Belize	It is not regulated; there are no guarantees of compliance.
Bolivia	It is not regulated; there are no guarantees of compliance.
Brazil	It contemplates itself in the law. The number of institutions that systematically adopt Traffic Education in their curriculum is very low. It is regulated and there is no evidence of non-compliance.
Chile	It contemplates itself in the law. It is present in schools as a vertical and transversal objective. It is regulated and there is no evidence of non-compliance.
Colombia	It is contemplated in the law and is carried out in a transversal way. There is a legal framework for obtaining the license, but numerous cases of non-compliance are recognized.
Costa Rica	It is not mandatory even if extended by covenants. It is regulated and there is no evidence of non-compliance.
Ecuador	It is contemplated in the law and is carried out in a tranversal way. It is regulated; there are no guarantees of its compliance. There are no guarantee of its application.
El Salvador	It is contemplated in the law, but there are no guarantees of its application. It is regulated; there are no guarantees of its compliance.
Guatemala	It is not implanted; even if one is working to achieve it. It is regulated; there are no guarantees of compliance.
Guyana	It is not regulated; there are no guarantees of its compliance.

Honduras	No, even if there's some isolated initiative. It is regulated; there are no guarantees of compliance.
Jamaica	It is not mandatory by law, even if education initiatives are carried out. Numerous deficiencies in training are recognized, which are improving in a bill.
Mexico	Level of development variable according to the states, there is no global policy at the national level. Numerous deficiencies due to the existence of several criteria in the states and a lack of national control.
Nicaragua	There's no implant, even if you're working to get it. It is regulated; there are no guarantees of compliance.
Panama	It is present in schools, in a transversal way. There are no guarantees of its application. It is regulated; there are no guarantees of compliance.
Paraguay	It is present in schools, in a transversal way. There are no guarantees of its application. It is regulated; there are no guarantees of compliance.
Peru	It is not mandatory by law. It is regulated; there are no guarantees of compliance.
Dominican Republic	It is contemplated in the law, but there are no guarantees of its application. It is regulated; there are no guarantees of compliance.
Uruguay	There is no legal coverage about it, even if some activities are carried out. It is adjusted incompletely.
Venezuela	It is contemplated in the law, but there are no guarantees of its application.

Font: IDB and AEC, 2009, p. 44 (adapted)

While traffic education appears well mentioned in numerous legal texts of the different countries, in reality its instrumentation is not observed systematically, there are many isolated public and private efforts, but they do not imply a state commitment to the real introduction of traffic education at all levels of schooling.

This is a field where there is much to be done and where private collaboration can play an important role, because there is a lot of developed training material and road parks that are already installed in some countries.

Traffic education and accident prevention campaigns can be applied in all countries, using mainly graphic, oral, television and digital means. The most repeated themes are sensitization (either with dramatic style or with positive type messages) about alcohol and driving, use of seat belts and prudence of

pedestrians among others. In most cases, an estimate of the effectiveness of campaigns is not performed, which can result in inefficient use of resources.

With regard to the traffic training of drivers, in almost all countries it is regulated, but in many of them high rates of non-compliance are identified while driving without a license and other problems derived from control deficiencies.

Although the qualifications to drive are in each Latin American standard, there are differences in psychophysical requirements, theoretical and practical examinations between the different institutions that provide driver's licenses, even comparing between locations in the same country.

The concern with accidents with children, in developed countries today, has led many countries to verify the physical and behavioral aspects that possibly intervene and that will make this user more vulnerable to accidents, including the factors of child exposure to traffic and accidents in the home-school-home route, with a concentration of the number of road risks.

Based on these results, developed countries have taken broader preventive measures involving school, community and family.

3. BRAZIL - INCLUSION OF TRAFFIC THEME IN EDUCACION.

Accidents are now the leading cause of death for children aged one to 14 years in Brazil. Every year, about, about 3,600 children of this age group die and another 111,000 are hospitalized due to these causes in the country (CHILD SAFETY/BRAZIL, 2020)

It is quite recent in Brazil to include the theme of traffic and at the same time it is known that educational actions that promote the formation and change of attitudes, which in turn materialize in appropriate behaviors, both for children and adolescents, as for adults, can contribute to safer traffic.

For this reason, among others, this article considered to emphasize in the education of children and adolescents and not that of adults:

a. Educating children and adolescents for traffic can be more efficient than educating adults, because the former are in the process of training as people, while adults already have their behaviors consolidated, which requires the proper use of special strategies, such as Social Marketing;
b. Traffic education can contribute to the formation of appropriate behaviors of children and adolescents by altering the behavior of adults in the medium and long term (OECD, 1993).

And this improvement in Traffic Education will occur according to Farias, (2002, p. 25), through three approaches:

a. The constructivist approach, to make the student active in his/her training process, where his visions, perception and expectations will be considered;

b. The Socio-Cultural, to promote citizenship through the analysis of real traffic situations and reflection on the consequences of the freedom enjoyed by individual motorized transport in the increased risk of traffic accidents;

c. The holistic approach or education in human values, so that the student has experiences of solidarity and cooperation in the classroom and traffic, as well as to transform his fragmented vision of the inclusive view of the world.

Transit education must act simultaneously in these three dimensions: to make the student active in his/her process of knowledge construction, to develop the potential for critical reflection of the student and to provide the experience of solidarity and cooperation in school and in traffic, because knowledge is built, human potential develops and value is lived. There is no discourse capable of teaching values, it is necessary to live them (MIGLIORI, 1998).

The deepening of the multidisciplinary approach of Traffic Education will help in understanding the issues studied here. First, trying to understand how the student perceives traffic and then formulate educational actions to reduce traffic risks and prevent accidents.

According to (Mauro, 2001, p. 208) in Brazil, an important preventive measure to reduce traffic accidents was the implementation of the New Traffic Code (CTB). Media and traffic technicians information on the new code revealed that significant progress has been made. The new code is based on three relevant pillars: education, citizenship and infractions. This involves setting boundaries, allowing education and punishing. They point out that the new Brazilian traffic code will have the difficult task of becoming one of the most violent transits in the world in insurance. It will have the force of strict punishments, fines and education to try to reduce the sad statistics of Brazilian traffic, as well as the rigor in: impunity, vehicle safety vehicle inspection and emission of pollutants and noise.

For Braga & Santos (1995), the biggest problem in the transit education process is to give users a passive role to receive information, for example, in educational campaigns, which, in addition to improving the passive role, there is no evidence of its re-educational effect. The ultimate goal is to change the view, the attitude of users with regard to their participation in traffic.

3.1 Legal Aspects of Traffic Education in Brazil.

When drafting the Federal Constitution of 1988 (arts. 6 and 23, XII), legislators have already demonstrated the concern and importance of education for transit in the social context, giving the powers

to the Union, States, Municipalities and the Federal District, as well as the CTB dedicates a chapter to the theme (Chapter VI, arts. 74 to 79), prioritizing this task to all the component bodies of the National Transit System (Chapter VI , arts. 74 to 79), prioritizing this task to all the component organs of the National Traffic System (Chapter VI, arts. 74 to 79), prioritizing this task to all the component organs of the National Traffic System, a fact that was ratified in Article 5.

Article 320 of the CTB also states that resources from the collection of traffic fines must be applied, among others, in traffic education.

More than ever, the school must actively participate in traffic education, because today's children will be the young people of the future, who will be users and traffic managers, able to transform this reality. (Anonymous, 2017)

And that traffic education, in addition to teaching rules, techniques, accident prevention methods, should have the concern to transform young people into conscious citizens, because we live in society and this concern must occur, in the short, medium and long term, because the complexity of the factors that cause these problems can no longer wait.

As educator Paulo Freire says: **"Education is not the solution, but there is no solution without education"**. Education is not to end the amenities offered by vehicles, but to adapt the use of these "facilities" rationally and consciously, due to their importance in our current life, that their coexistence with vehicles is in an orderly and healthy way, because traffic was created to serve man and not destroy him.

Brazilian traffic is regulated by Law 9.503/97- Brazilian Traffic Code - CTB and by complementary resolutions. In addition to the CTB and resolutions, states complement legislation through ordinances and decrees.

In general, Brazilian traffic legislation is considered good and even serves as an example for other countries. When it came into force in 1998, the CTB had many controversial points that allowed more than one interpretation that have already been clarified by experts today.

The Code defines the powers of the various authorities and bodies related to traffic, provides guidelines for Traffic Engineering and establishes rules of conduct, violations and sanctions for different users of this complex system, based on the Brazilian Constitution, as well as compliance with the agreements of the Vienna Convention and the MERCOSUR Agreement.

> Vienna Convention – In 1968, representatives from several countries approved the standardization of international traffic signs and standards, which were adopted by several countries, including Brazil. This standardization allows drivers from different backgrounds to travel safely in other countries, even without mastering the local language.
>
> MERCOSUL Agreement – Signed in Montevideo in 1992, it entered into force in 1993, It established the basic rules for regulating and standardizing vehicle amd international traffic in MERCOSUL participating countries – Brazil, Argentina, Bolivia, Chile, Paraguay, Peru and Uruguay – to increase the safety of people and vehicles in international circulation in theses countries. (BRUNS, p. 16, 2006).

Article 74 of the CTB (1997) states that: Education in transit is a right of all and is a priority duty for the components of the National Transit System:

§1 - The existence of educational coordination in each organ or entity component of the National Transit System is mandatory.

§2 - Executive bodies or transit agencies must promote, within their organizational or contractual structure, the operation of public transportation schools in the manner and standards established by CONTRAN.

Art. 75 The CONTRAN shall establish annually the themes and deadlines of the campaigns at national level which must be promoted by all organs or entities of the National Transit System, especially during periods corresponding to school holidays, long holidays and national traffic week.

§1 - The organs or entities of the national transit system must promote other campaigns within their electorate and according to local peculiarities.

§2 - The campaigns covered by this article are permanent, and the radio and transmission services of sounds and images operated by the government are obliged to disclose them free of charge, with the frequency recommended by the competent organs of the National Traffic System.

Art. 76 Traffic Education will be promoted in preschools and 1st, 2nd and 3rd grades, through planning and coordination actions between the organs and institutions of the National Traffic System, the Federal District and the municipalities, in their respective areas of operation.

Single paragraph. For the purposes provided for in this article, the Ministry of Education and Sport, acting on a proposal from CONTRAN and the Council of Rectors of Brazilian Universities, directly or through conventions, will promote:

I - The adoption, at all educational levels, of an interdisciplinary curriculum with programmatic content on road safety;

II - The adoption of content related to traffic education in schools of training and training of teachers and multipliers;

III - Creation of inter-professional technical bodies for the study and analysis of statistical data related to traffic;

IV - The elaboration of plans to reduce traffic accidents in interdisciplinary university transit centers, with a view to the integration of the University - Society in the area of traffic.

Art. 77. In the context of traffic education, it will be up to the Ministry of Health, through the contran proposal, to establish the national campaign clarifying the conduct to be followed for first aid in the event of a traffic accident.

Single paragraph. The campaigns will be permanent through the Unified Health System (SUS), being intensified during the periods and in the modes provided for in Article 76.

CTB's concern about the importance of traffic education is clear and imposes rules. Therefore, by promoting it, you will do nothing but your obligation. In CTB, it is mandatory in early childhood, elementary, high school and higher education.

If there was adequate and coherent road education, it would solve most of the problems of Brazilian traffic, in a positive domino effect. When people understand what is required of them, they understand the need to protect life and see all the mechanisms designed to make a safe transit: they become collaborators and not critical without knowledge of the cause.

In these times of greater control of spending in the public sphere, with greater exposure of administrators, the concrete results provided by a Traffic Education, produce excellent political and social dividends (Anonymous, 2008).

In Brazil, where there is much to do in this area, the initial results are likely to be highly visible. On the contrary, in countries such as Sweden and Japan, improving rates would be very difficult.

Traffic education is growing in importance in all developing countries. Here, we are seeing a great interest even from institutions that are not directly linked to traffic, perhaps because other measures have lost a little encouragement, because they have not given the expected result.

In 2006, DENATRAN, through the National Traffic Council and the Ministry of Cities, issued a resolution establishing standardization criteria for the operation of Public Traffic Schools – EPT throughout the country, in which the School of Public Traffic is primarily intended to offer courses, actions and educational projects, aimed at the exercise of citizenship in traffic, prioritizing the development of social coexistence in public space , promoting the principles of equity, ethics, aiming at a better understanding of the transit system with an emphasis on safety and the environment.

DENATRAN will establish the quality indicators to be observed in the control of the results, as well as the methods of monitoring the actions implemented by the EPT, in accordance with Article 6 of Res. 207/2006.

> It depends on the school of public transport:
>
> I – Indicate traffic educators to form their technical team according to established criteria;
>
> II – Define themes, curricula, establish content and evaluation systems to be developed, according to the public – object and in line with the objectives and guidelines of the National Traffic Policy;
>
> III – Plan and execute courses, action and projects of educational transit, as established in the plans and programs of Traffic Education of the respective traffic agency or entity;
>
> IV – Develop your pedagogical project according to the established parameters;
>
> V – Manage databases and information relevant to road education, establishing criteria for its access;
>
> VI – Develop and provide technical guidance for the preparation of teaching support material;
>
> VII – Propose partnerships with other organs, entities, institutions and organized sectors of society, for the integrated implementation of specific projects of education, studies and traffic research;
>
> VIII – Encourage the production of local knowledge and actions;
>
> IX – Interact with the social media activity of the respective traffic agency or Executive Agency;
>
> X – Develop continuous activity of studies and research focused on education in transit, including the organization and maintenance of a library, including arrangements and specialized library;
>
> XI – Carry out periodic evaluations of the implemented actions.

3.2 Good Practices and Outstanding Challenges in Traffic Safety

In Brazil, the concern with the adoption of educational measures can be verified since the end of the 1960s. Through the Resolution of the National Traffic Council - CONTRAN, the National Traffic Week guideline was established and guided the development of the campaign that should reach all citizens, through intense advertising and implementation by people of legal aspects of systematic traffic. With this measure, the Brazilian government believes that it will contribute to people's awareness of the safe practice

of traffic. The educational measures adopted by Brazil are summarized in the daily inspection and the National Traffic Week, the behavior and obligations of users and road signs, in addition to the moral and cultural aspect, which can influence the order of traffic. In recent years, we have received from Brazil numerous examples of good practices in road safety, which serve as a model for other countries.

> Countries that invested in Traffic Education achieve excellent results. Good examples of this are Sweden and Japan, which have had statistics as pitiful as ours and are now global benchmarks for safe traffic. The experience of countries that have experienced critical situations shows that traffic education works. (PORTAL SÃO FRANCISCO, 2016)

However, the number of traffic accidents continues to grow in a country with a thriving economy where vehicles and travel are increasing.

Brazil has a very restrictive law regarding driving under the influence of alcohol, which prohibits getting behind the wheel with any degree of alcohol in the blood. The so-called **"Prohibition" came into force in 2008**, with promising initial results, since mortality decreased by 13.6%. However, the effectiveness of the measure was reduced over time, so the law again hardened, with greater sanctions and controls.

In child restraint systems (SRI), Brazil also has **one of the most advanced regulations in its environment**, which also includes technical requirements with international approval. In the study conducted by the MAPFRE Foundation (2016) on SRI in Latin America and the Caribbean, it scored **74 out of 100**, being the second highest-rated country, behind **Only** Puerto Rico. According to this same report, it was necessary to improve the monitoring or police **control** of the use of NIS.

The Inter-American Development Bank (IDB) points out other points of improvement, such as **traffic education** and social awareness. The IDB analyzed in detail the characteristics of road accidents in Brazil in a report that compares the severity and frequency of accidents in different types of road infrastructure and identifies the conditions that most influence.

Among them is the lack of perception of the **risk of road users**, a problem that tries to combat with campaigns to promote road safety from the public and private sectors. For example, we find the videos and teaching materials of CESVI Brazil, the blog "Education for Traffic" or the web (*criancasegura.org.br*), in addition to the campaigns carried out by the National Department of Traffic of Brazil (DENATRAN).

We must not forget that **road safety is based on many pillars**, although **legislation** and **infrastructure** are essential, not least is monitoring and education. It will be of little use to improve the tracks if users are not taught how to cross them safely, with respect and responsibility. Similarly, the rules alone are also not sufficient: it is important that they are widely known and that compliance is well monitored.

3.3 Risks in Children from 0 to 14 years

According to data from the Ministry of Health (2017), about 6,000 children died and another 140,000 were hospitalized due to domestic and traffic accidents, according to the following data presented in the figure below. Only traffic was responsible for almost half of these deaths.

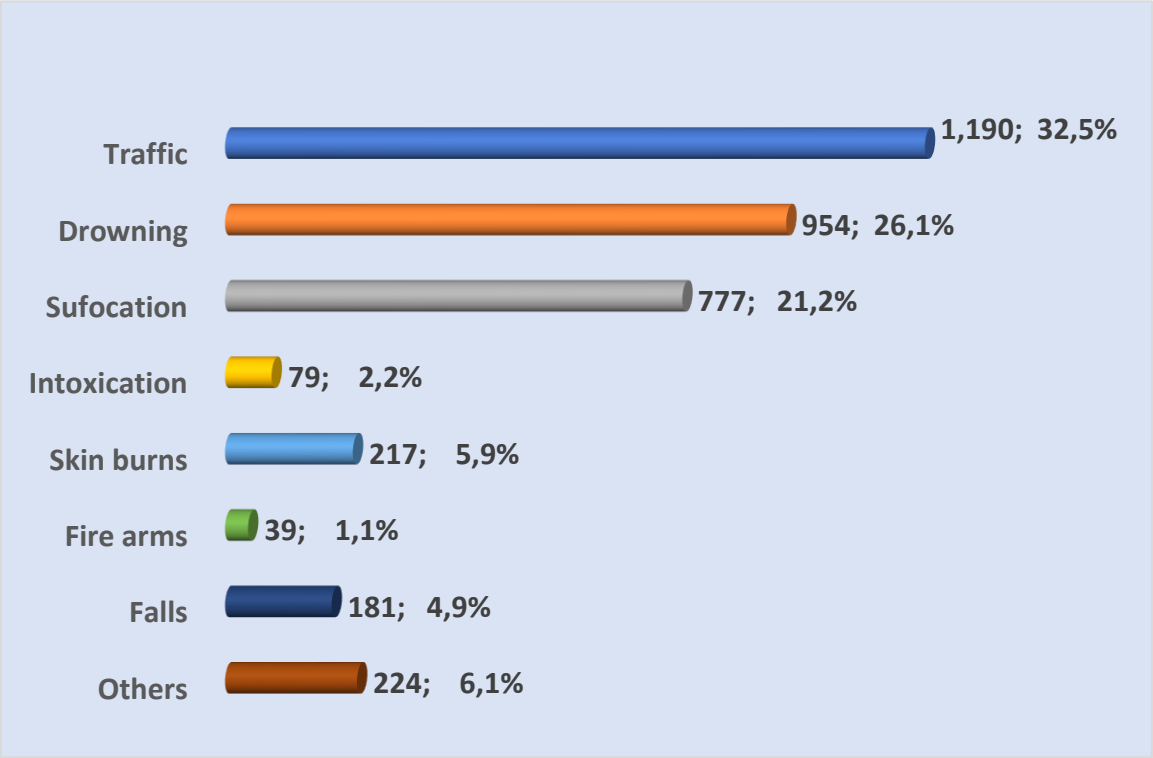

Figure 2. Deaths from accidents aged 0 to 14 years in Brazil

Font: The authors, adapted of DATASUS, 2020

All these data demonstrate the importance of accident prevention actions with children and adolescents. Studies show that 90% of accidental deaths could be prevented by adopting simple prevention measures, such as behavior change, adaptation of the environment or use of safety equipment.

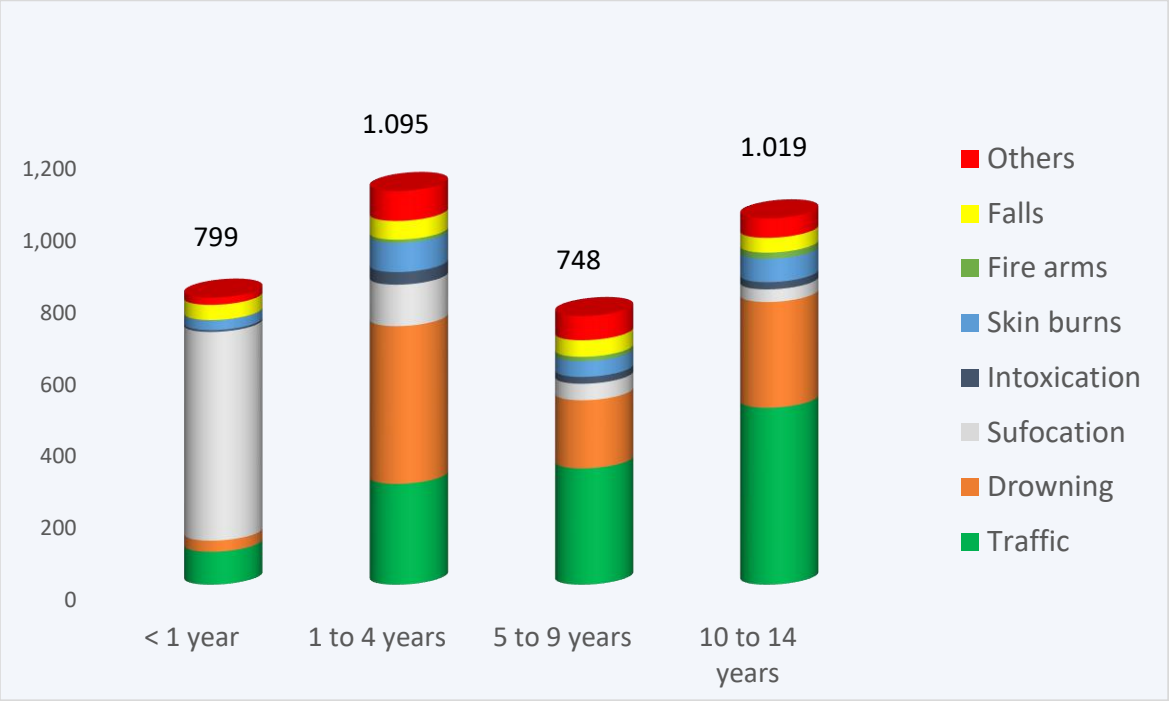

Figure 3. Deaths by age group/type of accident.

Font: The authors, adapted of DATASUS, 2020.

In the age group from 10 to 14 years is precisely when the child can sit in the front seat of the vehicle and that is when one perceives a greater number of occurrences.

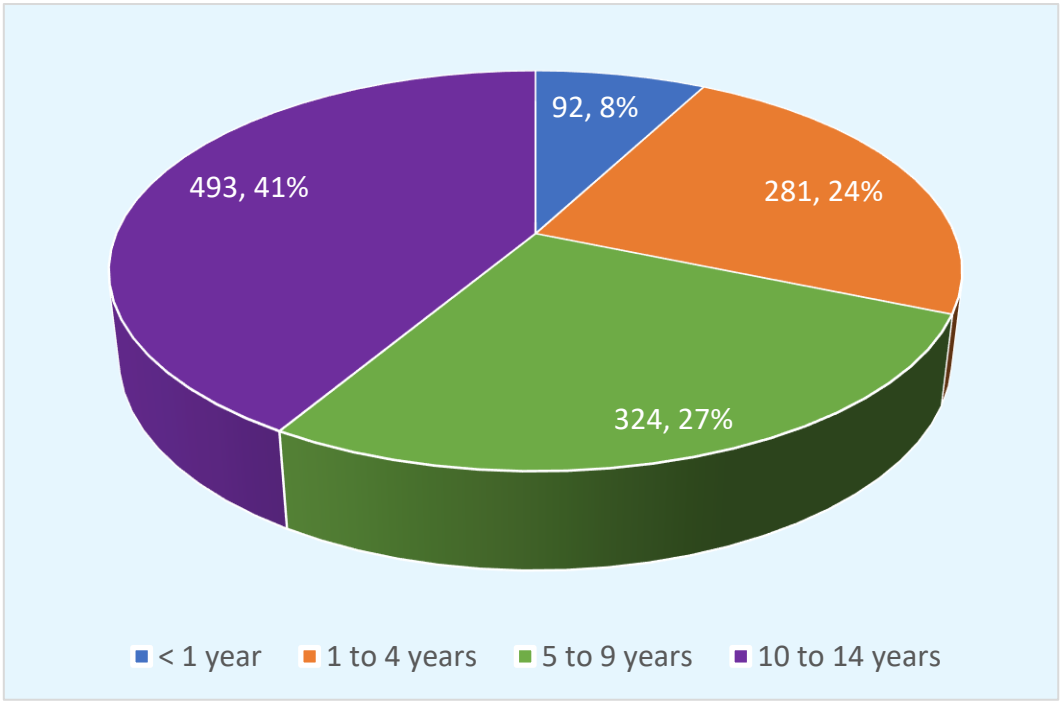

Figure 4. Deaths of children by age groups

Font: The authors, adapted of DATASUS, 2020

This makes us reflect on the responsibility of adults and how much their safety is still neglected.

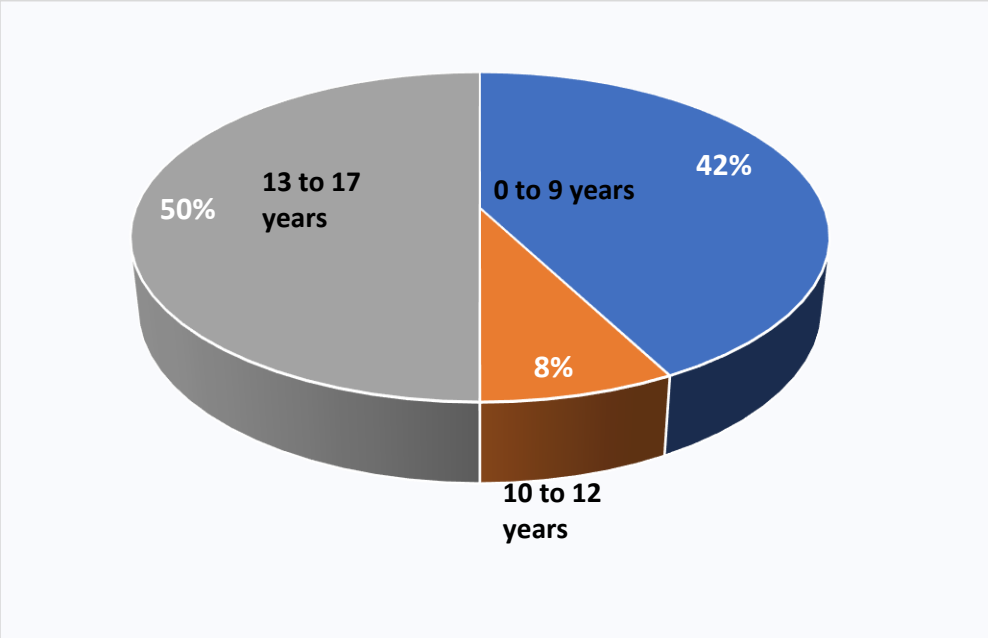

Figure 5. Percentage of deaths in children and young people.

Font: The authors, adapted of DATASUS, 2020.

According to Jorge and Martins (2013), children are identified as the most frequent victims of hit-and-run accidents, especially in the age group from thirteen to seventeen years of age and reaching a coefficient of 2.2 deaths per 100,000 inhabitants, being responsible for the highest lethality when compared to other types of traffic accidents.

> The literature points out that this is due to their lower perception of danger, because they cannot estimate the speed of vehicles when crossing the street, for not using the safety lane, for playing in the street in the middle of the movement of vehicles, for not knowing the rules in traffic, in short, by the very mental and physical immaturity of the children to follow the rules of traffic , due to the spirit of competition and speed characteristic of this age group, in addition to the urban conflict between vehicles and pedestrians, combined with the non-respect for pedestrians by drivers of vehicles. (JORGE and MARTINS, 2013)

Educational measures are emphasized here as of paramount importance aimed at forming, even in the long term, a more conscious generation, aware of risks and with greater capacity to face them.

It is necessary, however, to remember that the potentiating factors, such as disrespect for signage, excessive speed and the important problem of alcohol, can, even if the child crosses the safety range or is on the sidewalk, contribute to the victim of trampling. Supervision and education, in this case, is an important element in the prevention of these events.

Therefore, it is important to know who are the main victims, described below, as presented by the (SAFE CHILD PROGRAM, 2006):

a) Children under 5 years

Typically, there are no significant rates of mortality rates for pedestrians under five years of age, and in part this can be explained by the lower exposure of these children, as they would be under surveillance or in the company of parents or guardians.

b) Children from 5 to 10 years

Hit-and-run is the leading cause of death from accidents involving children aged five to ten years.

Often, children at this age start school life, so they present "a window of vulnerability" in which, both the expectations and demands of adults, go beyond the skills that these same children are able to offer, if viewed as pedestrians, from whom one expects sufficient maturity to make a safe crossing. Thus, as those responsible overestimate the abilities of this being, still in training, children older than five years would be, in a way, more exposed to hazards and, for this reason, much more vulnerable to traffic accidents.

c) Children and adolescents over 10 years

The age group over 10 years has a reduction in the level of death from traffic accidents, but it is worth mentioning, as well as deaths in 70% of victims over 10 years of age are caused by traffic accidents involving passengers or motor vehicle drivers

d) Boys and Girls

As in other events of deaths from external causes, in the condition of pedestrians, boys stand out as more frequent victims than girls.

According to THOMPSON, RIVARA and BARBEIRO, MELLO JORGE, WAKSMAN, BASSAOLS, BASSO, CHAN, cited by Alves (2001, p. 44), in Brazil, in studies conducted in the cities of São Paulo, Porto Alegre and Londrina, the predominance of occurrences in relation to males was verified. Alves (2001, p. 45) observed in Curitiba the predominance of males in deaths from traffic accidents involving children under 14 years of age (68.79%), in relation to female minors, which follows the worldwide profile.

Moreover, according to Novo (2006), children with more precarious socioeconomic conditions and living in regions that concentrate low-income populations are more likely to run over. Many studies from different countries report that children of low socioeconomic status have a higher risk of injury when they are moving in pedestrian situations.

4. CONCLUSION

Traffic Education, especially that of the children's public, can contribute to the reduction of traffic accidents in the medium and long term, through changes in risk behaviors and the development of appropriate behaviors, awareness of individual responsibility and respect for the rights of others. Society can more easily get its citizens to develop these values from an early age if children and adolescents are educated so that, when they are adults, they become pedestrians and, especially, more conscientious drivers.

Educating works and the countries that have invested in Traffic Education have achieved excellent results. Good examples are Sweden and Japan, which eclipse statistics as pitiful as ours and are currently the parameters of safe transit in the world.

The experience of countries that have experienced critical situations shows that Traffic Education works. What doesn't work or works badly, are short-term campaigns because they have a transient effect, as well as interrupted programs.

Although the Law guarantees Traffic Education through article 76 of the CTB, as presented, most schools do not include the theme "Transit" in their curricula.

We see that long-term education programs, consistent and with appropriate methodologies, take effect. We need continuity, because it is a new theme, in which the audience to which it is addressed (children, young people or adults) very little or nothing, saw, heard or read about it.

Traffic Education in Brazil is very recent. It is essential to develop a methodology that takes into account the public, their age, level of education, needs, desires, socioeconomic profile, etc. It is almost as a condition for it to be possible to educate for traffic.

In relation to Traffic Education in Elementary School, research shows that there is a lack of permanent strategies in schools for the effective realization of Traffic Education. The theme is worked on in isolation (mainly focused on patterns), as well as for a very short period of time, such as the week of transit. There is no continuous and systematic work.

Therefore, when trying to place within it a theme of enormous social relevance, it is noted that the school will not only strengthen its bond with the community, but will also make room for the qualification of life. In addition, talking about locomotion can stimulate the debate about social harmony, social behaviors in the face of differences, in short, can make the school environment increasingly open to work with themes that mobilize society.

In this sense, it is important to invest in the development of educational projects and activities that lead to better living conditions, changing their behavior in traffic, which means saving lives and helping many others to also enjoy their lives without the limitations imposed by the bad behavior of citizens. Therefore, the task is to educate for a more civilized and safe transit.

The data presented in this study support the need to educate for traffic and life, seeking to train generations of future drivers of vehicles and pedestrians more aware of their rights and duties in a continuous and systematic way.

Traffic education goes beyond the mere transmission of information. It focuses on the human being and works on the possibility of a change in values, behaviors and attitudes. It is not limited to sporadic events and does not allow uncoordinated actions. It takes on a continuous learning process and must use different methodologies to achieve different ...

Essential measures to improve government initiatives should be implemented, such as: reducing speed on streets and roads, controlling alcohol consumption and, undoubtedly, efficient work of Traffic Education.

Transit education should be a transversal program of school, family and government and, finally, of the whole society, emphasizing that this work must begin from Basic Education and extend to Higher Education.

If the school of basic education in Brazil manages to get involved in traffic education, its first job should be to look at the issue as a transversal curricular component, that is, not as a subject or an isolated activity that guarantees traffic education, but with the participation of the school in the task of preparing the student to move consciously and responsibly (as citizens) in brazilian streets and roads.

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