DECADE OF ACTION FOR ROAD SAFETY 2011-2020 AND ROAD SAFETY POLICY IN MACEDONIA

DEKADA AKCIJE ZA BEZBEDNOST SAOBRAČAJA NA PUTEVIMA OD 2011-2020 I POLITIKA ZA BEZBEDNOST U SAOBRAČAJU U MAKEDONIJI

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Abstract

The Decade of Action for Road Safety 2011-2020 is historic opportunity for global action which could save millions of lives across the ten-year period. The vision is a world with safe mobility for all road users. Road traffic injuries have substantial contribution to the disease burden in the Republic of Macedonia as well as in the world. Their prevention is set as Government priority in the National Strategy for Road Safety in the Republic of Macedonia 2009-2014 which main objective is to reduce the number of road traffic injuries by 50% until 2014 and to have zero fatal child injuries. Evaluation of the implementation of the National Strategy has been done in correlation with the Decade applying the "safe system" approach as guiding principle.

The Government is committed to implement the activities of the Decade’s five “pillars”: road safety management, safe roads and mobility, safer vehicles, safe road users and post-crash response, in the national policy. The Strategy action plan has concrete action plans for each sector: transport and communication, national roads, interior, health and education. A range of activities have been achieved in each sector as well as joint activities. The main achievements are: institutionalization of activities through establishment of the National Coordination Body and partnerships at national and local levels among relevant stakeholders. The effects of all undertaken activities resulted with decreased mortality rate from road traffic injuries especially among children at age 0-14 significantly reduced to 0.82 per 100 000 in 2009, which is in line with the main Strategy goal – zero fatal injuries among children by 2014. This reflects the high intervention effectiveness score for road traffic injuries in Macedonia of 94% much higher than the Regional median score of 81%. Further priority for all partners in the Decade should be: commitment for full implementation of the National Strategy and action plans, strengthening capacity to address injuries, promotion of road safety and behavioural change of vulnerable road users, promoting evidence - based approaches for injury prevention and trauma care.

Key words
decade, road, safety, traffic injury, policy

INTRODUCTION

Road traffic injuries (RTI) are among the leading causes of death and disability around the world, being a particular burden for low and middle income countries and showing an increasing trend. (1, 2) Even though road traffic injuries are serious public health problem, until recently, the extent of global burden around the world was unclear. In 2009 WHO published the Global status report on road safety as the first assessment of the road safety situation at the global level, using data drawn from a standardized survey conducted in 178 countries. Approximately 1.3 million people die each year on the world’s roads, more than 3000 deaths each day out of which more than half not travelling in a car. Twenty to fifty million more people worldwide sustain non-fatal road traffic injuries and these injuries are an important cause of disability. Significantly more action is needed to make the world’s roads safer, because if current trends continue, road crashes are predicted to become the fifth leading cause of death by 2030. (3)

Road traffic injuries can be prevented. Experience suggests that an adequately funded lead agency and a national plan or strategy with measureable targets are crucial compo-
Efforts towards a sustainable response to road safety. \(^{(4, 5)}\) Effective interventions include incorporating road safety features into land use and transport planning; designing safer roads; improving the safety features of vehicles; setting and enforcing laws for road safety; improving safe behaviour of road users; and improving post-crash care for victims of road crashes. \(^{(6)}\)

In March 2010, following the highly successful First Global Ministerial Conference on Road Safety in November 2009, the United Nations General Assembly with resolution 64/255 proclaimed the period 2011-2020 as the Decade of Action for Road Safety (Decade). The Decade seeks to save millions of lives by increasing activities conducted at national, regional and global levels for improving the safety of roads and vehicles; enhancing the behaviour of road users; and improving emergency services. \(^{(7)}\)

“I call on Member States, international agencies, civil society organizations, businesses and community leaders to ensure that the Decade leads to real improvements. As a step in this direction, governments should release their national plans for the Decade when it is launched globally on 11 May 2011.” Mr Ban Ki moon, UN Secretary-General. \(^{(6)}\)

Road traffic injuries have substantial contribution to the disease burden in the Republic of Macedonia too, \(^{(8, 9)}\), being dominant (25.1%) deaths from unintentional injuries or “accidents” which participate with 71.0% in the structure of deaths from injuries and violence. \(^{(10)}\)

Prevention of road traffic injuries is set as priority of the Government in the enacted Health Strategy of the Republic of Macedonia 2008-2020 \(^{(11, 12)}\) and especially in the National Strategy of the Republic of Macedonia for Improvement of the Road Traffic Safety 2009 - 2014 (Strategy) \(^{(13)}\) as well as and in other strategic documents. \(^{(14)}\)

Main objective of the National Strategy of the Republic of Macedonia for Road Traffic Safety 2009 - 2014 (Strategy) is to reduce the number of road traffic injuries by 50% until 2014 and to have zero fatal child injuries. \(^{(13)}\)

The principle goal of this paper is to evaluate the impact of the national policy for road traffic safety in Republic of Macedonia in correlation with the Decade of Action for Road Safety 2011-2020.

**MATERIAL AND METHODS**

The public health approach has been applied as multisectoral and science-based framework for injury prevention and policy intervention. \(^{(1)}\)

Evaluation of the implementation of the National Strategy of the Republic of Macedonia for Improvement of the Road Traffic Safety 2009 - 2014 has been done, through achieved results, accomplished activities and lessons learned in correlation with the Decade applying the “safe system” approach as guiding principle underlined in the Decade of Action. \(^{(6)}\)

“Safe system” approach aims to develop a road transport system that is better able to accommodate human error and take into consideration the vulnerability of the human body. The goal of a safe system is to ensure that accidents do not result in serious human injury, shifting a major share of the responsibility from road users to those who design the road transport system. \(^{(6)}\)

Official statistical data from the State Statistical Office (SSO), Institute of Public health (IPH) and World Health Organization (WHO) have been analyzed as well as the results from road traffic injury related studies. \(^{(15, 16, 17)}\)

**RESULTS**

Ninety percent of road traffic deaths occur in low- and middle-income countries, which have less than half the world’s registered vehicle. Road traffic injuries are among the three leading causes of death for people between 5 and 44 years of age. Unless immediate and effective action is taken, road traffic injuries are predicted to become the fifth leading cause of death in the world, resulting in an estimated 2.4 million deaths each year. The economic consequences of road insecurity have been estimated between 0.4%-5% and 3.1% of GDP of the world countries, reaching a total over $500 billion. \(^{(3, 6)}\) Some countries reported estimated costs per death in an attempt to express the cost of a human life in monetary terms, varying from 1298 euro in Switzerland to 10 euro in Macedonia. (Fig. 1).

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**Figure 1:** Costs (in euros) of road traffic deaths and injuries per person, gross output method, selected countries in the WHO European Region

*Source: European status report on road safety: towards safer roads and healthier transport choices. Copenhagen, WHO Regional Office for Europe, 2009* \(^{(4)}\)
Road traffic injuries are the leading cause of death and disabilities among the youth. Vulnerable road users such as pedestrians, motorcyclists and cyclists constitute 41% of all road deaths in the European Union. High vehicle speeds, roads and urban design place these road users at increased risk. (18)

Road traffic injuries are serious public health problem in Macedonia especially among children and youth, participating with 50% of all fatal injuries, while this age group participates with 43.6% in injured and 26.5% killed on the roads in Macedonia. Children are mostly injured as pedestrians in 80%. Alarming is the fact that 10% of adolescents younger than 18 years have been injured as drivers, borrowing their parent’s car. (8, 9, 11) 40% of adolescents never use seat belt, while 19.3% were driven in a car by driver after drinking (17) Economic burden of road traffic injuries is estimated as 28 million US$, while the annual costs for treatment is estimated to 2 million US$ i.e.1% of the annual budget of the Health Insurance Fund. (8)

The Decade of Action for Road Safety is an historic opportunity to offer Member States and their partners a framework for action which could ultimately save millions of lives across the ten-year period. The vision is a world in which mobility is safe for all those who use the world’s roads. (19) (figure 2)

Figure 2: Decade of Action for Road Safety 2011-2020: saving millions of lives
Source: Decade of Action for Road Safety 2011-2020 - saving millions of lives. 2011 WHO. (7)

The goal of the Decade is to stabilize and then reduce the forecast level of road traffic deaths around the world. To achieve its goal, Resolution 64/255, requested the World Health Organization and the United Nations regional commissions, in cooperation with the United Nations Road Safety Collaboration and other stakeholders to develop Global Plan for the Decade, based on the best evidence of successful stories from many countries. Five categories or “pillars” of activities have been developed and indicators to measure progress in each of these areas: road safety management safe roads and mobility, safer vehicles, safe road users and post-crash response. (6,7)

Macedonia as other countries is encouraged and committed to implement those five pillars, based on the recommendations of the World report on road traffic injury prevention and proposed by the Commission for Global Road Safety, incorporating in the national policy for road safety. Road safety management (Pillar 1) in Macedonia is in line with recommendations given in the Decade: strengthening the institutional capacity to further national road safety efforts: putting into practice major United Nations road safety conventions; having a lead agency for road safety – Republic Council for Road Traffic Safety in the country, involving partners from a range of sectors; having adopted a national road safety strategy with long-term targets for related activities, development of data systems to monitor and evaluate activities. Yet, there is a need for protecting sufficient funding for their implementation.

A Coordination Body has been established of high level representatives of relevant authorities to implement the National Strategy, such as: deputy Prime Minister, ministers of interior, transport and communications, health, economy, education and science, president and secretary and head of the science commission of the Republic Council for Road Traffic Safety, director of the agency for public roads. (20) Strategy has been implemented through the Action plan adopted by the Government in June 2010. The Strategy action plan has concrete action plans for each sector with recommended activities and mechanisms for monitoring the progress of the Strategy implementation for each sector: transport and communication, national roads, interior, health, education and for the national leading agency - Republic Council for road traffic safety, which is coordinating all these activities. (21) Within each sector is planned to develop local action plans, to be implemented through projects, NGOs, campaigns, education, evaluation. Legislative frame for Strategy implementation is: Law for roads, Law for vehicles, Law for road traffic safety and Law for road traffic (21)

A range of activities have been achieved in each sector as well as joint activities for the World Day of Remembrance for Road Traffic Victims 2009 and 2010. (Figure 3)

The Ministry of transport and communications and Agency for roads have accomplished activities from Pillar 1 and 2: for improving the transport safety -planning, design,
construction and operation of roads; assessment for safety; and encouraging relevant authorities to consider all forms of transport and types of safe infrastructure responding to the mobility needs of road users.\(^{(21)}\) Concretely the reconstruction of 11 regional roads (288km) and 84 local roads was completed, of 15 local roads is in process and planned for 123 local roads, started the second part of the loan from EBOP 50 million euros for reconstruction of regional roads, reconstruction of the planned highway destinations, horizontal and vertical signalisation for 5 reconstructed regional roads and program, continuous issuing decisions and permits for traffic regime, exams for advisers and drivers for dangerous materials, licences for road transport, exams and certificates for international drivers, safety measures to slow the traffic especially for children and near schools, control of visibility for drivers at certain locations affected by billboards or other objects etc.

Ministry of interior (MOI) has undertaken activities for safer roads and mobility, for safer vehicles and safer road users (Pillars 2, 3 ad 4), through the Program for the MOI for road traffic safety improvement, for all road users, especially the most vulnerable: pedestrians, bicyclists and motorcyclists, increasing preventive and control activities for 15%. Improved vehicle safety by harmonization of relevant standards and mechanisms to accelerate the uptake of new technologies which impact on safety, implementing new car assessment programmes, increased enforcement of road safety laws and standards.

Ministry of education has undertaken activities for safer road users (Pillar 4) developing and implementing education programs and legislation.

Ministry of health has implemented activities through the Department for Injury and Violence Control and Prevention (VIP) in the Institute of Public Health as a leading agency in the health sector for injury prevention and as a teaching base for research and safety promotion of the Medical School. The VIP Department works closely with multidisciplinary and inter-sectoral group of experts in this area. A range of activities from Pillar 1, 4 and 5, injury-related studies and safety promotion have been undertaken in cooperation with WHO: Focal point for road safety has been appointed, Report on evaluation of the emergency services in the Republic of Macedonia has been prepared, Strategy for Emergency services has bee prepared, Appointed National Commission and activities for the First UN Global Road Safety Week 23-29 April 2007, Information on traffic accidents and injuries in Macedonia (2001-2007) adopted by the Government, Community survey on injuries has been completed, Bloomberg project - Global status report on road safety has been completed, Global School-Based Student Health Survey in Macedonia conducted, TEACH VIP package for road safety prepared. These efforts are combined with primary prevention activities, increasing public awareness and education to increase seat-belt and helmet wearing and to reduce drinking and driving, speeding and other risks and promoting establishment of graduated driver licensing programmes for novice drivers.\(^{(22)}\)

In addition, partnership was established among: relevant Ministries for health, interior, transport and communication, education and science, environment, Republic Council for road traffic safety, Institute of Public Health, WHO country office, Red Cross, Directorate for protection and rescuing, National Insurance Bureau, Auto Moto Association of Macedonia, Association of physically handicapped persons, Association of motorcyclists and other stakeholders.

**DISCUSSION AND CONCLUSIONS**

The Decade provides a complementary opportunity to increase action to address the road safety crisis over the next ten years, encouraging political and resource commitments both globally and nationally. Activities taken as part of a Decade of Action for Road Safety will also have an impact on steps taken towards improving systems of sustainable development of road safety in Republic of Macedonia supporting the implementation of the National Strategy for road safety which is already in place and in accordance with the five pillars of the Decade.\(^{(6, 7, 13)}\)

Through the Decade, Republic of Macedonia with the support of the international community, has committed to actions in areas such as developing and enforcing legislation on key risk factors, i.e. limiting speed, reducing drinkdriving, and increasing the use of seatbelts, child restraints and motorcycle helmets. Challenges in implementing national action plans, strengthening capacity and promoting evidence-based approaches for prevention and care of road victims in Macedonia, as well as in Turkey, Hungary and the UK, were discussed as good practice on the session on road safety on the 3rd European Conference on Injury Prevention and Safety Promotion moderated by Francesco Zambon and Tozija Fimka in Budapest in June 2011.\(^{(18)}\)

The recent European Commission - communication "Towards a European road safety area: policy orientations on road safety 2011-2020" calling the Member States to reduce by half road deaths between 2010-20 and the 'Decade of Action' are providing straightforward strategic objectives and implementation actions for Member States. Key success factors for generating actions at national and local level are: a comprehensive "safe system" approach addressing the key risk factors; strengthening the enforcement effectiveness of police and raising public awareness; involving high level officials from different sectors in strategy development and
deployments; including focussed and measurable targets in such strategies; and of having government endorsement by different ministries. (6, 18, 20, 21)

Initial estimates set the required funding for national activities to around US$ 200 million per year, amounting to US$ 2 billion for the whole Decade. The combined effort of the international community towards funding road safety is roughly estimated to be between US$ 10–25 million per year. This funding gap must be bridged through expanded outreach to a broad range of stakeholders. (6,7)

All major stakeholders in road safety need to be involved at all time, i.e. government, civil society, private sector, NGO’s and academia. With respect to government, the health, education, transportation, interior, justice, labour and social welfare and communications sectors have to play their roles in the implementation of the strategy for road safety.

The main achievements in road safety in Macedonia are: Development of the National Strategy for Road Safety and annual action plans; Institutionalization of activities through establishment of the National Coordination Body; Partnerships at national and local levels established among relevant stakeholders through the implementation of the National Strategy for road safety. (21)

The effects of all undertaken activities resulted with decreased mortality rate from road traffic injuries especially among children and youth. In 2009 160 persons had fatal road traffic injuries (lower than 162 in 2008). (10) Mortality rate at age 0 -14 was significantly reduced to 0.82 per 100 000, compared to 1.87 in 2008 and 2.88 in 2007, which is in line with the main goal of the Strategy – zero fatal injuries among children by 2014. (13)

This reflects the high intervention effectiveness score for road traffic injuries in Macedonia of 94% much higher than the Regional median score of 81% as well as overall implementation of 94% of selected effective interventions on to control alcohol-related harm, versus a median regional score of 76%. (22) Macedonia reports implementing 82% of effective interventions reported as implemented of a total of 99 interventions to prevent a range of all injuries, versus a European Region median score of 73% and a third quartile of 81%. There has been positive progress in the past 12 months in all the key areas: national policy development, injury surveillance, capacity-building, multisectoral collaboration and evidence-based emergency care. (22)

“Safe system” approach which provides efficient, effective system for reducing the road accidents with injuries and fatalities has being applied. Implementation of the National Strategy for Road Safety will contribute to: Direct benefit in the amount of 200 million euro, by decreasing the cost for medical treatment of the injured, decreased cost for material damage, reduced cost for road and road infrastructure damages; and indirect benefit in the amount of 300 million euro, in the areas of environmental protection and the social sphere. (13)

CONCLUSIONS
The Decade of Action for Road Safety 2011–2020 is everybody’s Decade. We all have an interest in ensuring that the vision of the Decade becomes a reality.

Further priority for all partners in the Decade should be: commitment for full implementation of the National Strategy and action plans, strengthening capacity to address injuries, promotion of road safety and behavioural change of vulnerable road users, promoting evidence - based approaches for injury prevention and trauma care.
Apstrakt


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