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TABLE OF CONTENT

Editorial	3
Mircea Gelu Buta	
The Variants of Non-Mainstream Bioethics in Europe: An Essay on Hopes and Disappointments	5
Amir Muzur	
Beyond Case Studies: Alternate Methods for Teaching Ethics with an Emphasis on the Jewish Tradition	11
Hershey H. Friedman, Deborah S. Kleiner, James A. Lynch	
The Paradoxical Death through Cryoethanasia or Playing God. A Moral-Theological Approach	29
Sorin-Grigore Vulcănescu	
Medical Biotechnologies from the Ethical Perspective of the Responsibility of the Common Good	37
Elena Toader, Luiza Palmaru, Oana Hrisca Eva, Tudor Winzinger	
Ethical Considerations in Assisted Reproductive Technology	43
Florentina-Larisa Foti, Adina Karner-Huțuleac	
Ethical Implications Regarding the Use of Biotechnologies in Terminal Patient Care	49
Tudor Winzinger, Andreea-Luiza Palamaru, Eliza-Paula Winzinger, Elena Toader	
Ethical Aspects in Road Traffic Safety and Driving Behavior Change	57
Svetlana Cociu, Raisa Deleu, Constantin Rîmis, Serghei Cebanu, Cherecheș Răzvan Mircea	
Diversity and Inclusion 3.0	71
Philippe Rosinski	
Book Review	79
Aurelian Virgil Băluță	

ETHICAL ASPECTS IN ROAD TRAFFIC SAFETY AND DRIVING BEHAVIOR CHANGE

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Abstract

Road traffic injuries are a major global health and development problem, are the third leading cause of death for young people aged 15-29 years old worldwide. Less attention is paid to the prevention of road injuries considering ethical principles, even if everyone who shares a road can contribute to improving road safety by his/her responsibility, that refers to consciousness, individual responsibility, and proper behavior. Despite the government's efforts in reducing road accidents and injuries, however, the behavior and attitude of the participants in the traffic remain irresponsible. Government has a major responsibility for traffic safety, including road infrastructure, the adoption and enforcement of traffic laws, the taxation of fuel, and the education of drivers. On the other hand, road users are responsible for knowing the law and traffic rules, respect and attention in traffic, responsible behavior as a driver or pedestrian. Drivers have the moral duty while driving to use a seat belt, comply with road traffic rules and safety requirements and have a duty not to harm- to avoid putting yourself and others in danger by not observing safety measures. An ethical way to prevent harm due to injuries and death in traffic would be by understanding modifiable risk factors (behavior), increasing awareness of responsibility in traffic, and increasing respect for all participants in traffic, without causing any damage. This paper provides a background for a discussion of the ethical aspects applied in maintaining road safety.

Keywords: Road traffic injuries, duty not to harm, moral responsibility, road safety, behavior change.

Introduction

Road traffic injuries are a widespread public health problem, particularly in low- and middle-income countries (Etco et al, 2014; Heydari et al., 2019; Cociu et al., 2020). According to WHO, Global Status Report on Road Safety, the number of deaths on the world's roads remains unacceptably high, with an estimated 1.35 million people dying each year (Evans, 2008, WHO, 2018). Road traffic injuries are now the leading cause of death for children and young adults aged 5–29 years and more than half of all road traffic deaths are among vulnerable road users: pedestrians, cyclists and motorcyclists (WHO, 2018). Global Burden of Disease Collaborative Network, 2019 estimate that road injury ranks 8th after the main causes of death and according to forecasts will rank 5th by 2030. According to the Sustainable Development Goals, adopted by the UN General Assembly in 2017, our country assumes that by 2030 to reduce by 50% of deaths and injuries due to road accidents according to objective 3 (Health and well-being) (ONU, 2010) and according to Objective 11 (Sustainable Cities and Communities) - by 2030, ensuring access to safe, fair, affordable and sustainable transport systems for all, improving road safety, in particular by expanding public transport networks. At the global level, 12 Voluntary Global Performance Goals are set for the road with a focus on safety risk factors and service delivery mechanisms. The issue of

road injury is reflected in the legislative, normative and methodological framework of the country of the Republic of Moldova and support the "Zero Progressive Vision", from vision to strategy, "no deaths in road accidents", which has become an important component of the new concept of public health - "Healthy Cities".

The Republic of Moldova is characterized by a high mortality from road accidents, the most vulnerable group in this regard are men aged 20-29 and 50-59 years. A recent analysis (Cociu & Cebanu, 2019) of the causes of accidents underline that the human factor remains the most important and represents 50-90% of all causes of accidents. Children and people over the age of 50 are more likely to fall victim to a collision, and in the 15-39 age group they have a higher risk of dying behind the wheel or being a passenger in a transport unit. The majority (34%) of the deceased are pedestrians, followed by car passengers (33%) and drivers (25%), motorcyclists and cyclists - 4% and 2% respectively. Some actions in education of traffic behavior includes such issues as speeding, seat belt use, and child car seat, prevention of driving under the influence of alcohol and other substances with similar effects, protection of the most vulnerable road users - pedestrians, children and cyclists. Data analysis on road injuries shows the necessity of taking measures to target interventions for prevention and treatment, thus reducing mortality and morbidity injured population.

Data from a recent prospective study (Cociu, 2020), identify 324 cases of injury which reported traffic related mechanism at the Emergency Department during a year; half of the patients it was unknown if seatbelt was used, 14% did not, while only 36% - use seatbelt; child safety restrains were used in only 17%, in 76%- not known and in 7% -not used. Data concerning deaths and morbidity of children and adults resulting from road accidents form another study showed a downward trend of 30.3%, although it is an urgent need to further develop actions to prevent road injuries and to strengthen the multidisciplinary efforts of all actors in different competent bodies and structures (Cazacu-Stratu et al, 2021).

More government interventions, policies and programs have been proposed in order to prevent road injuries, decision makers still accept injury and death due to road traffic, even knowing that those may save lives thought comprehensive prevention. So, far, this problem was less approached by applying and respecting ethical aspects among all the participants in traffic. In nowadays, the roads may be safer, because of technologies such as seat belts, but the future holds many more ways that technology can save and improve lives on the road. Raising awareness of population regarding elementary methods of protection on road safety could considerably contribute to achieving the proposed goal. In the same context, an intervention in the road traffic injury prevention could serve to apply an ethical approach to this, such as moral responsibility or duty to respect others in relation to all participants in traffic.

What we can do to improve?

So many actions have been done in the regard of insuring the safety of traffic participants, most of them are related to governmental programs, laws and regulation, or high fees for traffic violations. All of which have been successful in some countries and less successful in others. Several questions may follow: are nowadays measures, policies and technologies ethically justifiable to achieve the goal of save people's lives? should ethical concern such as moral and social responsibility, and no harm (non-maleficence) improve the road safety in the country? If so, may that argue a cost-effective model in the prevention of road injuries? Applying the PICO tool, I will follow with this research question: *Can ethical concerns lead to effective traffic safety policies? Can ethical concerns lead to changing and improving the driver behavior?*

Justification

Road traffic injuries can be prevented, and many preventative interventions have been implemented over the last decades, especially in high-income countries. Life and its quality depend on each one of us. It is impossible to change people's attitude if he/she does not want that. From the medical perspective there should be developed the professional self-confidence and skills to know where and when to productively intervene. These productive interventions could develop cooperative partnerships which will allow not only evaluating the physical mechanisms of injury, but also underlining risk factors and understanding them. Even so, knowing that using seat belts for ex. is a zero cost intervention with regret, but still many do not use it. A major objective in the prevention of road trauma would be that the message to reach the population using different methods so that to be understandable that injuries are a health risk and that it can be prevented by joint effort and major involvement of all actors from the country. Each participant in road traffic can contribute at the same time to improving and endangering road traffic safety, which means its responsibility, is twice. Ethical aspects in regard to road traffic have not received largely attention so far, even if those can be prevented by applying individual protection measures and observing the traffic rules established by law. The key to the effectiveness of a safe ethic is humanizing the population and building relationships with respect for the human being. The challenge for the community in ensuring safety is to understand the impact and contribute to safety and risk management in traffic. Discussion of policies and regulations from the ethical perspective in road safety is not covered largely. The increased attention of professionals, researchers but also of individuals in civil society on ethical issues related to injury and death in traffic has the potential to generate enormous reductions in damage, much greater than these from ongoing safety programs.

Ethical aspects in road traffic prevention.

It is known that, ethics deals with issues of rights, obligations, duties, and responsibilities, also theories and discussions about what activity is right or wrong. All these concepts and issues can be applied in the field of the road traffic safety. A basic norm of the traffic ethics is: "Think of yourself and others!" (Elvebakk, 2005).

Is there a driver moral responsibility to prevent harm while is using and sharing a road with others? The principle of not doing harm means that you have an obligation to avoid actions which could reasonably be foreseen to harm damage of any kind to another person or for yourself. This means that you must anticipate the risks when we are in traffic and take care, by respecting the road rules, to prevent possible injuries or damages to yourself or other person involved in the traffic.

The harm principle is prominent in discussions of public health, including injury prevention (Ameratunga et al., 2019). Road traffic causes "much harm", personal vehicle use is one of the major sources of harm in the modern world (Husak, 2004). We have a moral duty while driving (seat belt use, compliance with road traffic rules, safety requirements) and duty not to harm (non- maleficence) - to avoid putting yourself and others in danger by not observing safety measures. We have a duty to ourselves and the people who rely on us to maintain our health and functional status by avoiding harm. We have duties to other in our society to avoid harming, (a) others and (b) their property, and thereby using an unjust share of public resources to repair the damage to people and property.

What legal duties does a driver have? Drivers are required to be careful not to injure anyone (duty not to harm) else on the road. That means: to drive respecting the legal norms of the country, be attentive/careful and cautious when getting behind the wheel and check the technical control of the permanent vehicle.

Sharing the same road, we have duties to be responsible. Traffic accidents harm us, others, and property, so we need to be responsible and maintain the road safety. We have a duty to prevent traffic accidents to prevent all of those harms and costs. With regard to the economic losses as a result of road accidents, it is difficult to estimate (Heydari et al., 2019), the countries announce a large number of hospitalization, a big number of people who remain with the sequelae for the rest of their life due to a road accident and need care, large amount are imposed by the state to be allocated, but separate studies on this issue are certainly needed.

Behavioral factors in traffic has an increased risk to crashes and injuries. This is a need to be considered, moral responsibility and moral judgment for those who drive aggressive and put his and others life in danger (Elvebakk, 2005). Does those need to be supported by policy? Dilemma: if the morality refers to personal responsibility, may it help to reduce the road traffic harm within the policy implication, only to punish those who do harm (mostly unintentionally, unreeling their risky behavioral).

On the one hand, drivers are those who bear the personal moral responsibility not to harm others (Evans, 2008), but are drivers or pedestrians aware that illegal driving is a threat to others? Are they correctly informed about? Who participates in these information processes, who creates this environment / conditions for traffic participants? The driver is the final agent, and institutions / environment indirectly contribute to the driver's behavior and thus directly contribute to trauma and traffic accidents.

In the Fahlquist (2009) opinion, there seems to be a fundamental difference between privacy in your own home, in your own car and privacy on the road. The high degree of risk exposure associated with driving may imply that the expectation of confidentiality on the road is unreasonable. Justice referring to the fact that humane infrastructure protects vulnerable road users, for example children, the elderly and disabled people; but responsibility for traffic safety- individuals driving safely and that accidents are caused by drivers (Fahlquist, 2009).

Public education is effective in changing behavior and attitudes that lead to traffic accidents. *Health promotion and health education in injuries prevention* has a huge role (Cebanu et al., 2020). Authors mention, that in the Republic of Moldova, activities for teaching health promotion are provided for all study programs within the “Nicolae Testemitanu” State University of Medicine and Pharmacy (SUMPh), the is prevention and injury control course aiming to promote injury prevention among the population by having trained students and doctors. Starting with 2020, within the Program of Continuing Medical Education we conduct Health Promotion and Behavior Change course in close collaboration with the National Agency for Public Health, Healthy Life Project: reducing the burden of non-communicable diseases. Also, several informative events were organized in partnership with National Patrol Inspectorate, which promote a responsible traffic behavior in the country. Another injury prevention action was the Novateca Project, through which public libraries across the country were involved in informing the population about methods of injuries prevention, intoxications and poisoning among children, as well as in distributing informative materials to the population. If injury prevention were considered fundamental by many health promotion practitioners, if more attention were offered to the promotion part, perhaps we could have prevented much more of these injuries, deaths and disabilities.

Behavioral change intervention for road injuries prevention (COM-B)

The COM-B model of behavior (Capability, Opportunity and Motivation), proposed by Michie et al. 2011, is the one I will bring arguments for application in road injuries prevention (Michie et al., 2014). This is a tool for a better understanding behaviors and make the behavioral diagnosis: define the problem in behavioral terms, select the target behavior, specify the target behavior and identify what needs to change. This instrument was

studied and applied in the Republic of Moldova in the fight against the burden of non-communicable diseases, in planning interventions of behavior change, identifying risk factors, empowering communities, as well as for various final purposes (Sécula et al., 2020; Curteanu et al., 2021).

What knowledge supports us for a better understanding of the content of the current intervention? Knowing the fact that preventing road injuries is a public health priority, so we must not forget that the process of the public health system it is a continuous cycle of collecting and analyzing information, making decisions, carrying out actions and evaluation procedures. It is also important to find in which way the Causes and effect correlates to identify the reasons for Road Accidents/Traffic Problem. In the Fig.1 are illustrated the main causes and effects using the Fishbone Diagram (Cociu et al, 2021). Previous studies on risk factors in road accidents and road injuries highlight 3 major factors: the human factor and its behavior, the condition of the road and environmental factors, and the factors conditioned by the vehicle (Cociu et al., 2021; Cociu et al, 2020; Staton et al.,2016; Mohanty & Gupta, 2015; Razzaghi et al., 2009; Waller, 2001).

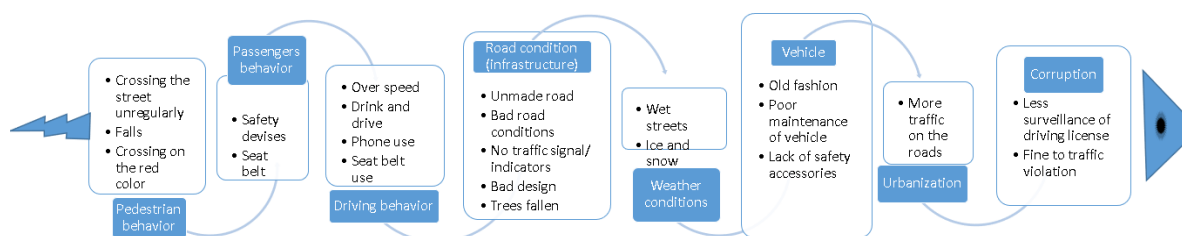


Fig.1. Cause- Effect. Fishbone Diagram. Reasons for Road Accidents/Traffic Problem

In the literature, numerous factors are described that contribute to the occurrence of road accidents and injuries due to that (Etco & Moroşanu, 2014; WHO, 2018). According to the World Health Organization's Global Road Safety Report (WHO, 2009; WHO, 2018), the main causes of road trauma are traffic violations, drunkenness, road conditions and environmental factors (ice, fog, technical vehicle defections, time of year, street lighting s.a.).

The key principles for planning behavior change interventions can also be applied as criteria for self-assessing the quality of the intervention project developed. When do so, is important to justify thought data, asses data to understand behaviors; change one behavior at a time; the behavior you want to change or want to achieve must be specific; start with a small result (start with little to achieve and continue); behaviors take place within behavioral systems, which you also need to understand; behavior change can occur at different levels and in different locations; behavior change is iterative (relapses are possible!).

When planning the intervention, think about what would be the first thing to do when you decide to take action in road safety within your country. Also, from where do we get good road safety data/ information. Following the COM-B model, you need to define the problem in behavioral terms (step 1):

- What is the problematic behavior you want to change? (ex. driving a car under the influence of alcohol, or drivers exceed the maximum allowable speed limit)
- Who is involved in the manifestation of the behavior? (ex. Drivers)
- Where does the behavior take place? (ex. in car, driving)

After assessing the problematic behaviour, need to see what conclusions from *scientific evidence* or literature review support this problem? Ex. From the above data:

- Men aged 20-29 years old and 50-59 years old were identified at higher risk of dying being a driver or being a passenger in a transport unit.

- Most accidents occurred in October, and the number of deaths is significant for May and September
- Distribution of road injuries by days of the week underline that both injuries and death are on Friday
- Most accidents with injuries occurred between 12.00 and 20.00, and most deaths occurred between 18.00 and 6.00.
- The most common causes of road injury or death were: failure to give priority to other vehicles and to pedestrian, failure to change lanes or direction of travel, incorrect turn, non-compliance with the distance between vehicles and inadequate speed, visibility, environmental conditions, road infrastructure.
- Some of the factors that influence the occurrence of road accidents are: insufficient organization of activities in the field of passenger transport, incorrect systematization use of road traffic and irresponsibility of road users.

The step 2 will focus on creating a *long list of desired behaviors: (ex.):*

- The Government of the Republic of Moldova is making efforts in support of promoting road safety reforms
- The competent evidence bodies have a better evidence and monitoring of the traffic violation and of the road injury surveillance.
- The state will ensure that new roads meet technical standards.
- Driver instructors train future drivers at the highest level
- Drivers are following all the basic rules while driving
- Drivers are not speaking at the phone while driving
- Drivers will use the seat belts while driving
- Car passengers use the safety devices in car
- Pedestrian crossing the road regulatory

The list of behaviors may be longer as we mentioned within the cause –effect diagraph. The next step will be to choose the target behavior: What is the "desired" behavior you want to achieve? From the long list of behaviors whose list you just generated, for ex. We choose 2 of them to examine and evaluate according to 3 questions: which will be the impact of behaviour change, which will be the propability of change and what may be the effect.

Potential target behavior	The impact of behavior change	Probability of change	Spreading effects
The Government of the Republic of Moldova is making efforts in support of promoting road safety reforms.	High (will affect the entire population)	From small to medium? How easily will you be able to make legislative changes?	Positive: limits and restrictions will be promoted for excessive speed, phone use, seat belt use Negative: drivers will not comply with the rules in force
Drivers use the seat belts while driving	Medium (will affect drivers and passengers)	Medium (how easily you will be able to create the ability of drivers to use the seat belt and its benefits	Positive: effect on the whole family Negative: hospitals will have fewer patients with road trauma

Step 3, based on this evaluation we choose a single behaviour (ex. Drivers use the seat belts while driving) and try to make it as specific as possible in accordance with the principle 3 (The behavior you want to change or reach must be as specific as possible) and describe the target behavior according to who needs to do, what, when, where, how often and with whom.

Who should adopt this behavior?	Target group (drivers)
What do they have to do differently to achieve the desired change?	to use the seat belts while driving
When should he do this?	All the time when driving a car
Where should he do this?	In community/ city
How often should he do this?	All the time
With whom should he do this with?	Individually, friends

Next, step 4 we need to understand what components of behavior need to change, identify what needs to change to get the desired behavior (ex. Drivers use the seat belts all the time while driving). At this stage will be applied the *COM-B components* (capability, opportunities and motivation). *Capability* refers to the fact if the person or persons affected by the change in behavior must have physical strength, knowledge, skills, stamina, etc. to perform the behavior; it refers to physical capability (physical skill) and psychological capability (the capacity to engage in the necessary thought processes -comprehension, reasoning). There must be a "*opportunity*" for this behavior to take place in terms of a favorable physical and social environment (ex. it must be physically accessible, financially accessible, socially acceptable and there must be sufficient time); it refers to physical opportunity (opportunity afforded by the environment) and social opportunity (opportunity afforded by the cultural milieu that dictates the way that we think about things). At the same time, there must be sufficient strong "*motivation*", people must be more motivated to adopt the behavior at the relevant time than not to do the behavior or to engage in competitive behavior; it refers to reflective motivation (beliefs about what is good and bad, conscious intentions, decisions and plans) and automatic motivation (emotional responses, desires, impulses and habits resulting from associative learning and physiological states).

COM-B Components	What we know (data / evidence)	What needs to happen to generate the desired behavior?	Is a change needed?
Physical capability	target group can use their seat belts	drivers trained to have knowledge and to be educated	Yes
Psychological capability	are unaware of the harms of not using a seat belt and the benefits of using it	accumulation of knowledge	Yes
Physical opportunity	drivers have access to information about the benefits of using a seat belt?	to provide this information	Yes

Social opportunity	there is no perception of the need to use a seat belt	to send messages / information about	Yes
Reflective motivation	drivers are not aware of the need to wear a seat belt (permanently)	applying and disseminating the desire for change recommendations	Yes
Automatic motivation	the existence of drivers who promote the use of seat belts permanently when driving	drivers use the seat belts all the time while driving	Yes

Taking into account the above analyses, the next steps will be to propose an intervention based on the COM-B analysis, choose team members to implement the intervention and mapping stakeholders and partners, establish the time frame for intervention and a preliminary budget.

Interventions must be chosen based on evidence. However, the interventions and/or the messages employed to support them in the community must be tailored to local culture and beliefs. Here are some good practice elements for road safety management (Bliss & Breen, 2013):

- ✓ Adopting a Safe System approach to addressing road safety
- ✓ Undertaking a road safety management capacity review and implementing the findings
- ✓ Providing strong road safety leadership through a “lead agency”
- ✓ Establishing a road safety management framework with Key Performance Indicators (KPIs), including the requirement for data collection strategies to effectively plan and monitor road safety activity and outcomes
- ✓ Building road safety capacity across the sector
- ✓ Developing and adopting ambitious strategies and road safety targets with regular reporting on progress.

Which is the best way to assess drivers' attitudes, modify or change driving behaviors?

Is it necessary to involve social possibilities (are the way and tactics of proper conduct accepted in the community? what are the cultural aspects and how to set the safe driving from the insecure one, which could harm. Once we do not have individual roads, and we use the roads together, then we must all comply and use them responsibly. The practices show that most of the time the drivers' education is related to the knowledge of the laws and rules but less to the attitudes and responsibilities of maintaining road safety. Once you pass the car exam and you get your driver's license, they look at traffic respect and the humane attitude between drivers who use the same road. Driving should be perceived as a responsible joint activity and without harming anyone during the period of driving a car. It is definitely necessary to share good attitudes, responsibility in traffic, to create more awareness of one's own behavior towards others, to reduce road trauma, to live longer without being influenced by the risky behavior of one of the participants in traffic.

The National Road Safety Strategy is based on the Safe System approach adopted in Australia by improving road safety. This involves a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users. It is an inclusive approach that caters for all groups using the road system, including drivers, motorcyclists, passengers, pedestrians, cyclists, and commercial and heavy vehicle drivers. Key inputs to the Safe System (Safe system diagram adapted from Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–21) are:

- using data, research and evaluation to understand crashes and risks
- developing road rules and enforcement strategies to encourage compliance and manage non-compliance with the road rules
- managing access to the road through licensing drivers and riders and registering vehicles
- providing education and information
- being open to and seeking innovation
- developing standards for safe vehicles, roads and equipment
- good management and coordination

Within the National Road Safety Conference, 2019 were also discussed the impact of behavior change and the use of behavior change techniques in road safety interventions. Prof. Paul Norman, University of Sheffield come up with three important factors in changing road safety behavior: attitude, subjective norm and perceived behavior control; referring to speed limit while driving that may result in less injuries and accidents, less risk for pedestrian, less air pollution, and it makes easier to detect hazards. He concludes that changing behavioral may influence positive the road safety. It was also discussed that young drivers are more likely to get injured because of lack of sufficient experience in driving and understanding this behavior may prevent injuries by setting up effective specific interventions (Tingval & Haworth, 1999; Government Offices of Sweden, 2019).

It is important to realize that in the prevention of road trauma a complex approach is needed between the parties involved: people, vehicles and road infrastructure. A secure approach to the system ensures their interaction in a way that creates a high level of security, by anticipating and adjusting human errors. It is shown that in all accidents, speed is a key element that determines the forces that hurt people. Speed management is essential to improve the interaction of the three parts of the road transport system. Speed, whether driving at an inappropriate speed for the prevailing conditions or driving at a speed above the limit, contributes to the risk of accidents and their severity. Even if the vehicle speed is within the displayed speed limit and was not considered the cause of an accident, the kinetic energy transfer affects the severity of the injury.

Whose responsibility is this? A liability on the part of all those involved is necessary, so that the probability of an accident is reduced to a minimum, as a result of a fatal or serious injury. solutions must be sought throughout the system, and not just driver's / road manager's / car builders, law enforcement, police, anyone who has a direct or indirect contribution to road trauma (duty not to harm)

One of the best practice action, is the long term goal Vision Zero was set up by Sweden, the global leader in road safety performance, with 2.8 deaths per 100,000 inhabitants, decreasing by 66% the number of road deaths in 1990-2015. Vision Zero states that the loss of human life and health is unacceptable and therefore the road transport system should be designed in a way that such events do not occur. This means that safety is a more important area than other issues in the road transport system (except for health-related environmental issues). Mobility therefore should follow from safety and cannot be obtained at the expense of safety. Vision Zero means no one will be killed or seriously injured within the road transport system, in contrast, Vision Zero explicitly states that the responsibility is shared by the system designers and the road user. The guiding principles behind this approach are that people do make mistakes but this should not take or cost anyone's life; and the car safe system should be known and applied (when a crash is happened and that will continue to occur because people make mistakes, all the elements within the safe system should work together to ensure the forces created in the crash do not exceed the physical limits of our bodies and result in a fatal or serious injury. Vision Zero emphasizes that every human being is unique and irreplaceable (it is not good to take any harm or damage) and

involves research by identifying physical abilities and opportunities in road design, but also other aspects that can keep people safe (Australian Government, n.d.). The vision zero in Danish road safety strategy is even "Every accident is one too many and whenever someone is killed or seriously injured, necessary steps must be taken to avoid a similar event" (Elvebakk, 2005).

Starting from the point that the Vision zero – zero fatalities, no one shall be killed or seriously injured within the transport system, or that will violate the ethical aspect to not harm. The countries that have adopted this system maintain about 5 pillars: stakeholder's implication, ethical concept, shared responsibility while you are road user, safety philosophy and driving change.

By the stakeholder's implication, means that a better outcome is higher if a joint vision is united to fight for a common action (prevent injurie, no harm, no suffering), it is necessary a clear vision and the establishment of a coherent and targeted plan, and not only sporadic actions that have effect only for the moment related to, so, traffic safety involves to share the responsibility involving all the stakeholders.

Ethical concept, means that human life and health is paramount, life and health cannot, in the long run, be traded against other benefits, no life should be loosed on the roads, no harm, if those could be prevented.

Responsibility should be shared between each road users and system designers, comprehensive involvement, like: politicians, community planners, road managers, vehicle manufacturers, health sector, police, rescue forces, transport companies and everyone who professionally uses roads and streets (Fahlquist, 2009). Although human error is considered the most important cause in road crashes and injuries (Petridou & Moustaki, 2000), inadequate road design are also influences to road crashes and cause injuries and people are dying on the roads (Evans, 2008; Fahlquist, 2009). Emerging the responsibility of the drivers, road users is well reflected within the zero vision, which more and countries are attended to. For ex.: health professionals have a role in helping future drivers to achieve the knowledge in the way to be able to manage their safety on the roads; or parents contribute significantly to the road safety education of their children, by direct supervision as a learner driver, by applying and sharing the knowledge's and road user behavior daily; or teachers promote education campaign at school with children by promotion safe crossing streets, ability to perceive safe participation in traffic. Fahlquist (2009), is giving an example: if a driver got behind the wheel but drank alcohol before getting behind the wheel, then he certainly did not show responsibility. This situation could create an accident, injury or even loss of life, so it is necessary to involve regulations prohibiting the consumption of alcohol while driving, smart cars that would not allow the person who consumed alcohol to start the car. Government and the competent organs are in charge most to influence the driver's behavior and their responsibility and have a core duty to prevent the harm to other. It seems that this would be a solution to prevent trauma, but it still doesn't work and we see a lack of responsibility. In order to ensure a safer road traffic environment, it is necessary to involve different actors and a comprehensive collaboration.

In the other hand, could we explore the social opportunities in regard to social acceptance, cultural issues among the traffic participates as a motivation that would increase road safety. By understanding and showing responsibility that could lead to no death on the roads, no injured persons, for that is needed an ethical way of thinking to be developed and promoting of an early code of conduct while sharing the road.

Safety philosophy- although many actions have been taken to ensure safe roads in recent years, these are not yet as safe as they should be, like vehicle design, effective legislation, safety campaigns, driving behavior- still a challenge. Car system designers should be guide by ethical rules, and understand that "life and health can never be exchanged for

other benefits within the society” and “whenever someone is killed or seriously injured, necessary steps must be taken to avoid a similar event” (Fahlquist, 2009).

Driving change - there is a need to improve the road safety by using the smart cars, to improve the capacity of drivers, to follow best practices in infrastructure and designing the roads and increasing in traffic control (Husak, 2004; McPherson & Mladenović, 2014).

Conclusions

Over the years, have been done many actions in prevention of injuries and deaths from road accidents, governments and local government have intervened with various projects and control interventions, but the problem still persists and is far from being reached in LMIC countries or speaking of LIC, so measures must be revised, evaluated, and properly set up. In order to improve the road traffic safety, it is necessary to involve all the stakeholders, involve all the required resource; it is necessary to change the behavior and make the population responsible, because even if we have better roads, smart vehicles, good laws and regulation, efficient strategies, but they will not be properly applied, then we will not have a result.

Car accidents and road traffic related injuries can be prevented, each can help improve road safety and avoid risks and damage. Each of involved in the road traffic can contribute in improving the road safety by his/her responsibility, which refers to consciousness, morality, ethics and ethical behavior, culture. Culture and responsibility can be achieved through continuing education, starting from home, school, university, work and this to be a continuous process for all current and future traffic participants.

An ethical way to prevent harm due to injuries and death in traffic would be by understanding modifiable risk factors (behavior), increasing psychological capacity and benefits and avoiding risks, investing in educational campaigns, effective communication, social support and encouragement, increase awareness of responsibility in traffic and increasing respect for all participants in traffic, without causing any damage. Drivers have the moral duty while driving to use seat belt, comply with road traffic rules and safety requirements and have duty not to harm- to avoid putting yourself and others in danger by not observing safety measures.

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