



ROAD TRAFFIC ACCIDENT: AN ISSUE OF LACK OF EDUCATION IN THE CITIZENSHIP EXERCISE

ACIDENTE NO TRÂNSITO: UMA QUESTÃO DE FALTA DE EDUCAÇÃO NO EXERCÍCIO DA CIDADANIA

ACCIDENTE DE TRÁFICO: UNA CUESTIÓN DE FALTA DE EDUCACIÓN EN EL EJERCICIO DE LA CIUDADANÍA

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ABSTRACT

Objective: to know about the aspects related to the road traffic accidents. **Method:** it is a descriptive and exploratory study, with a quantitative approach, performed in Natal/RN/Brazil, in the Monsenhor Walfredo Gurgel Hospital, where forms were used for data collection. The sample was composed of 70 patients injured by road traffic accidents. Data were categorized and processed by the program Microsoft Excel 2000, in Windows XP platform. The study was approved by the Ethics Research Committee, under CAAE nº 0144.0.051.294-09. **Results:** 30% were pedestrians or passengers and 70% were drivers, of which 43% were not qualified, in other words, they did not have the Brazilian Driving License. **Conclusion:** as a reflection of this study, we have designed a Government Project fostered by the Education Sector of the State Traffic Department from the Rio Grande do Norte State (DETRAN/RN), called Traffic Transversal Activities in the Public and Private Education Networks. The aforementioned project aims at establishing a didactic and educational process that allows us to build a new perception of social values and education, by contributing to the life quality. **Descriptors:** Traffic Accidents; Education; Nursing.

RESUMO

Objetivo: conhecer aspectos relacionados aos acidentes de trânsito. **Método:** estudo exploratório-descritivo, de abordagem quantitativa, realizado em Natal/RN/Brasil, no Hospital Monsenhor Walfredo Gurgel, no qual foram utilizados formulários para coleta de dados. A amostra foi composta por 70 pacientes acidentados de trânsito terrestre. Os dados foram categorizados e processados pelo programa Microsoft Excel 2000, em Windows XP. O estudo foi aprovado pelo Comitê de Ética em Pesquisa, sob CAAE nº 0144.0.051.294-09. **Resultados:** 30% eram pedestres ou passageiros e 70% eram motoristas, dos quais 43% não estavam habilitados, ou seja, não possuíam a Carteira de Habilitação Nacional. **Conclusão:** como reflexo deste estudo, foi elaborado um Projeto Governamental fomentado pelo Setor de Educação do Departamento Estadual de Trânsito do Rio Grande do Norte (DETRAN/RN), denominado Atividades Transversais de Trânsito na Rede de Ensino Público e Privado. O referido projeto visa a estabelecer um processo didático-educacional que permita uma nova percepção de valores sociais e de educação, contribuindo para a qualidade de vida da população. **Descritores:** Acidentes De Trânsito; Educação; Enfermagem.

RESUMEN

Objetivo: conocer aspectos relativos a los accidentes de tráfico. **Método:** estudio exploratorio descriptivo, de abordaje cuantitativo, realizado en la ciudad de Natal (RN, Brasil) en el Hospital Monseñor Walfredo Gurgel, en el que se utilizaron formularios para recabar datos, con 70 pacientes víctimas de tráfico terrestre. Los datos se categorizaron y procesaron por el programa Microsoft Excel 2000 en Windows XP. El Comité de Ética en Investigación aprobó el estudio bajo protocolo CAAE nº 0144.0.051.294-09. **Resultados:** el 30% eran peatones o pasajeros y el 70% conductores, de los cuales el 43% no tenían Permiso de Manejar Vehículos. **Conclusión:** como reflejo de este estudio se elaboró un Proyecto Gubernamental impulsado por el Sector de Educación del Departamento Estatal de Tráfico de Rio Grande do Norte (DETRAN-RN), denominado Actividades Transversales de Tráfico en la Red de Enseñanza Pública y Privada. El referido proyecto pretende establecer un proceso didáctico y educativo que fomente una nueva percepción de valores sociales y de educación, mejorando la calidad de vida de la población. **Descriptores:** Accidentes de Tráfico; Educación; Enfermería.

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INTRODUCTION

The public health management viewpoint, before the implementation of the Unified Health System (SUS) was based on the health intervention, i.e., aimed at fighting against infectious diseases and organizing the private health care.

With the rights insured by the Brazilian Federal Constitution of 1988, enabling access to health, there has been a substantial improvement in health care. A larger proportion of the population has been made capable to survive the impact of communicable diseases, due to the effectiveness of public health actions. In contrast, the mortality and morbidity rates from chronic diseases have increased, especially, because of cancer and cardiovascular diseases, as well as injuries arising from the several violence forms. When it comes to the cases of the aforementioned diseases, such rates are consequences of the improvement in life expectancy.^{1,2}

The health promotion started to be understood as actions that should not be limited only to the sanitary issues, but extended to the pressing issues with regard to the traffic accidents, public security, education and citizenship, since its main definition is assuring better living conditions.³

The traffic presents itself as a serious social problem since the 60s, as a reflection of the Brazilian industrial development and linked to the profound socioeconomic changes and rural exodus, by promoting a fast, unplanned and disorganized urbanization. This urbanizing process, added to the motorization in developing countries, was not consistent with the inappropriate roads engineering and the lack of traffic education programs, awareness, risk prevention and infringements suppression.^{3,4}

In the 80s, it was observed that deaths from accidents and violence forms began to be the second cause of death in the overall mortality context, exceeded only by cardiovascular diseases. Hence, they should be treated as one of the most serious public health problems already faced. Regarding the set of external causes, traffic accidents became highlighted due to their magnitude, both by the deaths and the amount of injured people.⁴⁻⁵

For the Brazilian Ministry of Health, accidents are avoidable and unintentional events, in a greater or lesser degree, perfectly predictable and preventable, causing physical and emotional injuries in the

domestic or in other social environments, such as: work, traffic, school, sports and leisure. Nonetheless, there is a notable impediment when establishing the intentionality nature of such events. They compose a set of health grievances, which might or might not lead to death, which includes the causes that are referred to as non-accidental - due to traffic, work, falls, poisoning, drowning and other accident types -, and the intentional causes - attacks and self-inflicted injuries.⁶

Contemporaneously, in Chapter XX of the International Classification of Diseases (ICD), the designation of external causes of morbidity and mortality receive the following codes: for accidents, we see V01 - V99, corresponding to the road traffic crashes, and W00 - X59, for other accident types.

As to the accidents by violence forms, they are classified into: self-inflicted injuries, receiving the code, by the ICD, of X60 - X84; attacks, with the ICD X85 - Y10, legal interventions and war operations, with the ICDs Y35 and Y36, respectively. In turn, there are the external causes of ignored intentionality, Y10 - Y34, and the sequels of external causes, Y85 - Y89.⁷

According to an Executive Report from the Brazilian National Institute for Applied Research (Known as IPEA), 2003 data, Brazil is recognized as word record holder in land transportation crashes. In the study entitled "Map of Violence 2011: The Youth of Brazil", developed by the Ministry of Justice, shows that Brazil, among the 99 countries involved in the research, ranks the 10th position in the death rate from transportation accidents in the total population and 14th position concerning the rates referred to the young population.⁹

Since the promulgation of the Brazilian Traffic Code (known as CTB), in 1997, there was an awakening of consciousness towards the seriousness of the transportation accidents problem. The Ministry of Health, since 2001, has prioritized the reduction of mortality and injuries arising from such events. To this end, it has implemented actions such as the establishment of national policies to reduce morbidity and mortality rates from accidents and violence forms and of care for urgencies and health promotion. Besides these measures, it has implemented the Project to reduce the morbidity by traffic accidents, the National Network of Violence Prevention Cores and, recently, the Health Promotion Program and the Surveillance of Violence and Accident Forms in Sentinel Service (known as VIVA).^{3,6}

However, even with these efforts, the incidence of traffic accidents has strongly increased over time. Admittedly, Brazil is as world record holder in land transportation crashes, being that the Northeast Region holds the highest rates in the country.^{9,10}

The accomplishment of the present study is justified by the increased statistical numbers. Proportionally, the road traffic accidents kill more people in the Rio Grande do Norte State (RN) than in the São Paulo State (SP). In São Paulo, it was recorded 15,8 deaths from road traffic accidents to every 100 thousand inhabitants, while in our state (RN) the rate is 16,4. Thus, it is clear that, in the national ranking, RN ranks the 20th position and SP ranks the 21th, according to data from the Brazilian Ministry of Health. It should also be observed that, in 2006, 478 traffic deaths in Rio Grande do Norte State were recorded.¹⁰

This reality in the health scope might be understood as an epidemic, or even a traffic disease. According to the data collected in the Statistics Sector from the Monsenhor Walfredo Gurgel Hospital (known as HMWG), which, as a way of exemplifying, determines a pretty significant ratio of accidents involving motorcyclists in the metropolitan region of Natal, which has reached a rate of 8.281 cases in the year 2010, such a ratio mathematically determines over 22 injured motorcyclists per day. All this amount of injured people does not include the statistical rates of other hospitals, emergency rooms and health stations of public and private health networks from the Rio Grande do Norte State, what supposes that such a ratio might be even greater.¹¹

Given these numbers, questions are raised about the why this increased number of traffic-related injured people in the city of Natal/RN/Brazil. What are other relevant issues that prior researches have not pointed yet?

OBJECTIVES

- To know aspects related to the traffic accidents;
- To ascertain the competency of drivers to conduct motor vehicles.

LITERATURE REVIEW

In the last years concerning the 80s, Brazil was in a chaotic period when there were movements against the military dictatorship. In the health sector, there was an organization composed of professionals, students and leader members of society, who

fought and longed to achieve a dignified health system for all people, through the aspirations for a broad democracy that could give priority, mainly, the health sector. This social movement was called “Sanitary Reform”, which expression was used with basis on the Italian Sanitary Reform, regarded as a model for the building of the Brazilian sanitary reform.

This period coincided with the democratic transition movements: the end of the military regime, direct election of governors (DIRETAS JÁ movement, 1985), the landslide victory of the opposition, the emergence of several social movements, including in the health field, which culminated in the creation of state (known as CONASS) or municipal (known as CONASEMS) associations of health government secretaries.¹

The social movements of the time were consolidated in the VIII National Health Conference, in 1986, in which, for the first time, representatives of all civil society segments discussed a new health model for Brazil. The outcome of that gathering was to assure in the Constitution, through popular amendment, that the health is a Citizen’s right and a State’s duty. These facts simultaneously occurred with the election of the National Constituent Assembly, in 1986, and the promulgation of the new Brazilian Federal Constitution (CF/88), in 1988, in which the Unified Health System (known as SUS) was defined.^{12,13}

In Chapter VIII, Section II, the CF/88 defines in Articles 196 and 198, which respectively state:

“Health is everyone’s right of and State’s duty, by ensuring through social and economic policies aimed at reducing the risk of illness and other hazards and at the universal and equal access to actions and services for its promotion, protection and recovery.”

“The actions and public health services integrate a regionalized and hierarchical network and constitute a unified system, organized according to the following guidelines:”

- I. Decentralization, with single direction in each sphere of government;
- II. Comprehensive care, with priority for the preventive activities, without prejudice to the care services;
- III. Community participation;

“Sole paragraph - the Unified Health System shall be funded, with resources from the social security budget, Union, States,

Federal District and Municipalities, besides other sources.”

One can see that the Unified Health System has been defined in the Constitution, but its regulation only occurred on September 19th, 1990, when the Government publishes the Laws 8.080 and 8.142, known as the Health Organic Laws.¹

With the accessibility to the health services, assured by the CF/88, there was a reduction of communicable diseases. However, the deaths from accidents and violence forms began to be the second cause of death, leading to the coverage perception of the Health Promotion, which was extended to the traffic, public safety, education and the citizenship itself.^{1,3,8}

The new health care model proposed by the SUS is based on the appreciation of the promotion, prevention and rehabilitation activities; services decentralization, coverage expansion, completeness of care; services regionalization, with quality and resoluteness; and rationality of actions.¹⁴

To know the epidemiological profile of the population is essential in choosing the best actions, resource optimization and more effective tools that can promote/preserve the health status, not only by serving the spontaneous demand, but also by promoting the health surveillance within a permanent building space.

To prevent and promote the health of an individual, one should understand the completeness as one of the SUS principles, from the viewpoint of the individual and/or collective gaze, by realizing the user as a historical, social and political subject, which is attached to its family background, as well as the environment and the society in which it is inserted.

Thus, it presents the importance of articulating health education actions as a key element for a collective knowledge, by fostering the individual in its autonomy and empowerment to take care of itself, its family and environment.¹⁴

By exploring the traffic accidents, it is observed that the repercussion overcomes the medical and biomedical aspects, by reaching the lifestyle and a set of social, historical and environmental conditionings in which the Brazilian society lives, works, makes relationships and projects its future, by requiring a broader concept of health, according to the Federal Constitution (1988) and legislation to which it gives rise.

Thus, when casting the road crash accidents as a public health problem, it is crucial to reach the participation of several sectors, such as the civil society, in promoting citizenship and life quality to the population and, from another angle, its specific role, by using its own tools, such as to highlight the strategies for health promotion and prevention of diseases and grievances, as well as having a better accuracy of the actions with regard to the care, recovery and rehabilitation.³

METHOD

This current study is exploratory, descriptive and has a quantitative approach. Exploratory surveys are developed with the aim of providing greater familiarity with the problem, with a view to making it more explicit, by providing a comprehensive view on a given fact.¹⁵

A descriptive study has as its primary objective to make observation, record, analysis and relation of facts and phenomena - variables - without change them. It describes characteristics of certain populations or phenomena, besides obeying standardized techniques, such as: data collection and systematic observation, as well as the group characteristics - age, gender and origin -, organization process thereof and analysis of the care level of the study site.

Quantitative research almost always involves the use of numbers, percentages, statistical analysis and probabilities. This method is based on the sets of procedures supported on the sampling theory and, as such, is indispensable in the study of certain aspects of the social reality where one wishes to measure the degree of correlation between two or more phenomena. For the use of this method, the researcher should, necessarily, have knowledge of the basic notions of statistics and know how to apply them. The statistical method is associated with two main terms: population and universe.¹⁶

The research was conducted in the city of Natal, in the Monsenhor Walfredo Gurgel Hospital (known as HMWG), which is considered a benchmark in emergency care of the SUS in the Rio Grande do Norte State. Hence, it was of paramount importance having performed this research at that location, given the large number of attendances of traffic accident victims, whether coming from the state capital or hinterland.

The research was previously submitted to the Ethics Research Committee (ERC) of the

Onofre Lopes University Hospital (known as HUOL), under CAAE 0144.0.051.294-09 and Protocol 364/09, by respecting the Resolution 196/96, due it is a study that involves human beings.

All participants who agreed to participate in the survey have signed the Free and Informed Consent Form (FICF). During the collection, we emphasized that it was a voluntary participation and they could withdraw from the study at any time, or refrain from answering any question that caused them embarrassment, even with the signing of the Consent Form.

The tool used for data collection was a structured form developed in this study, i.e., the one completed by the researcher or a trained research participant. Data collection was performed from February to May 2010. The convenience sample consisted of 70 patients. The inclusion criteria were: admission caused by traffic accidents, allocated in the hospital wards, aged over 18

years, aware and who answered the questions in a satisfactory way. As a criterion for exclusion: we did not perform interviews with patients in certain areas, such as ICU and Polytrauma Sector, because, despite the access restriction to such locations, patients showed mechanical and psychological limitations.

Data were categorized and electronically processed through the database program Microsoft Excel 2000, in Windows XP platform.

After producing the final report, we went to the Education Sector of the State Traffic Department from the Rio Grande do Norte State - DETRAN/RN - to showcase the developed work and, from the results, trace possible strategies for solving problems.

RESULTS AND DISCUSSION

Table 1. Absolute distribution and percentage of patients injured by road traffic accidents, according to gender, age, marital status, residence. Natal, in January and March 2010.

Variable	Specifications	n =70	%
Gender	Male	62	89%
	Female	08	11%
Age	18-28 years	32	46%
	29-38 years	18	26%
	39-48 years	09	13%
	49-58 years	06	08%
	+59 years	05	07%
Marital status	Married	40	57%
	Single	27	39%
	Divorced	03	4%
Residence	Metropolitan Region	25	36%
	Hinterland	42	60%
	Other location	03	04%

Of the total sample, it should be emphasized 89% are male. It was found that 57% of the victims were married, 39% were single and 3% divorced. Most of the

interviewees (60%) lived in the hinterland, 4% were tourists and 36% lived in the state capital.

Table 2. Absolute distribution and percentage of patients injured by road traffic accidents, according to injured profile, driving license, schooling level. Natal, in January and March 2010.

Variable	Specifications	n=70	%
Injured profile	Motorcyclist	41	58%
Driving license	Driver	04	06%
	Cyclist	06	09%
	Pedestrian	07	10%
	Pedestrian	12	17%
	Have license	19	27%
	Do not drive	21	30%
	Do not have license	30	43%
Schooling level	Illiterate	04	06%
	Incomplete Elementary School	25	36%
	Complete Elementary School	21	30%
	Incomplete High School	10	14%
	Complete High School	08	12%
	Incomplete Higher Education	01	01%
	Complete Higher Education	01	01%

The interviewees had the following distribution: 30% were pedestrians or passengers and 70% were drivers. From the driver population, 27% were qualified, i.e., they had the Brazilian Driving License (known as CNH).

Regarding the schooling level, 6% were illiterate, 36% had incomplete Elementary School, 30% had complete Elementary School, 12% had studied up to High School and 1% had finished the Higher Education. This study also showed aspects of financial condition: 13% did not know how to answer as to the value of their income, 1% was unemployed, 9% had an income lower than the one minimum wage, 32% had an income of one minimum wage, 17% had an income of one minimum wage and a half, 13% had two minimum wages as family income, 10% two minimum wages and a half, 1% three minimum wages, 1% four minimum wages and a half and 1% ten minimum wages. Regarding the transportation type used by the people involved in the surveyed road traffic accidents, 69% have involved motorcycles, 20% cars, 9% bicycles, 1% trucks and 1% buses.

The accidents that happened on a straight road amounted to a percentage of 69%. When asking about the influence of weather and/or route conditions, 90% said that there was not the influence of these two factors for the occurrence of the accidents. We also found that 56% of them did not use any protective equipment.

As for the fact of driving drunk, 30% of interviewees did not know how to answer if anyone involved in the accident was drunk, 30% of interviewees said they were drunk and driving the motor vehicle at the time of the accident, 3% of pedestrians said they were under influence of alcohol at the time of the accident, besides 2% of cyclists. 30% of interviewees said they did not see anyone drunk at time of accident.

One can observe the lack of technical and educational training from the injured people, mainly when it comes to the drivers (27% of drivers were qualified, while the remaining 73% were not). The profile of our respondents basically consists in men (89%), and of these, more than half of them (60%) were resident in the state hinterland, with low schooling (36% had Elementary School), married and family providers (57%), grower (32%), with a monthly income of around one minimum wage (32%) and having the motorcycle as a vehicle (69%).

The man is highlighted in several studies through high violence rates, chronic diseases, smoking and alcoholism, physical disabilities, deaths from external causes, circulatory

system diseases, tumors, digestive diseases and respiratory system diseases.¹⁷ Among some of these factors, we might point out the socially established aspect of the man as the family provider, a powerful, dominant, virile and vigorous being, as the possible cause.¹⁸ These gender issues are related to the socioeconomic conditions, by acting as factors that contribute to the traffic accident occurrences.³

Prevention campaigns against transportation accidents are insufficient, being that it is primarily necessary having a political will for holding actions and, furthermore, an permanent program, which is capable of deploying and maintaining these actions. Even with a Traffic Code which recommends what the driver should do or should not do, we should not forget that the support by an effective legislation is always necessary, by emphasizing that there is no need for further laws, but an effective fulfillment of existing laws, since articulated actions of education and ostensive monitoring are crucial to obtain an improved traffic safety.¹⁹

The study showed that the interviewees have no competency - theoretical knowledge and practical ability to drive - or even basic knowledge - facts evidenced by the low schooling levels -, thus, how could these individuals understand the repercussions of traffic accidents?

The conventional education does not encourage an intelligent understanding about the life. Moreover, it does not generate the self-awareness which comes from the realization of our own thinking and feeling. We are educated only to achieve better jobs, being efficient people and having wide domination over others. In accordance with the foregoing, we have shallow and empty lives. The life has an extensive meaning and our education does not help us to discover such a meaning. There is no point in being scientists, married to the books, or specialist devoted to the science, if we are contributing to the destruction and misery of the world.²⁰

Generically, transportation accidents victims show themselves able to follow rules, such as the helmet use, just to avoid penalties and not as a support to assure their physical integrity. This is exactly a result of the mechanistic education that does not encourage the critical thinking about their actions, or even their consequences.

It is worth emphasizing the need to work the permanent education in traffic, in order to develop opinions-makers in the building

sense, as an attempt to reduce accidents on the public roads.²¹

And for a conceptual and cultural change to actually occur, it becomes necessary that education promotes deep changes with regard to the knowledge, values, habits, attitudes, lifestyles and that can build and rebuild a new lifestyle, by recognizing the importance of substantiating our theoretical approaches from other areas of knowledge beyond the usual ones.²²

As a reflection of this study, we have designed a Government Project in association with the Education Sector of the DETRAN/RN, called Traffic Transversal Activities in the Public and Private Education Networks. Such a process is seen as didactic and educational, through the development of a set of systematic actions, based on education and culture change. Thus, it shall allow a new perception of social values and education, by enabling us to pursue a new understanding and urban coexistence in the traffic. The education institutions should adhere to the inclusion - in school curricula - of concepts in relation to the accidents prevention in their different aspects.

FINAL REMARKS

The study showed the need to put into practice the new integral concept, which is intended for relating the several sectors of society to promote the people's health. By recognizing the peculiarities related to the road traffic accidents at the study location, we have noted the relevance of social issues as contributing factors for such events (employment, income, schooling, culture), as well as aspects related to the infrastructure (the large contingent of drivers in the state hinterland who does not have authorization for such an activity and the health care only focused at the benchmark hospital unit in urgency and emergency of the state). Thus, it is crucial to create public policies towards the employment and income generation and an education that encourages the critical thinking of the individual, by giving it a dialogical dimension of society, besides greater monitoring by the competent bodies and health care strategies at local level (accident location).

REFERENCES

1. Polignano MV. História das políticas de saúde no Brasil: uma pequena revisão [Internet]. [cited 2012 Jan 24]. Available from: <ftp://ftp.medicina.ufmg.br/internatorural/arquivos//mimeo-23p.pdf>.
2. Instituto de Pesquisa Econômica Aplicadas (IPEA), Associação Nacional de Transportes Públicos (ANTP). Saúde no Brasil: Algumas Questões sobre o Sistema Único de Saúde (SUS). Brasília; 2009 [cited 2011 Oct 05]. Available from: http://www.ipea.gov.br/sites/000/2/publicacoes/tds/td_1391.pdf
3. Conselho Nacional de Saúde (CNS). O Brasil falando como quer ser tratado: Pacto contra a violência o SUS e as políticas públicas na promoção da vida e da paz. Revista da Saúde [Internet]. 2002 [cited 2011 Oct 05];3(3):4-61. Available from: <http://conselho.saude.gov.br/biblioteca/revistas/revistacns03.pdf>
4. Silva RA. Caracterização dos acidentes de trânsito e das vítimas atendidas pelo samu. Rev enferm UFPE on line [Internet]. 2011 [cited 2012 Jan 05];5(10):2462-69. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/2034/pdf_726
5. Souza MR, Neto ER. Caracterização dos acidentes de trânsito e Goiânia: a experiência do Hospital de Urgências de Goiânia. In: Anais do XVI Encontro Nacional de Estudos Populacionais; 2008 Sept-Oct 29-03; Caxambu, Minas Gerais. Brasil: ABEP; 2008. p. 1-14 [cited 2012 Feb 21]. Available from: http://www.abep.nepo.unicamp.br/encontro2008/docspdf/ABEP2008_1193.pdf
6. Brasil. Ministério da Saúde. Política Nacional de Redução da Morbimortalidade por Acidentes e Violências: Portaria MS/GM nº 737 de 16/5/01, publicada no DOU nº 96 seção 1e, de 18/5/01. Brasília; 2001 [cited 2011 Oct 06]. Available from: <http://portal.saude.gov.br/portal/arquivos/pdf/portaria737.pdf>
7. Instituto de Pesquisa Econômica Aplicadas (IPEA), Associação Nacional de Transportes Públicos (ANTP). Custo da violência para o sistema público de saúde no Brasil [Internet]. 2009 [cited 2011 Oct 05]. Available from: http://www.ipea.gov.br/sites/000/2/publicacoes/tds/td_1295.pdf
8. Instituto de Pesquisa Econômica Aplicadas. Impactos Sociais e Econômicos dos Acidentes de Trânsito nas Aglomerações Urbanas Brasileiras (Relatório Executivo) Brasília; 2003 [cited 2011 Oct 05]. Available from: <http://www.ipea.gov.br/Destaques/textos/relatorio.pdf>
9. Brasil. Ministério da Justiça. Mapa da Violência 2011: Os Jovens do Brasil - (Relatório Executivo). Brasília; 2011 [cited 2011 July 05]. Available from:

<http://www.sangari.com/mapadaviolencia/pdf2011/MapaViolencia2011.pdf>

10. Brasil Ministério da Saúde. Trânsito mata mais no Brasil [Internet]. [cited 2011 Mar 27]. Available from:

http://189.28.128.100/portal/aplicacoes/noticias/noticias_detalhe.cfm?co_seq_noticia=55560.

11. Hospital Monsenhor Walfredo Gurgel. Setor de Estatísticas do Hospital Monsenhor Walfredo Gurgel - Relatório SAME. Natal; 2010.

12. Arouca S. Sanitarista: Reforma Sanitária. Biblioteca Virtual [Internet]. 2006 [cited 2011 Mar 27]. Available from:

http://bvsarouca.icict.fiocruz.br/sanitari_sta05.html.

13. Conill EM. Desafios para a Organização de Serviços Básicos e da Estratégia Saúde da Família. Cad. Saúde Pública. Rio de Janeiro. 2008 [cited 2011 July 05];24(Sup 1):7-27. Available from:

<http://www.ppgp.ufma.br/uploads/files/Eleonor%20Minho%20Conill%201.pdf>

15. Machado MFAS, Monteiro EMLM, Queiroz DT, Vieira NFC, Barroso MGT. Integralidade, formação de saúde, educação em saúde e as propostas do SUS - uma revisão conceitual. Ciência & Saúde Coletiva [Internet]. 2007 [cited 2010 Dec 05];12(2):335-42. Available from:

<http://www.scielo.br/pdf/csc/v12n2/a09v12n2.pdf>

16. Gil AC. Como elaborar projetos de pesquisa. 4ª ed. São Paulo: Atlas; 2002.

17. Fachin O. Fundamentos de metodologia. 3 ed. São Paulo: Saraiva; 2001.

18. Brasil. Ministério da Saúde. Secretária de Atenção à Saúde. Departamento de Ações Política Nacional de Atenção Integral à Saúde do Homem: princípios e diretrizes. Brasília; 2009 [cited 2011 May 23]. Available from:

<http://dtr2001.saude.gov.br/sas/PORTARIAS/Port2008/PT-09-CONS.pdf>

19. Baggio MA, Carvalho JN, Backes MTS, Backes DS, Meirelles BHS, Erdmann AL. O significado atribuído ao papel masculino e feminino por adolescentes de periferia. Esc. Anna Nery Rev. Enferm [Internet]. 2009 [cited 2012 July 25];13(4):872-78. Available from: <http://www.scielo.br/pdf/ean/v13n4/v13n4a25.pdf>

20. MELLO-JORGE MHP, LAURENTI R. Acidentes e violência no Brasil - Apresentação. Rev. Saúde Pública. 1997;31(Supl. 4):1-4.

21. Krishnamurti J. A educação e o significado da vida. São Paulo: Cultrix; 2001.

22. Santos VC, Anjos KF dos, Almeida OS. Patologia social com ênfase em acidentes de

trânsito. J Nurs UFPE on line [Internet]. 2010 Apr/June [cited 2012 de June 12];4(2):865-73. Available from:

23. http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/626/pdf_1

24. Moraes MC. Ecologia dos Saberes: complexidade, transdisciplinariedade e educação: Novos fundamentos para Iluminar: Novas práticas educacionais. São Paulo: Antakara / WHH (Willis Harman House); 2008.

Submission: 2012/09/05

Accepted: 2013/03/08

Publishing: 2013/04/01

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